



**MINWA • ANYWHERE**

**MW** GENERAL  
CATALOGUE  
2012 - 2014

ISO 9001 : 2000 · SA 8000 · WEEE · REACH · RoHS  
ISO 17025 · ISO 9001 : 2008 · SA 8000 · WEEE · REACH · RoHS



**MINWA ELECTRONICS CO., LTD.**  
**MINWA GREEN ENERGY ELECTRONICS CO., LTD.**

# MINWA PRODUCTS ARE CONFORMED TO WEEE, RoHS AND REACH DIRECTIVES

## About WEEE, RoHS and REACH Directives

The Directive of WEEE and RoHS regarding waste management and hazardous materials of electrical products have been currently launched by the EU (European Union). The two directives play a vital role in the manufacturing, design, and recycling of electrical products. They have been adapted into national laws and effective since 1st of July 2006.

The REACH directive of regulation is to ensure a high level of protection of human health and the environment, including the promotion of alternative methods for assessment of hazards of substances.

The Directive has been effective from 1st of June 2007.

**WEEE (2002/96/EC)**, the directive of waste electrical and electronic equipment, is aimed at preventing electrical and electronic waste; and in addition, to encourage reuse, recycling and other recovery measures to reduce the disposal of waste. It specifically requires the equipment that fall under the directive be marked clearly with a symbol of a crossed out wheeled bin; and an additional solid bar/ date code according to EN 50419 to contribute information to assist in the recycling of products.

**RoHS (2002/95/EC)**, the directive of restriction of the use of certain hazardous substances in electrical and electronic equipment, is aimed to substantially reduce or eliminate the use of Lead, Mercury, Hexavalent Chromium, Polybrominated Byphenyls, Polybrominated Diphenyl and Cadmium in the production of electrical and electronic equipment so as to reduce WEEE. This Directive has been effective from 1st of July 2006.

**Minwa has to keep abreast with the two directives. Every product we make is completely compliant with the requirements of WEEE and RoHS Directives.** There is no more non-RoHS product is being produced. Also all of them are marked with the crossed out wheeled bin on the back of the unit.

## REACH (1907/2006/EC)

The directive restricts the use of certain hazardous substances in electrical and electronic equipment, includes Polychlorinated terphenyls (PCTs), Benzene, Asbestos fibres, Ammonium sulphide, Benzidine, and some more dangerous substances which aimed to ensure a high protection level of human health and the environment. The directive is for manufacturers and importers to ensure that the products they manufacture, place on the market are safe.

Minwa Electronics is fully committed to support WEEE, RoHS and REACH Directives. As a forward looking company, we keep ourselves in the front so as to stay abreast of all the latest market conditions and demands.



# A STRONG COMMITMENT FROM MINWA TO BOTH CUSTOMERS & STAFF CARE

## GPMS (Green Product Management System)

In Aug of 2006, we have completed the factory audit of Green Product Management System (**GPMS**) and obtained the certificate from laboratory **SGS**. **GPMS** is a management system which line up all departments of our factory, from raw materials purchasing, product development, mass production and packaging through every step of manufacturing. The new system ensures that we have thorough and up-to-date information on all the materials and components we are using, enable us to spot potential non-RoHS materials using in production immediately and enhance the efficiency and accuracy of our manufacture.

Minwa invested a lot to upgrade our production facilities and the raw materials used in the production cycle. We have employed the Lead-free soldering technique on production. We currently brought a **XRF** (X-Ray Fluorescence Spectrometer) using in Quality Control process. We practice random checking of our products by using this machine before delivery, which is for keeping our promise that our products are complied with both RoHS & WEEE directives.

## SA 8000

Minwa pays great attention to provide our workers and staff with a better working and living environment. As we believe that good relationship build trust, cooperation and loyalty among us, which in turn enhance the efficiency and productivity.

In Jul of 2006, our factory obtained the **SA8000** accreditation from Social Accountability International which a set of standards for decent working conditions. This certificate proves the working conditions and living environment we provided to our workers and staff are met the international standards.

Our core values are in terms of quality, safety, staff welfare, and social responsibility. We have remained competitive in terms of price, and our production machinery and equipment are state-of-the-art. We take pride in what we have achieved, and we shall keep improving ourselves to meet all –round success.

## ErP

**ErP (2009/125/EC)**, the directive of energy efficiency and saving launched by the EU (European Union). It has been effective in April-2009, and became mandatory efficiency requirements for external power supplies in April 2010.

We have a newly developed high-energy efficiency SMPS series, aims to reduce energy loss during loading or no load of adaptors, the series consists single voltage and multiple voltage outputs. It complies with 2nd enforcement stage of **ErP**, (for EU countries), which is much more rigorous than the CEC and MEPS ones. This explains our new series also complies with CEC (US market) and MEPS (Australian market).

We provide various products with reliability, affordability and environmental friendly, contact us today at [sales@minwa.com.hk](mailto:sales@minwa.com.hk) for details.



GPMS Certificate



SA8000 Certificate

# ABOUT US

## Minwa Electronics Co., Ltd

## Minwa Green Energy Electronics Co., Ltd

was established in 1977. We have been robustly growing from a local electronics factory to a leading manufacturing company of its kinds serving worldwide customers with experience, innovation and outstanding service over the past 34 years.

**Today**, our head office is located in Hong Kong. In 2008, we successfully moved to the new industrial plant in Huizhou, which we endeavor to cater our valued customers' needs in the fast-changing market. We strive to diversify our products ranging from OEM products, power supplies, battery chargers, electronic accessories and technological solutions.

**Minwa's** fully integrated industrial plant, from product development to final packaging. There are more than 4,000 staff and 100 engineers specializing in different disciplines. We provide in-house training to engineers, letting them familiarize with the latest technological developments and requirements of worldwide standards. Minwa has diversified into OEM/ODM business and a new OEM/ODM engineering team was formed accordingly with a view to serve customers better.

**Minwa** certified to ISO9001:2008 and its laboratory obtained the ISO 17025 accreditation from TÜV Rheinland. Therefore, the laboratory is entitled to conduct in-house LVD safety tests and calibration tasks in conformity with both EN and CB standards. With these laboratories in place, the product development cycle is shortened and become far more advanced. Our products thus getting much cost effective and competitive in the worldwide market.

**Pursuance** of excellence in both of our products and services have led us forward over the past 34 years, we take pride in what we have achieved, but will never cease to seek improvement and growth. We thank our existing customers for their continued support to witness our growth and welcome any suggestions for improvement. We are looking forward to be the opportunity of establishing a partnership with those we have yet to serve in the near future.



GPMS Certificate



SA8000 Certificate



ISO9001:2008 Certificate



TÜV ISO 17025 Certificate



**A# V# Q#** cUL<sup>®</sup> us



**CB**  
Scheme



**FC**  
FOR HOME OR  
OFFICE USE



# HUIZHOU INDUSTRIAL PARK



The construction of our new industrial park in Huizhou, Guangdong has completed in 2008, which aims to further revolutionizing our development and establishing a better workflow. It increases our daily production capacity to 100,000pcs. The certificates of SA8000, ISO9001: 2000, ISO17025 and the execution of GPMS, the new plant, which symbolizes our achievement and strong capacity to serve our customers best.

## Minwa highway

Minwa takes the pioneer work to cooperate the construction of the infrastructure with the regional government in Huizhou. Minwa Highway is about 2.8km long in length directly linking the new industrial park to other different places. Thus, this highway can ensure and facilitate the flow of our products' delivery smoothly.comprehensive control on production cost and quality.



Minwa highway

## Capital investment & strong capacity

The industrial park consists of 5 production halls, and its own R&D center. New product development, product tests, in-house tooling, injection molding, metal stamping, cable fabrication and coil winding departments are fully vertical integrated in the industrial park. Furthermore, our copper wire manufacturing factory, battery-manufacturing factory and printing factory have been put on steam in the industrial park in 2008, which enable Minwa a comprehensive control on production cost and quality.



Battery manufacturing



EMC laboratory



Copper wire manufacturing



X-Ray Fluorescence Spectrometer (XRF)



Production department

## Social responsibility

Being a responsible social business group, we deposit the electronic waste properly according to WEEE and RoHS Directives. Furthermore, the implementation of GPMS, a line-up of the all departments in our factory, not only ensures our products are hazardous free, but also minimizes the emission of harmful substances affecting the area. We hope our actions can contribute to society on the ground of profit making.

## The Huizhou industrial park

is the milestone of excellence in Minwa's products and services.



Basketball match in leisure time

# MINWA COMMUNITY

Our core values are in terms of quality, safety, staff welfare, and social responsibility. Other than the good working place we provide to our workers, Minwa also cares the living environment of our people. The industrial park is a working place, it is also a community to the person who live there.



Cycling in leisure

## Improving Quality of Life

Our mission to achieve environment health and justice is the construction of the new factory plant to a large greenbelt. The factory plant will be about 20% of land covered by green plants to enhance the quality of air, the well being of the workers.

The landscape-engineering plan is on going with a great success. After the completion of the project, the planted area is full of fruit trees, brushes, arbors, different kinds of flowers, etc., which improves the appearance of the new industrial park, and peoples live in here with their family are now enjoying fresh air, a healthier living environment, better vision of the working and living place, no matter they are working or during leisure.



The latest view of the greenbelt



Weed removal



Tree-planting campaign



Recycled water for irrigation



Beautiful scenery



Solar panel at the roof



Hundreds of solar panel



Well trained security team



Auto patrol

## Improving Living Conditions

Minwa pays great attention to provide our workers with a better working and living environment. The 7-storey dormitories with a total floor area of 30,000 sqm site, which provides a comfortable accommodation for single, couple, and couple with child. Every room has its own bathroom, color TV and storage area.



Apartment for couple



Decent room for single

We understand that fresh and nutritional food is good to health. Therefore we purchase fresh vegetables and fruits from the farmers nearby. Fish from the ponds, pork from hoggeries and chickens from chicken farm, etc.. The supermarket is located at the canteen. It provides various stuff and supplements for daily necessities.



Source of fresh vegetable



Fish pond



Supermarket



Variety of choices



Fresh fruits & vegetables



'Smart card' system applies to daily life



Well-organized & tidy canteen



As a living place, recreation and leisure facilities are essential to keep healthy. The industrial park has enough spaces and facilities for family and children to play with. The basketball & badminton courts, table tennis hall, web- surfing center and more are provided for up to 8,000 workers.



Web-surfing centre



Basketball match



Experienced cook



Well-organized kitchen



Plenty of options



Table tennis hall



Cheer squad

We take pride in what we have achieved, and we shall keep improving ourselves to meet all-round success.



Enjoy leisure on the playground



"Back home safe" program



Night-view of the industrial park

# QUICK INFORMATION

## ACCESS IS ALL FOR SUCCESS

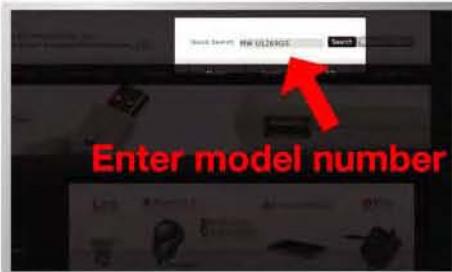


[www.minwa.com.hk](http://www.minwa.com.hk)

Start from a “click” . . .



Online Product Info



Key Word Search



Advance Search Function



Online New Product Info



Online Catalogue for Download



Online Factory Tour



Online Promotion

NOW ENJOY MINWA'S **ONLINE SERVICE!**

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## LOGO DESCRIPTION



Products obtained the GS approval from TÜV Rheinlaand. LVD section is comprised in GS approval.



Products obtained the GS approval from Intertek Testing Services. LVD section is comprised in GS approval.



Products have been tested and comply with the related safety requirements by Intertek Testing Services. LVD section for EU conformity is comprised in GS approval.



Products are CE approved. CE usually contains two sections; LVD and EMC.



Products obtained the approval mark for the USA and Canada from TÜV Rheinland. cTUVus is one of the official approval marks of the USA and Canada.



Products obtained the approval mark for the USA and Canada from ETL, cETLus is one of the official approval marks of the USA and Canada.



Products obtained the approval mark for the USA and Canada from UL International Limited. cETLus is one of the official approval marks of the USA and Canada.



Products obtained the approval mark for the USA and Canada from SA. SA is one of the official approval marks of the USA and Canada.



Products obtained the e-mark approval. Since October 2002, all auto accessories sold to Europe must have e-mark. E4 is issued by Luxembourg and it is valid in Europe.



Since 1st April 2001, The Japanese government launched the "Electrical Appliance and Material Safety law" (DENAN Law). The old-T-mark and other mark were replaced by the Pse diamond mark/PSE circle mark.



Products comply with the standard and establish a traceable link between the equipment and the manufacturer, importer or the agent responsible for compliance and for placing it on the Australian market. C-tick represents EMC approval.



Products comply with the standard and establish a traceable link between the equipment and the manufacturer, importer or the agent responsible for compliance and for placing it on the Australian market. Q# is issued in Queensland and represents safety approval.



Products comply with the standard and establish a traceable link between the equipment and the manufacturer, importer or the agent responsible for compliance and for placing it on the Australian market. V# is issued in Victoria.



Products comply with the standard and establish a traceable link between the equipment and the manufacturer, importer or the agent responsible for compliance and for placing it on the Australian market. A# is issued by International Testing and Certification Service in Australia.

## LOGO DESCRIPTION



This is an international program for exchange and acceptance of product safety test results among participating laboratories and certification bodies (CBs) around the world. It offers manufacturers a simplified way to obtain multiple national safety certifications for their products.



Products have obtained the Korean EK-mark. The Korean government launched the new Electric Appliance Safety Control Act. Products falling under the scope of the law are required to obtain the mandatory EK-mark.



Products obtained the Argentina approval mark from TÜV Rheinland. The Argentina S-mark is the official approval mark of Argentina.



Chargers with timer function. Chargers have timer to prevent overcharge of batteries by switching the charge cycle from fast mode to trickle mode after a predetermined time. The recommended charging current of a timer-charger is usually less than 0.2 - 0.3C (C = battery's capacity).



Chargers with timer function. Chargers have timer to prevent overcharge of batteries by switching the charge cycle from fast mode to trickle mode when the charger detected the abrupt change of voltage and other parameters. Since the chargers with  $\Delta V$  detection usually have a well-designed protection circuit, the recommended charging current of these chargers are around 0.25C-1C (C = battery's capacity).



Chargers with discharge function. It clears the built-memory inside the battery



A device for checking battery's condition.



Input voltage of product is 100VAC to 240VAC for using worldwide.



AC mains plug converter



Products for R/C toys and battery packs



This product is under Patent protection.



This product is with USB input.

## LOGO DESCRIPTION



Products for use with PSP



Products for use with iPod



Products for use with iPhone



Products with LCD display



Products for mobile/cellular phones



Products for digital cameras



Products for corresponding game machines



Products for notebook computers



Products for PDA



Products for audio products, e.g. MP3 players, discman, walkman



Products with changeable input plugs so they can be used in most of the countries.



Products with rotary input plug. The plug could be rotated so as to be adjusted to your desired angle.



Products with foldable input plug. The plug can be stored inside the unit when it is not in use.



# O.E.M./O.D.M.

As a professional **OEM/ODM** manufacturer, we strive continuously on the development and manufacturing of battery chargers, power supplies, and electronic accessories with best quality

With our excellent product knowledge, strong and experienced engineering force, infinite combinations and flexibilities, we are capable of offering our clients an outstanding tailored-made solution.

The sales team pays great attentions to every aspect of clients' request in order to perform great services to our clients.

We accomplish our clients' needs and requests through each stage of R&D, manufacturing, distribution and service. We attempt to offer clients with best and prompt solutions to every demand.



# O.E.M./O.D.M.

## Your Best O.E.M./O.D.M. Partner of Consumer Electronics

### 1) Pioneer of Product Safety

We realized that product safety is the major concern of our customers. In response to this, Minwa has set up in-house laboratories which have obtained international accreditation. The LVD laboratory obtained the ISO 17025 accreditation from TÜV Rheinland. Therefore, Minwa is entitled to conduct in-house LVD safety tests and calibration tasks in conformity with both EN and CB standards. We also have a fully equipped EMC laboratory, which is set up under the expert advices of the university professor, who is now working for TÜV Rheinland. With these laboratories in place, the product development cycle is shortened and become more cost effective. Our products therefore become reliable and affordable in the worldwide market.



EMC lab test



Tempreature & Humidity test



Magnetic fields test



ErP test

### 2) Minwa fully supports both of the RoHS, WEEE and REACH directives

Being a socially responsible business group, we fully understand that we are obligated to ensure all products are complied with the directives. Our entire production process is subject to "green audit" under the SGS Green Product Management System (GPMS), from raw materials purchasing and design through every step of manufacturing, ensure every product we make is completely compliant with RoHS, WEEE and REACH directives. Our factory also accredited under SA8000, established by Social Accountability International, which shows we care the standard of decent working condition to our staff.



X-Ray Fluorescence Spectrometer (XRF)



PCB assembly department

### 3) Vertically-integrated Factory

Minwa has grown robustly over the years, and is now one of the largest manufacturers of consumer electronics in the region. The factories, occupying 200,000 square meters, accommodate 50 production lines and 4,000 staff. Minwa's fully integrated factories consist of in-house tooling, injection molding, metal stamping, cable fabrication, and coil winding departments. It enables a higher flexibility in production and our products to be price-competitive.

# O.E.M./O.D.M.

## 6) New Division - LED Bulb Manufacturing

In 2010, we started the manufacturing of LED bulbs. We believe quality and product safety are the most important elements to customers that we invest much capital for testing machines for development use, for production lines, for quality inspection, etc. With the implementation of Lamp bead workshop, automatic test line, LED lamp assembly. We provide 100% in-house production of our high quality LED bulbs with a very competitive pricing.

Our LED ranges as following:

- 1) Ball shape (6400K, 4200K & 2700K)
- 2) Mushroom shape (6400K, 4200K & 2700K)
- 3) Cup shape (6400K, 4200K & 2700K)
- 4) Candle shape (6400K, 4200K & 2700K)
- 5) Reflector (6400K, 4200K & 2700K)

Bases include E26, E27, GU10, GU5.3, E14, etc.

All our LED bulbs are complied with WEEE, RoHS, REACH and carry international approvals. For 100-240VAC version is carrying TÜV GS, CE. For 12VDC version, CE is available.

Contact us today for more information.



LED bead production



LED assembly

LED integrated test

## 7) Strengthen the Product-design & Engineering Team



In-house training

Minwa is backed up with a strong engineering and product-design team, with over 50 staff specializing in various disciplines. We provide in-house training to our engineers in order to familiarize with the latest technological developments and requirements of worldwide standards. Minwa has diversified into OEM/ODM business and a new OEM/ODM engineering team was formed accordingly with a view to serve customers better.



CNC machine



PCB mold making



Metal mold making



## 8) Product Variety

Minwa provides a large variety of products for different applications:

- i) Cellular phone accessories
- ii) Laptop accessories
- iii) Audio accessories
- iv) iPod / iPhone / iPad accessories
- v) Game accessories

They are divided into below categories:

- AC/AC power supplies
- AC/DC non-regulated power supplies
- AC/DC primary switched power supplies
- AC/DC switched USB power supply
- Battery chargers for Ni-CD/Ni-MH batteries
  - a. Standard charger
  - b. Timer charger
  - c. ΔV charger
- Rechargeable Battery
- Battery chargers for Lead Acid batteries
- Battery chargers for Li-Ion battery pack
- DC/DC converter
- DC/DC USB adaptor
- Converter plug
- LED lamp



EMC test



Plastic injection department

## OEM/ODM order are welcomed

In this competitive market, Minwa always strives to take prompt actions against changes and always places customer relations as the first priority. We look forward to be your long-term business partner.

# O.E.M./O.D.M. orders are welcomed

## 4) Capital Investment with Global Management

Our management commits to capital investments for improving our products and customer services. They have conducted field visits of the factories worldwide and bought the best element together for the new factory's design. In order to provide a better flow of work and to improve the working and living environment for workers, in 2004, Minwa started the construction of a new industrial park in Huizhou, Guangdong with a view to further revolutionizing our development and establishing a better workflow. The new plant consists of 5 production halls, dormitories, and R&D center with a total floor area of 200,000sqm site. The inauguration of the new industrial park symbolizes a fully equipped platform from material supply, R&D, product tests, production to logistic service. Combined with our new management style, Minwa is striving to become the leader in our field.



Blister manufacturing department



SMT assembly department



Metal stamping department



Plastic molding department



Auto Spraying department



## 5) Battery Manufacturing, copper wire manufacturing & printing company



Battery manufacturing department

Pursuance of excellence in our products, we start to produce our own rechargeable Ni-Cd & Ni-MH batteries in 2008. The entire investment of the department is 10 millions US dollars. The professional management team & production team persist to provide high quality batteries with low price to customers. Together with our copper wire manufacturing and printing company, which concentrate on equipment automation, production technique and staff training, we can take the advantage of cost minimization, better quality control and ensure the product performance are reliable, safe and green. Gradually, we increase the market competitiveness by providing the value- maximizing product and service to our customers at one place.



Copper wire manufacturing department



Printing department

## Input Plug

### Input Plug

**Desktop Models** - Adaptors have an AC-cord for connection to a main socket.

**Plug-in Models** - Adaptors have the AC plug incorporated in the base for direct insertion to main socket.

#### For our desktop models

We supply adaptors with various kinds of input plugs. Some of the most common being the following:

Type	European	American	British	Australian	Argentina	South Africa	VDE	VDE1	Korean
Ordering Code	AV	AF	UK	SAA	ARG	RUK	V	U1	KR
Diagram									

#### For our plug-in models

Please refer to the chart next to the adaptor for available input plugs, following is a list and abbreviation of all available input plugs:

Type	VDE	SCHUKO	BS415	Australian	South African	ROUND	DUAL ROUND	FLAT	DUAL FLAT	UL/CSA	FLAT (220V)	Argentina	Korean	China	China
Diagram															
Ordering Code	VCE	UCE	UK	SAA	RUK	AR	DR	AF	DF	UL	LF	ARG	KR	CF	CSAA
Input Voltage	230V	230V	230V	240V	240V	220V	110/220V	110V	110/220V	110V	220V	220V	220V	220V	220V

## World mains Guide

Following is a table for different countries' mains voltage, frequency, and input plug. Please only use this as a general guide, as some countries have different voltage and frequencies in different areas.

Europe is "harmonised" to a 230V standard, but the actual voltage supply dose not change. The 230V is the standard, with tolerances adjusted to suit the standard.

Country	Voltage	freq.	Plug	Country	Voltage	freq.	Plug	Country	Voltage	freq.	Plug
Argentina	220V	50 Hz	ARG	Iceland	230V	50 Hz	U	Portugal	230V	50 Hz	U / V
Australia	240V	50 Hz	SAA	India	220V	50 Hz	U / AR	Puerto Rico	120V	60 Hz	AF
Austria	230V	50 Hz	U	Indonesia	220V	50 Hz	U / AR	Romania	230V	50 Hz	U / V
Bangladesh	220V	50 Hz	AR	Ireland	230V	50 Hz	UK	Russia & Formal Soviet	230V	50 Hz	U / V
Belgium	230V	50 Hz	U / V	Israel	230V	50 Hz	U	Republics			
Bermuda	120V	60 Hz	AF	Italy	230V	50 Hz	U	Singapore	230V	50 Hz	UK / U / AR
Brazil	110V	60 Hz	AF	Jamaica	110V	60 Hz	AF	Slovakia	230V	50 Hz	U
Canada	120V	60 Hz	UL	Japan	100V	50/60 Hz	JF	South Africa	220-240V	50 Hz	RUK
Chile	220V	50 Hz	AR	Jordan	220V	50 Hz	AR	Spain	230V	50 Hz	U
China	220V	50 Hz	LF / CF	Korea	220V	60 Hz	KR	Sri Lanka	220V	50 Hz	AR
Colombia	110V	60 Hz	AF	Kuwait	220/240V	50 Hz	AR / UK	Sweden	230V	50 Hz	U / V
Cyprus	230V	50 Hz	UK	Macao	220V	50 Hz	AR	Switzerland	230V	50 Hz	U
Czech Republic	230V	50 Hz	U / V	Malaysia	240V	50 Hz	UK	Taiwan	110V	60 Hz	AF
Denmark	230V	50 Hz	U / V	Mexico	100V/117V	60 Hz	AF	Thailand	220V	50 Hz	AR / LF
Ecuador	220V	60 Hz	DF	Netherlands	230V	50 Hz	U	Turkey	220V	50 Hz	U
Egypt	220V	50 Hz	AR	New Zealand	240V	50 Hz	SAA	United Arad Emirates	220-240V	50 Hz	UK / AR
Finland	230V	50 Hz	U / V	Nigeria	220V	50 Hz	AR	United Kingdom	230V	50 Hz	UK
France	230V	50 Hz	U	Norway	230V	50 Hz	U / V	United States of America	120V	60 Hz	UL
Germany	230V	50 Hz	U / V	Pakistan	220V	50 Hz	AR	Uruguay	220V	50 Hz	AR
Greece	230V	50 Hz	U	Peru	220V	50 Hz	AR	Venezuela	120V	60 Hz	AF
Hong Kong	220V	50 Hz	UK	Philippines	220V	60 Hz	LF	Zaire	220V	50 Hz	AR
Hungary	230V	50 Hz	U	Poland	230V	50 Hz	U				

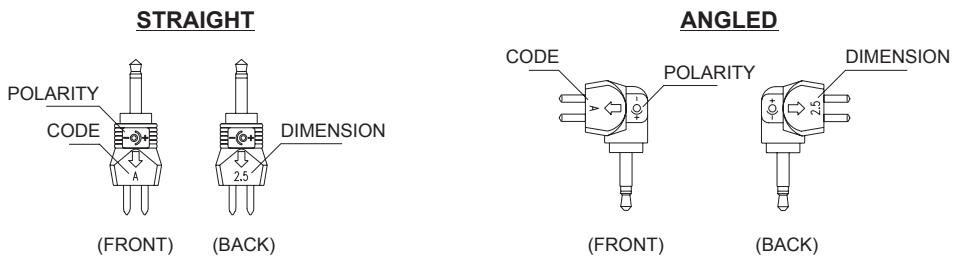


We have a series of input plug converter in Pg.188-194

## Output Plug & Output Connector

### Output Plug

We offer a range of standard output coaxial plugs & jack plugs. They can be either straight or angled, depends on your application. We can also provide tailor-made output plugs.



CODE	A	B	C	D	D1	E	F	G	H	I	J	M	N	P	Q	R	S	U	V	Y	AA	AB
DIAGRAM																						
CODE	ZA1	ZB1	ZC1	ZD1	ZD1-1	ZE1	ZF1	ZG1	ZH1	ZI1	ZJ1	ZM1	ZN1	ZP1	ZQ1	ZR1	ZS1	ZU1	ZV1	ZY1	ZAA1	ZAB1
DIAGRAM																						
CODE	ZA	ZB	ZC	ZD	ZD1-2	ZE	ZF	ZG	ZH	ZI	ZJ	ZM	ZN	ZP	ZQ	ZR	ZS	ZU	ZV	ZY	ZAA	ZAB
DIAGRAM																						
CODE	SA	SB	SC	SD	SD1-2	SE	SF	SG	SH	SI	SJ	SM	SN	SP	SQ	SR	SS	SU	SV	SY	SAA	SAB
DIAGRAM																						
SIZE	2.5/12	3.5/15	3.0 X1.0/10	5.0 X2.1/12	4.95 X1.98/7.8	5.5 X2.1/12	5.0 X2.5/12	5.5 X2.5/12	3.5 X1.35/10	4.0 X1.7/10	4.75 X1.75/10	5.0 X1.5/12	5.5 X1.5/12	5.5 X2.8/12	6.3 X3.0/12	7.0 X1.0/12	2.35 X0.75/8	5.0X3.4 X1.0/10	3.8 X1.35/10	2.45 X1.0/10	6.5 X1.0/12	5.5 X1.75/12



We have a series of DC output detachable X plug in Pg.180-186

### Multiple Output Unit

As you can see, we have a wide range of products. We welcome any combination of these designs. At the moment, we have experience in developing the following multiple-output products:

- 1.) 2 x AC/AC power supply (Two outputs at one unit)
- 2.) 1 x AC/AC, 1 x AC/DC power supply (Two outputs at one unit)
- 3.) 1 x AC/AC, 1 x AC/DC regulated power supply (Two outputs at one unit)
- 4.) 2 x AC/DC power supply (Two outputs at one unit)
- 5.) 1 x AC/DC, 1 x AC/DC regulated power supply ( Two outputs at one unit )
- 6.) 2 channels standard charger (Two outputs at one unit)
- 7.) 1 x standaard sharging, 1 x fast charging with ΔV control charger (Two outputs at one unit)
- 8.) 2 channels fast charger with ΔV control charger (Two outputs at one unit)
- 9.) 2 channels standard charging, 2 x fast charging with ΔV control charger (Four outputs at one unit)
- 10.) 1 x ΔV control Ni-MH charger, 1 x AC/DC power supply (Two outputs at one unit)
- 11.) 2 channels Primary switched AC/DC power supply (Two outputs at one unit)

For details, please contact our sales representatives.

## Input Plug

### OEM Ordering Information:

Ordering Number Format: (for AC/AC, AC/DC, AC/DC regulated power supply, battery charger, battery charger with ΔV sensing, battery charger with timer control and all toroidal Adaptors & Chargers.)

**M X Y Y Y A Z Z Z I / S P**

**M** - represents the name of the company

**X** - represents the core size or the output power of switching power supply with one letter:

Core Size	35x15mm	41x16mm	41x26mm	48x26mm	57x30mm	66x33mm	66x44mm
Symbol	A	B	C	D	E	F	G
Output Power	1.8VA	3.6VA	6VA	9.6VA	14.4VA	21.6VA	24VA

Core Size	75x45mm	96x45mm	48x30mm	EE19	EER28	41x20mm	EE25
Symbol	H	J	K	L	M	N	O
Output Power	36VA	60VA	12VA	9.6VA	60VA	4.8VA	14.4VA

Core Size	70x40mm	85x50mm	95x55mm	110x65mm	125x75mm	EE16	EF20	PQ2603	PQ2601
Symbol	P	Q	S	T	U	V	X	Z	Y
Output Power	20VA	50VA	120VA	200VA	300VA	8VA	10.8VA	30VA	45.6VA

**Y** - represents the output voltage, multiples by 10, in three digits  
(i.e. 2.4V - 024, 12V - 120, 30.5V - 305)

**A** - represents the type of unit

Symbol	A	D	S	C	E	F	G	L
Type of Unit	AC/AC power supply	AC/DC non-regulated power supply	AC/DC regulated power supply	Battery Charger	AC/AC power supply without LED	AC/DC non-regulated power supply without LED	Battery Charger without LED	Li-Ion Charger

Symbol	V	T	P	CB
Type of Unit	Battery Charger with ΔVsensing	Battery Charger with Timer Control	Primary Switched power supply	Lead Acid Charger with End Charging indicator

**Z** - represents the output current, divided by 10, in three digits

(i.e. 100mA - 010, 1200mA - 120, 630mA - 063)

**I** - represents the input plug ordering code

**S** - represents the output plug type.

**P** - represents the polarity of the output plug-centre (centre-positive - "+", centre-negative - "-") if applicable

**Example:** For an **AC/AC power supply**, with **6V, 300mA** output, **UK input plug**, **size C output plug**, **centre-positive** the model number would be **MB060A030UK/C+**.

**Approval (For some of our products) :**



## Standard Ni-Cd/Ni-MH Battery Pack Charger

### Standard Ni-Cd/Ni-MH Battery Pack Charger

Standard battery pack charger is ideal for Ni-Cd/Ni-MH battery pack. Since this is our standard charger, there is no overcharge protection. **Hence, it is recommended to select a charger with about 0.1C (C=Battery Pack Capacoty) charger current.** Current fuse or polyswitch can be added as an option for 1.) Reverse Polarity Protection, 2.) Short Circuit Protection and 3.) Overload Protectin.

Battery Voltage (V)	Charging Voltage (V)	# of cells	Maximum output current by Iron Core Size (mA)								
			3515	4116	4126	4826	5730	6633	6645	7645	9645
1.2	1.4	1	450	500	-	-	-	-	-	-	-
2.4	2.8	2	450	500	800	1000	-	-	-	-	-
3.6	4.2	3	340	500	800	1000	2000	2900	3600	-	-
4.8	5.6	4	340	500	800	1000	2000	2900	3600	5400	-
6.0	7.0	5	240	450	600	850	1500	2500	3400	4000	-
7.2	8.4	6	240	450	600	850	1500	2500	3400	3800	6500
8.4	9.8	7	170	300	500	800	1200	1800	3000	3500	5000
9.6	11.2	8	170	300	500	800	1200	1800	2700	3500	5000
10.8	12.6	9	140	250	400	600	1000	1500	2450	3000	4000
12.0	14.0	10	140	250	400	600	1000	1500	2200	3000	4000
13.2	15.4	11	114	200	350	490	800	1100	2000	2500	3300
14.4	16.8	12	114	200	350	490	800	1100	1850	2500	3300
15.6	18.2	13	85	160	250	380	600	880	1700	2140	2800
16.8	19.6	14	85	160	250	380	600	880	1600	2140	2800
18.0	21.0	15	85	160	250	380	600	880	1480	2140	2800
19.2	22.4	16	85	160	250	380	600	880	1400	1850	2500
20.4	23.8	17	85	160	250	380	600	880	1300	1850	2500
21.6	25.2	18	70	130	200	300	500	800	1230	1650	2200
22.8	26.6	19	70	130	200	300	500	800	1150	1650	2200
24.0	28.0	20	70	130	200	300	500	800	1100	1500	2000
25.2	29.4	21	70	130	200	300	500	800	1050	1500	2000
26.4	30.8	22	-	100	180	250	-	600	1000	1370	1850
27.6	32.2	23	-	100	-	250	-	600	950	1370	1850
28.8	33.6	24	-	100	-	-	-	600	900	-	-
30.0	35.0	25	-	100	-	-	-	600	900	-	-

### MA...G...



### 3515 Standard Charger without LED

- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
Dimension: 53 x 42 x 75mm (Housing 34)  
Packing: Individual white giftbox



### MA...C...



### 3515 Standard Charger

- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 53 x 42 x 75mm (Housing 14)  
Packing: Individual white giftbox



### MB...C...



### 4116 Standard Charger

- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 59 x 50 x 80mm (Housing 5)  
Packing: Individual white giftbox



### MC...C...



### 4126 Standard Charger

- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 67 x 50 x 80mm (Housing 6)  
Packing: Individual white giftbox



## Standard Ni-Cd/Ni-MH Battery Pack Charger

MD...C...



ME...C...



MF...C...



MG...C...



MH...D...



MJ...S...



### 4826 Standard Charger

● Plug-in ● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 75 x 58 x 87mm (Housing 7)  
Packing: Individual white giftbox



### 5730 Standard Charger

● Desktop ● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 100 x 72 x 60mm (Housing 8)  
Packing: Individual white giftbox



### 6633 Standard Charger

● Desktop ● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 110 x 84 x 67mm (Housing 9)  
Packing: Individual white giftbox



### 6645 Standard Charger

● Desktop ● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 136 x 87 x 67mm (Housing 22)  
Packing: Individual white giftbox



### 7645 AC/DC Adaptor

● Desktop ● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 122 x 95 x 160mm (Housing 12)  
Packing: Individual white giftbox



### 9645 AC/DC Adaptor

● Desktop ● For Ni-Cd/Ni-MH battery packs

● Regulated

Input: 230V~50Hz  
LED indication: Power LED  
Dimension: 136 x 101 x 198mm (Housing 13)  
Packing: Individual white giftbox



## Option:



A.) Add approved output current fuse (inside the housing) for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.



B.) Add approved replaceable output current fuse (in the external FH1 fuse box) for  
1.) Short Circuit Protection and  
2.) Overload Protection.



C.) Add output polyswitch for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.

## Remarks:

- 1.) The most common battery pack connector is F01D.
- 2.) Please note the formulas given above are for reference only. The actual battery performance may vary with different brands of batteries.

## Charger for Ni-Cd/Ni-MH Battery Pack With Timer Control

### Charger for Ni-Cd/Ni-MH Battery Pack With Timer Control

This battery pack charger series have timer control to protect the battery against overcharging. It is recommended to select a charger with less than 0.25C (C=Battery Pack Capacity) charging current. Please specify your battery pack capacity when placing order. The following formula is for calculating the fast charging time.

$$\text{Fast Charging Duration (hr)} = \text{Battery Capacity} \times 1.4 / \text{Charging Current}$$

Current fuse or polyswitch can be added as an option for 1.) Reverse Polarity Protection, 2.) Short Circuit Protection and 3.) Overload Protection.

Battery Voltage	Charging Voltage	# of Batteries	Maximum Output Current by Iron Core Size	
			4120	4826
2.4V	2.8V	2	300mA	500mA
3.6V	4.2V	3	300mA	500mA
4.8V	5.6V	4	300mA	500mA
6.0V	7.0V	5	300mA	500mA
7.2V	8.4V	6	300mA	500mA
8.4V	9.8V	7	300mA	500mA
9.6V	11.2V	8	300mA	500mA
10.8V	12.6V	9	300mA	500mA
12.0V	14.0V	10	300mA	500mA

MN...T...



**4120 Charger With Timer Control**

● Plug-in

● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz

Dimension: 82 x 56 x 80mm (Housing 15)

Packing: Individual white giftbox

LED indication

Status	LED Red	LED Green
Power On (No Battery is connected)	Off	Off
Fast Charging	On	Off
Trickle Charging	Off	On



MD...T...



**4826 Charger With Timer Control**

● Plug-in

● For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz

Dimension: 85 x 62 x 88mm (Housing 16)

Packing: Individual white giftbox

LED indication

Status	LED Red	LED Green
Power On (No Battery is connected)	Off	Off
Fast Charging	On	Off
Trickle Charging	Off	On



Option:



A.) Add approved output current fuse (inside the housing) for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.



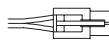
B.) Add approved replaceable output current fuse (in the external FH1 fuse box) for  
1.) Short Circuit Protection and  
2.) Overload Protection.



C.) Add output polyswitch for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.

Remarks:

- 1.) The most common battery pack connector is F01D.
- 2.) Please note the formulas given above are for reference only. The actual battery performance may vary with different brands of batteries.



## Ni-Cd/Ni-MH Battery Pack Charger with $\Delta V$ Detection & Discharge

### Charger for Ni-Cd/Ni-MH Battery Pack With $\Delta V$ Detection and Discharge Function

This battery pack charger series can protect the battery against overcharging with the  $\Delta V$  control. It is recommended to choose a charger with 0.4C to 1C (C=Battery Pack Capacity) charging current. When the battery is full, the IC in the charger will detect the change of voltage and several other parameters to prevent the battery from overcharging. The discharge function is built inside the charger.

Current fuse or polyswitch can be added as an option for 1.) Reverse Polarity Protection, 2.) Short Circuit Protection and 3.) Overload Protection.

Battery Voltage	Charging Voltage	# of Batteries	Maximum Output Current by Iron Core Size		
			4120	4826	5730
2.4V	2.8V	2	400mA	600mA	-
3.6V	4.2V	3	400mA	600mA	1000mA
4.8V	5.6V	4	400mA	600mA	1000mA
6.0V	7.0V	5	400mA	600mA	1000mA
7.2V	8.4V	6	300mA	600mA	1000mA
8.4V	9.8V	7	300mA	600mA	1000mA
9.6V	11.2V	8	300mA	600mA	1000mA
10.8V	12.6V	9	300mA	600mA	1000mA
12.0V	14.0V	10	300mA	600mA	1000mA

### MN...V...



### 4120 Battery Charger

- $\Delta V$  Detection
- Discharge function
- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz

Dimension: 85 x 56 x 80mm (Housing 15)

Packing: Individual white giftbox



#### LED indication

Status	Dual Colour LED
Power On (No Battery is connected)	Off
Fast Charging	Red
Trickle Charging	Green
Discharging	Yellow

### MD...V...



### 4826 Battery Charger

- $\Delta V$  Detection
- Discharge function
- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz

Dimension: 85 x 62 x 88mm (Housing 16)

Packing: Individual white giftbox



#### LED indication

Status	Dual Colour LED
Power On (No Battery is connected)	Off
Fast Charging	Red
Trickle Charging	Green
Discharging	Yellow

### ME...V...



- $\Delta V$  Detection
- Desktop
- Plug-in
- For Ni-Cd/Ni-MH battery packs

Input: 230V~50Hz

Dimension: 122 x 76 x 60mm (Housing 17)

Packing: Individual white giftbox



#### LED indication

Status	Dual Colour LED
Power On (No Battery is connected)	Off
Fast Charging	Red
Trickle Charging	Green

#### Option:



A.) Add approved output current fuse (inside the housing) for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.

B.) Add approved replaceable output current fuse (in the external FH1 fuse box) for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.



C.) Add output polyswitch for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.

#### Remarks:

1.) The most common battery pack connector is F01D.



2.) Please note the formulas given above are for reference only. The actual battery performance may vary with different brands of batteries.

## Lead Acid Battery Charger

### Standard Charger For Lead Acid Battery

This type of charger is ideal for Lead Acid battery. To optimize the Lead Acid battery lifetime, **it is recommended to select a charger with about 0.1C (C=Battery Pack Capacity) charging current.** It is also optional to add a current fuse or polyswitch for 1.) Reverse Polarity Protection, 2.) Short Circuit Protection and 3.) Overload Protection.

### For 6V Lead Acid Battery

Battery Capacity	With End Charging Indicator	Charging Current (mA)	With Power Indicator	Charging Current (mA)
1.0 - 1.8Ah	MW6CB015GS	150	MA060C015GS	150
1.9 - 3.0Ah	MW6CB028GS	280	MA060C028GS	280
3.1 - 3.8Ah	MW6CB032GS	320	MA060C032GS	320
3.9 - 4.5Ah	MW6CB042GS	420	MA060D040GS	400
4.6 - 6.0Ah	MW6CB050GS	500	MB060C050GS	500
6.1 - 8.5Ah	MW6CB072GS	720	MC060C072GS	720
8.6 - 10.5Ah	MW6CB100GS	1000	MC060D100GS	1000
11.0 - 14.0Ah	MW6CB120GS	1200	MD060D120GS	1200

### For 12V Lead Acid Battery

Battery Capacity	With End Charging Indicator	Charging Current (mA)	With Power Indicator	Charging Current (mA)
0.6 - 1.0Ah	MW12CB008GS	80	MA120C008GS	80
1.1 - 1.5Ah	MW12CB013GS	130	MA120C013GS	130
1.6 - 2.0Ah	MW12CB020GS	200	MA120D020GS	200
2.1 - 2.5Ah	MW12CB022GS	220	MB120C022GS	220
2.6 - 3.5Ah	MW12CB033GS	330	MB120C030GS	300
3.6 - 4.6Ah	MW12CB042GS	420	MC120C042GS	420
6.5 - 7.8Ah	MW12CB072GS	720	MD120C072GS	720
10.0 - 13.0Ah	-	-	ME120C120GS	1200
16.0 - 20.0Ah	-	-	MF120C180GS	1800

**MW6CB015GS  
MW6CB028GS  
MW6CB032GS  
MW6CB042GS  
MW6CB050GS**



### 6V Lead Acid Battery Charger

● Plug-in

● With end charging indicator

Input: 230V~50Hz

LED indication

Output voltage: 6V

Status

Power On (No Battery is connected)



Packing: Individual white giftbox

Red LED indication

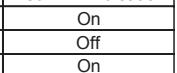
Battery is connected (Battery is not full)



Dimension: 82 x 56 x 80mm (Housing 15)

Off

Battery is connected (Battery is full)



### 6V Lead Acid Battery Charger

● Plug-in

● With end charging indicator

Input: 230V~50Hz

LED indication

Output voltage: 6V

Status

Packing: Individual white giftbox

Red LED indication

Power On (No Battery is connected)



Off

Dimension: 85 x 62 x 88mm (Housing 16)

Battery is connected (Battery is not full)



### 12V Lead Acid Battery Charger

● Plug-in

● With end charging indicator

Input: 230V~50Hz

LED indication

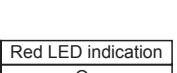
Output voltage: 12V

Status

Packing: Individual white giftbox

Red LED indication

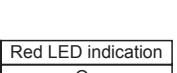
Power On (No Battery is connected)



On

Dimension: 82 x 56 x 80mm (Housing 15)

Battery is connected (Battery is not full)



**MW12CB008GS  
MW12CB013GS  
MW12CB020GS  
MW12CB022GS  
MW12CB033GS**



## Lead Acid Battery Charger

**MW12CB042GS  
MW12CB072GS**



**MA060C015GS  
MA060C028GS  
MA060C032GS  
MA060D040GS**



**MB060C050GS**



**MC060C072GS  
MC060D100GS**



### 12V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
Output voltage: 12V  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 16)  
Charging Current:

	MW12CB042GS	MW12CB072GS
Charging Current	420mA	720mA

#### LED indication

Status	Red LED indication
Power On (No Battery is connected)	On
Battery is connected (Battery is not full)	Off
Battery is connected (Battery is full)	On

### 6V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
Output voltage: 6V  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 14)

#### Charging Current:

	MA060C015GS	MA060C028GS	MA060C032GS	MA060C040GS
Charging Current	150mA	280mA	320mA	400mA

### 6V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
Output voltage: 6V  
Charging Current: 500mA  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 5)

### 6V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
Output voltage: 6V  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 67 x 50 x 80mm (Housing 6)

#### Charging Current:

	MC060C072GS	MC060D100GS
Charging Current	720mA	1000mA

### MD060D120GS

### 6V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
 Output voltage: 6V  
 Charging Current: 1200mA  
 LED indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 75 x 58 x 87mm (Housing 7)

### MA120C007GS MA120C013GS MA120C020GS

### 12V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
 Output voltage: 12V

#### Charging Current:

	MA120C008GS	MA120C013GS	MA120D020GS
Charging Current	80mA	130mA	200mA

LED indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 53 x 42 x 75mm (Housing 14)

### MB120C022GS MB120C030GS

### 12V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
 Output voltage: 12V

#### Charging Current:

	MB120C022GS	MB120C030GS
Charging Current	220mA	300mA

LED indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 59 x 50 x 80mm (Housing 5)

### MC120C042GS

### 12V Lead Acid Battery Charger



#### ● Plug-in

Input: 230V~50Hz  
 Output voltage: 12V  
 Charging Current: 420mA  
 LED indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 67 x 50 x 80mm (Housing 6)

**MD120C072GS**



**12V Lead Acid Battery Charger**

CE

● **Plug-in**

Input:	230V~50Hz
Output voltage:	12V
Charging Current:	720mA
LED indication:	Power LED
Packing:	Individual white giftbox
Dimension:	75 x 58 x 87mm (Housing 7)

**ME120C120GS**



**12V Lead Acid Battery Charger**

CE

● **Desktop**

Input:	230V~50Hz
Output voltage:	12V
Charging Current:	1200mA
LED indication:	Power LED
Packing:	Individual white giftbox
Dimension:	100 x 72 x 60mm (Housing 8)

**MF120C180GS**



**12V Lead Acid Battery Charger**

CE

● **Desktop**

Input:	230V~50Hz
Output voltage:	12V
Charging Current:	1800mA
LED indication:	Power LED
Packing:	Individual white giftbox
Dimension:	110 x 84 x 67mm (Housing 8)

**Option:**



A.) Add approved output current fuse (inside the housing) for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.



B.) Add approved replaceable output current fuse (in the external FH1 fuse box) for  
1.) Short Circuit Protection and  
2.) Overload Protection.



C.) Add output polyswitch for  
1.) Reverse Polarity Protection,  
2.) Short Circuit Protection and  
3.) Overload Protection.

**Remarks:**

1.) Please note the formulas given above are for reference only. The actual battery performance may vary with different brands of batteries.

## Smart IC Charger For Li-Ion Battery

### Smart IC Charger For Li-Ion Battery

This type of charger is designed for charging Li-Ion battery pack. There are ranges of chargers for 3.6 & 7.2V battery packs. Our chargers have an excellent IC control to prevent overcharging of batteries. There are two charging states: Constant current charging mode and Constant voltage charging mode. Constant current charging mode is a "fast" charging cycle of the charger. After the optimal battery voltage has reached, the charger will switch to the constant voltage charging mode. It is the "trickle" charging cycle of the charger. When the optimal charging current has reached, the charger will stop charging the battery to prevent overcharging of Li-Ion Battery. Besides, they have output short circuit protection and temperature protection to ensure users' safety.

#### For 3.6V Li-Ion Battery

Model	Charging Current (mA)
MW36LS03CE	300
MW36LS05CE	500
MW36LS15CE	1500

#### For 7.2V Li-Ion Battery

Model	Charging Current (mA)
MW72LS05CE	500
MW72LS10CE	1000
MW72LP15CE	1500

#### MW36LS03CE

#### MW36LS05CE



#### 3.6V Li-ion Battery Charger

- Plug-in

Input: 230V ~ 50Hz  
Output voltage: 3.6V  
Packing: Individual white giftbox  
Dimension: 82 x 56 x 80mm (Housing 15)

- Built-in timer pre-set: 1.58hrs

Charging Current:		
	MW36LS03CE	MW36LS05CE
Charging Current	300mA	500mA
LED Indication		
Status	LED Red	LED Green
Power On (No Battery is Connected)	Off	On
Fast charging	On	On
Battery is full	Off	On

#### MW36LS15CE



#### 3.6V Li-ion Battery Charger

- Plug-in

Input: 230V ~ 50Hz  
Output voltage: 3.6V  
Charging Current: 1500mA  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 16)

- Built-in timer pre-set: 1.58hrs

LED Indication		
Status	LED Red	LED Green
Power On (No Battery is Connected)	Off	On
Fast charging	On	On
Battery is full	Off	On

#### MW72LS05CE



#### 7.2V Li-ion Battery Charger

- Plug-in

Input: 230V ~ 50Hz  
Output voltage: 7.2V  
Charging Current: 500mA  
Packing: Individual white giftbox  
Dimension: 82 x 56 x 80mm (Housing 15)

- Built-in timer pre-set: 1.58hrs

LED Indication		
Status	LED Red	LED Green
Power On (No Battery is Connected)	Off	On
Fast charging	On	On
Battery is full	Off	On

#### MW72LS10CE



#### 7.2V Li-ion Battery Charger

- Plug-in

Input: 230V ~ 50Hz  
Output voltage: 7.2V  
Charging Current: 1000mA  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 16)

- Built-in timer pre-set: 1.83hrs

LED Indication		
Status	LED Red	LED Green
Power On (No Battery is Connected)	Off	On
Fast charging	On	On
Battery is full	Off	On

#### MW72LP15CE



#### 7.2V Li-ion Battery Charger

- Plug-in

- Switching mode

Input: 230V ~ 50Hz  
Output voltage: 7.2V  
Charging Current: 1500mA  
Packing: Individual white giftbox  
Dimension: 85 x 62 x 88mm (Housing 25)

- Built-in timer pre-set: 1.83hrs

LED Indication		
Status	LED Red	LED Green
Power On (No Battery is Connected)	Off	On
Fast charging	On	On
Battery is full	Off	On

## Single Output AC/AC Adaptor

Output Voltage Range	Maximum Output Current by Core Size							
	3515	4116	4126	4826	4830	5730	6633	6645
0.8 - 1.4 V	-	-	-	-	-	-	4500mA	-
1.5 - 3.0 V	1000mA	1500mA	2500mA	2200mA	3000mA	3500mA	4500mA	-
3.1 - 4.5 V	800mA	1200mA	2000mA	2200mA	3000mA	3500mA	4500mA	-
4.6 - 6.0 V	600mA	900mA	1500mA	1800mA	3000mA	3500mA	4500mA	5000mA
6.1 - 7.5 V	480mA	800mA	1200mA	1600mA	2500mA	3000mA	3500mA	4800mA
7.6 - 9.0 V	400mA	700mA	1000mA	1300mA	2200mA	2600mA	3200mA	4500mA
9.1 - 12.0 V	300mA	550mA	830mA	1100mA	1667mA	2000mA	3000mA	3300mA
12.1 - 15.0 V	240mA	400mA	650mA	900mA	1300mA	1600mA	2500mA	2650mA
15.1 - 18.0 V	200mA	350mA	500mA	800mA	1100mA	1400mA	2000mA	2200mA
18.1 - 21.0 V	170mA	320mA	420mA	650mA	950mA	1000mA	1500mA	1900mA
21.1 - 24.0 V	150mA	300mA	400mA	650mA	830mA	1000mA	1500mA	1650mA
24.1 - 27.0 V	130mA	260mA	350mA	550mA	650mA	900mA	1400mA	1500mA
27.1 - 30.0 V	120mA	230mA	310mA	500mA	740mA	830mA	1250mA	1310mA
30.1 - 33.0 V	112mA	-	290mA	450mA	610mA	760mA	1100mA	1220mA

MA...E...

**3515 AC/AC Adaptor without LED**



● Plug-in

Input voltage:

230V ~ 50Hz

Packing:

Individual white giftbox

Dimension:

53 x 42 x 75mm (Housing 34)

MA...A...

**3515 AC/AC Adaptor**



● Plug-in

Input voltage:

230V ~ 50Hz

LED indication:

Power LED

Packing:

Individual white giftbox

Dimension:

53 x 42 x 75mm (Housing 14)

MB...A...

**4116 AC/AC Adaptor**



● Plug-in

Input voltage:

230V ~ 50Hz

LED indication:

Power LED

Packing:

Individual white giftbox

Dimension:

59 x 50 x 80mm (Housing 5)

MC...A...

**4126 AC/AC Adaptor**



● Plug-in

Input voltage:

230V ~ 50Hz

LED indication:

Power LED

Packing:

Individual white giftbox

Dimension:

57 x 50 x 80mm (Housing 6)

## Single Output AC/AC Adaptor

MD...A...

### 4826 AC/AC Adaptor



#### ● Plug-in

Input voltage: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 75 x 58 x 87mm (Housing 7)

MK...A...

### 4830 AC/AC Adaptor



#### ● Plug-in

Input voltage: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 75 x 58 x 87mm (Housing 7)

ME...A...

### 5730 AC/AC Adaptor



#### ● Desktop

Input voltage: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 100 x 72 x 60mm(Housing 8)

MF...A...

### 6633 AC/AC Adaptor



#### ● Desktop

Input voltage: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 110 x 84 x 67mm(Housing 9)

MG...A...

### 6645 AC/AC Adaptor



#### ● Desktop

Input voltage: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 136 x 87 x 67mm(Housing 22)

#### Option:

To cope with the increasing demand of AC/AC power supply for use with table light, we now provide an approved output switch (OS1) to our clients. You can order this optional switch from our sales representatives.



## Single Output AC/DC Adaptor

### Single Output AC/DC Adaptor

This type of power supplies provide a DC output voltage, its output current is depended on the mains input voltage and load.

Output Voltage Range	Maximum Output Current by Core Size								
	3515	4116	4126	4826	4830	5730	6633	6645	7645
1.5 - 2.9 V	550mA	-	-	-	-	1500mA	2000mA	-	-
3.0 V	550mA	800mA	1000mA	1500mA	-	1500mA	2000mA	-	-
3.1 - 4.5 V	530mA	800mA	1000mA	1200mA	-	1500mA	2000mA	3600mA	-
4.6 - 6.0 V	400mA	600mA	800mA	1200mA	-	1500mA	2000mA	3600mA	5400mA
6.1 - 7.5 V	320mA	500mA	700mA	1100mA	-	1500mA	2000mA	3600mA	4000mA
7.6 - 9.0 V	260mA	450mA	600mA	1000mA	-	1500mA	2000mA	3400mA	3800mA
9.1 - 12.0 V	200mA	350mA	500mA	800mA	1000mA	1200mA	1700mA	2500mA	3500mA
12.1 - 15.0 V	160mA	300mA	400mA	650mA	850mA	1000mA	1400mA	2050mA	3000mA
15.1 - 18.0 V	130mA	250mA	330mA	550mA	730mA	800mA	1200mA	1700mA	2500mA
18.1 - 21.0 V	110mA	220mA	280mA	420mA	620mA	700mA	1000mA	1450mA	2140mA
21.1 - 24.0 V	100mA	200mA	250mA	420mA	550mA	700mA	1000mA	1300mA	1850mA
24.1 - 27.0 V	85mA	180mA	220mA	360mA	480mA	600mA	870mA	1150mA	1650mA
27.1 - 30.0 V	80mA	160mA	200mA	330mA	430mA	560mA	800mA	1000mA	1500mA
30.1 - 33.0 V	75mA	140mA	180mA	220mA	410mA	520mA	750mA	950mA	1370mA

MA...F...



### 3515 AC/DC Adaptor without LED

- Plug-in

Input: 230V ~ 50Hz  
Packing: Individual white giftbox  
Dimension: 53 x 42 x 75mm(Housing 34)



MA...D...



### 3515 AC/DC Adaptor

- Plug-in

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 53 x 42 x 75mm(Housing 14)



MB...D...



### 4116 AC/DC Adaptor

- Plug-in

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 59 x 50 x 80mm(Housing 5)  
Model: MB...D...JF is PSE Jet approved.(Only from 0.8V to 15V)



MC...D...



### 4126 AC/DC Adaptor

- Plug-in

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 67 x 50 x 80mm(Housing 6)



MD...D...



### 4826 AC/DC Adaptor

- Plug-in

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 75 x 58 x 87mm(Housing 7)



MK...D...



### 4830 AC/DC Adaptor

- Plug-in

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 75 x 58 x 87mm(Housing 7)



**ME...D...**



**5730 AC/DC Adaptor**



● Desktop

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 100 x 72 x 60mm(Housing 8)

**MF...D...**



**6633 AC/DC Adaptor**



● Desktop

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 110 x 84 x 67mm(Housing 9)

**MG...D...**



**6645 AC/DC Adaptor**



● Desktop

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 136 x 87 x 67mm(Housing 22)

**MH...D...**



**7645 AC/DC Adaptor**



● Desktop

Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 122 x 95 x 160mm(Housing 12)

## Single Output AC/DC Regulated Adaptor

### Single Output AC/DC Regulated Adaptor

These adaptors have stable DC output voltage regardless of the load and mains supply voltage. Besides, they have 1.) Automatic short circuit cutoff, 2.) Automatic thermal cutoff, and 3.) Automatic Overload cutoff.

Output Voltage Range	Maximum Output Current By Core Size (mA)						
	4126	4826	5730	6633	6645	7645	9645
1.5 - 3.0V	1000	1400	1900	1500	4000	-	-
3.1 - 4.5V	900	1300	1900	1500	4000	-	-
4.6 - 6.0V	800	1200	1680	1500	4000	6000	-
6.1 - 7.5V	700	1150	1300	1500	3000	5300	-
7.6 - 9.0V	600	1000	1260	1500	3000	4400	6500
9.1 - 12.0V	500	800	1200	1200	2500	3300	5000
12.1 - 15.0V	400	640	960	1000	2000	2650	4000
15.1 - 18.0V	330	530	780	900	1660	2200	3300
18.1 - 21.0V	290	480	680	800	1420	1900	2800
21.1 - 24.0V	250	400	600	800	1250	1650	2200
24.1 - 27.0V	-	-	-	-	-	1450	2200
27.1 - 30.0V	-	-	-	-	-	1300	2000
30.1 - 33.0V	-	-	-	-	-	1230	1850

MC...S...

### 4126 AC/DC Regulated Adaptor



● Plug-in



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 92 x 56 x 84mm(Housing 23)

MD...S...

### 4826 AC/DC Regulated Adaptor



● Plug-in



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 98 x 64 x 91mm(Housing 24)

*Model: MD...S...JF is PSE Jet approved.(Only from 1.5V to 15V)*

ME...S...

### 5730 AC/DC Regulated Adaptor



● Desktop



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 122 x 76 x 60mm(Housing 17)

MF...S...

## 6633 AC/DC Regulated Adaptor



### ● Desktop



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 136 x 87 x 67mm(Housing 22)

MG...S...

## 6645 AC/DC Regulated Adaptor



### ● Desktop



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 136 x 87 x 67mm(Housing 22)

MH...S...

## 7645 AC/DC Regulated Adaptor



### ● Desktop



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 160 x 122 x 95mm(Housing 12)

MJ...S...

## 9645 AC/DC Regulated Adaptor



### ● Desktop



Input: 230V ~ 50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 198 x 136 x 101mm(Housing 13)

## Single Output Switching AC/DC Adaptor

### Single Output Switching Power Supply

The newly developed high-energy efficiency SMPS series, aims to reduce energy loss during loading or no load of adaptors, this single voltage series is fully complied with 2nd enforcement stage of ErP, (for EU countries), which is much more rigorous than the CEC and MEPS requirement. In other words, our new series also complies with CEC (US market) and MEPS (Australian market).

We provide various products with reliability, affordability and environmental friendly, contact us today at [sales@minwa.com.hk](mailto:sales@minwa.com.hk) for details.

Output Voltage Range	Maximum Output Current By Series (mA)																
	3A03 (3.6W Max.)	3S05 (6W Max.)	3C05 (6W Max.)	3N06 (7W Max.)	3N06HT (7W Max.)	7E08 (9.6W Max.)	3K10 (12W Max.)	3K10HT (12W Max.)	3R15 (18W Max.)	3IP25 (27W Max.)	3I25 (27W Max.)	3D25 (30W Max.)	3H36 (36W Max.)	3X48 (48W Max.)	3W72 (72W Max.)	3Y90 (90W Max.)	3M120 (120W Max.)
3V	600	1000	1000	1000	1000	1600	1500	1500	2100	2250	2250	3000	-	-	-	-	
4.5V	600	1000	1000	1000	1000	1600	1500	1500	2100	2250	2250	3000	-	-	-	-	
5V	600	1000	1000	1000	1000	1600	1500	1500	2100	2250	2250	3000	3000	3500	-	-	
6V	500	800	800	1000	1000	1500	1500	1500	2100	2250	2250	3000	3000	3500	-	-	
7.5V	480	800	800	800	800	1200	1500	1500	2100	2250	2250	3000	3000	3500	-	-	
9V	400	660	660	800	800	1000	1000	1000	1500	2250	2250	3000	3000	3500	5000	-	
10.5V	340	570	570	600	600	850	1000	1000	1500	2250	2250	2800	3000	3500	5000	-	
12V	300	500	500	600	600	800	1000	1000	1500	2250	2250	2500	3000	3500	5000	6000	8000
13.5V	260	440	440	480	480	600	800	800	1200	1800	1800	2000	2660	3200	5000	-	
15V	240	400	400	480	480	600	800	800	1200	1800	1800	2000	2400	3200	4800	5000	7000
16V	-	-	-	-	-	-	-	-	-	-	-	-	3000	4500	4500	6500	
18V	200	330	330	400	400	500	670	670	1000	1500	1500	1600	2000	2670	4000	4500	6500
18.5V	-	-	-	-	-	-	-	-	-	-	-	-	2590	3890	4500	6500	
19V	-	-	-	-	-	-	-	-	-	-	-	-	2520	3790	4500	6320	
19.5V	-	-	-	-	-	-	-	-	-	-	-	-	3690	4500	6150		
20V	180	300	300	340	340	420	500	500	7500	1280	1280	1400	1800	2400	3600	4500	6000
21V	170	280	280	340	340	420	500	500	7500	1280	1280	1400	1710	2280	3430	4280	5710
22V	160	270	270	300	300	375	500	500	7500	1120	1120	1200	1630	2180	3270	4090	5450
24V	150	250	250	300	300	375	500	500	750	1120	1120	1200	1500	2000	3000	3720	5000
30V	-	-	-	-	-	-	400	400	600	900	900	1000	1200	-	-	-	
36V	-	-	-	-	-	-	-	-	-	-	-	1000	-	-	-	-	

\* More international approvals could be provided on requested.

### NA...P...PGS (3A03GS Series)

New!



### 3.6W Switching AC/DC Adaptor

#### Plug-in



Input voltage: 100-240VAC ~ 60/50Hz

LED indication: Power LED

Packing: Individual white giftbox

Dimension: 69 x 39 x 31mm



### NS...P...PGS (3S05GS Series)

New!



### 6W Switching AC/DC Adaptor

#### Plug-in

Input voltage: 100-240VAC ~ 60/50Hz

LED indication: Power LED

Packing: Individual white giftbox

Dimension: 85 x 62 x 88mm



### NC...P...PGS (3C05GS Series)

New!



### 6W Switching AC/DC Adaptor

#### Plug-in

Input voltage: 100-240VAC ~ 60/50Hz

LED indication: Power LED

Packing: Individual white giftbox

Dimension: 69 x 39 x 31mm



## Single Output Switching AC/DC Adaptor

### NN...P...PGS

(3N06GS Series)



New!

### NN...P...PHT

(3N06HT Series)



New!

### ML...P...PGS

(7E08GS Series)



New!

### NK...P...PGS

(3K10GS Series)



New!

### NK...P...PHT

(3K10HT Series)



New!

### NR...P...PGS

(3R15GS Series)



New!

### NI...P...PGS

(3IP25GS Series)



New!

### 7W Switching AC/DC Adaptor

● Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 69 x 39 x 31mm



ErP compliance

### NN...P...PHT

(3N06HT Series)



New!

### ML...P...PGS

(7E08GS Series)



New!

### 7W Switching AC/DC Adaptor

● Plug-in ● "HT" changeable plug system

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Input plug standard: Including a "HTU" detachable input plug  
Packing: Individual white giftbox  
Dimension: 69 x 74 x 41mm



ErP compliance

### NK...P...PGS

(3K10GS Series)



New!

### 9.6W Switching AC/DC Adaptor

● Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 82 x 36 x 50mm



ErP compliance

### 12W Switching AC/DC Adaptor

● Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 75 x 43 x 32mm



ErP compliance

### 12W Switching AC/DC Adaptor

● Plug-in ● "HT" changeable plug system

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Input plug standard: Including a "HTU" detachable input plug  
Packing: Individual white giftbox  
Dimension: 75 x 43 x 32mm



ErP compliance

### 18W Switching AC/DC Adaptor

● Plug-in

Input Voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 82 x 52 x 36mm



ErP compliance

### 27W Switching AC/DC Adaptor

● Plug-in

Input Voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 88 x 51 x 42mm



ErP compliance

## Single Output Switching AC/DC Adaptor



**NI...P...GS  
(3I25GS Series)**

New!

**ND...P...PGS  
(3D25GS Series)**

New!

**NH...P...GS  
(3H36GS Series)**

New!

**NX...P...GS  
(3X48GS Series)**

New!

**NW...P...GS  
(3W72GS Series)**

New!

**NY...P...GS  
(3Y90GS Series)**

New!

**NM...P...GS  
(3M120GS Series)**

New!

### NI...P...GS

(3I25GS Series)

### 27W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 96 x 50 x 30mm



ErP compliance



### ND...P...PGS

(3D25GS Series)

New!

### 30W Switching AC/DC Adaptor

● Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 69 x 39 x 31mm



ErP compliance



### NH...P...GS

(3H36GS Series)

New!

### 36W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 110 x 50 x 30mm



ErP compliance



### NX...P...GS

(3X48GS Series)

New!

### 48W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
Packing: Individual white giftbox  
Dimension: 75 x 49 x 31mm



ErP compliance



### NW...P...GS

(3W72GS Series)

New!

### 72W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 134 x 56 x 33mm



ErP compliance



### NY...P...GS

(3Y90GS Series)

New!

### 90W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 134 x 56 x 33mm



ErP compliance



### NM...P...GS

(3M120GS Series)

New!

### 120W Switching AC/DC Adaptor

● Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
LED indication: Power LED  
Packing: Individual white giftbox  
Dimension: 148 x 65 x 36mm



ErP compliance

## Single output DC/DC Converter/ Cigarette Lighter Plug Cable

### **Single output DC/DC Regulated Converter/ Cigarette Lighter Plug Cable**

This type of DC/DC converter is intended to provide a regulated DC output in cars. The DC output is regulated, regardless of the output loading. They are all conforming to the most updated e-mark standard. Besides, all DC/DC converters have 1.) Automatic short circuit cut off, 2.) Automatic thermal cut off, and 3.) Automatic overload cut off to ensure user's safety.

Maximum Output Current By Series (mA)			
Output Voltage Range	208	292	216
1.5 - 10.0V	1000	2000	4200

#### **MW CP1-X**

**X = Different Output Plug(see Pg.16 for output plug dimensions)  
Cigarette Lighter Plug Cable**



Input Voltage: 10.8-28.8VDC  
 Output Voltage: 10.8-28.8VDC  
 LED Indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 80 x 27mm

#### **MW208VVVIII**

**(VVV = Output voltage, III = Output Current)  
1000mA DC/DC Regulated Converter**



Input: 12VDC  
 Output: 1.5 - 10VDC ~ 1000mA  
 LED Indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 96.5 x 38.4 x 29mm (Housing 27)

#### **MW292VVVIII**

**(VVV = Output voltage, III = Output Current)  
2000mA DC/DC Regulated Converter**



Input: 12-24VDC  
 Output: 1.5 - 10VDC ~ 2000mA  
 LED Indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 100 x 70 x 32mm (Housing 28)

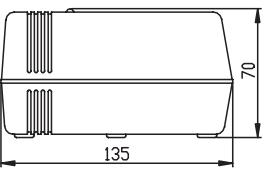
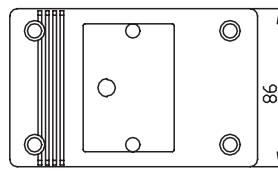
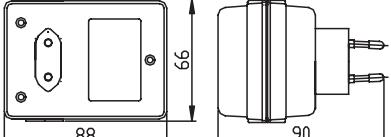
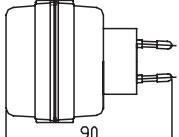
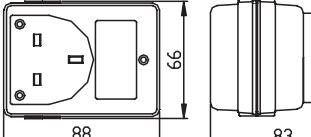
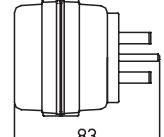
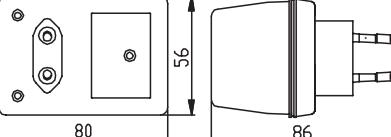
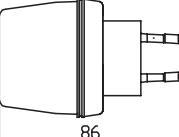
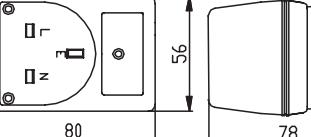
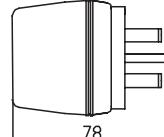
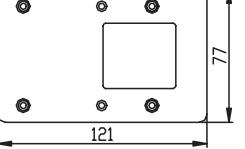
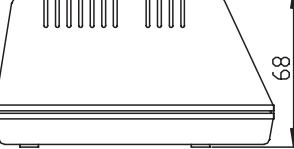
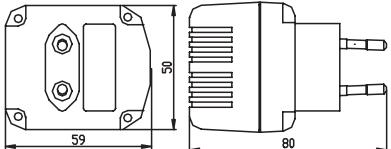
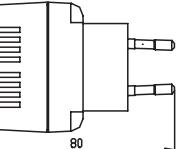
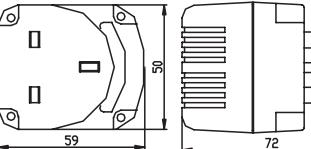
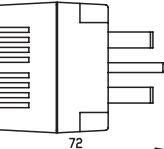
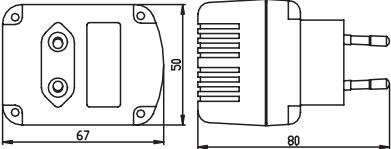
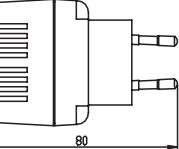
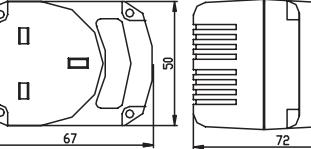
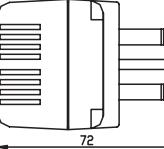
#### **MW216VVVIII**

**(VVV = Output voltage, III = Output Current)  
4200mA DC/DC Regulated Converter**



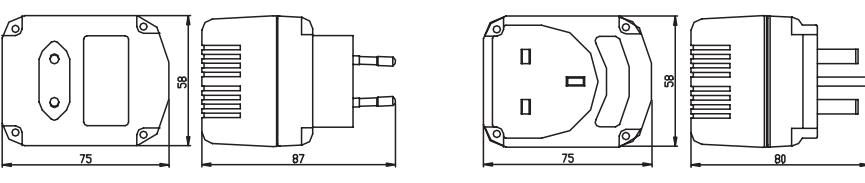
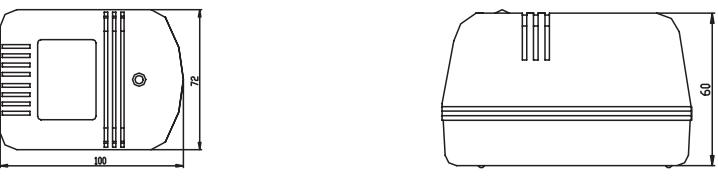
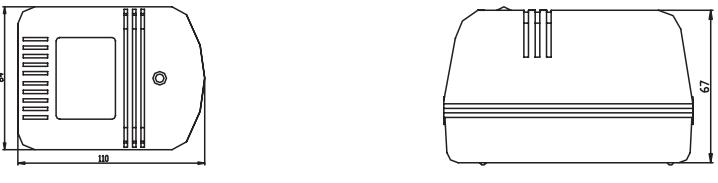
Input: 12VDC  
 Output: 1.5 - 10VDC ~ 4200mA  
 LED Indication: Power LED  
 Packing: Individual white giftbox  
 Dimension: 105 x 66 x 35mm (Housing 29)

## Housing

<b>Housing Type 1</b>		 
<b>Housing Type 2</b>		   
<b>Housing Type 3</b>		   
<b>Housing Type 4</b>		 
<b>Housing Type 5</b>		   
<b>Housing Type 6</b>		   

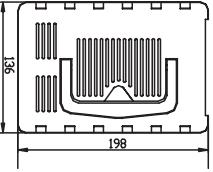
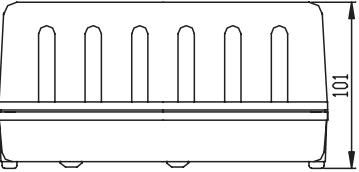
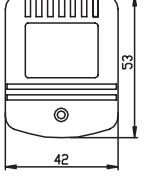
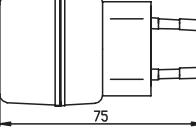
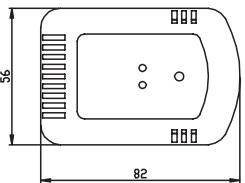
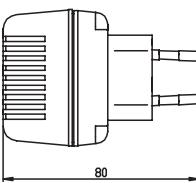
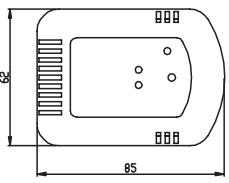
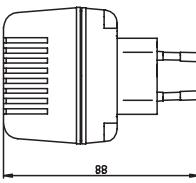
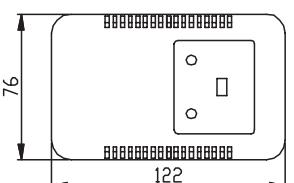
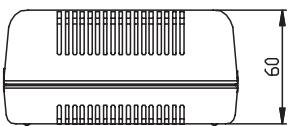
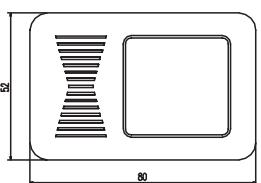
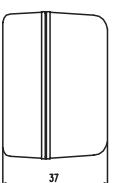
Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
1	-	20	27.5	26	39 x 27 x 41	0.043	13020
2	20	40	27	25	55 x 23 x 34	0.043	26040
3	20	40	11.5	10	52 x 22 x 32	0.037	30240
4	-	20	18	17	40 x 36 x 29	0.042	13320
5	50	100	27.5	26	41 x 39 x 32	0.051	54900
6	20	80	31.5	29.5	41 x 19 x 54	0.042	53280

## Housing

<b>Housing Type 7</b>		
<b>Housing Type 8</b>		
<b>Housing Type 9</b>		
<b>Housing Type 10</b>		
<b>Housing Type 11</b>		
<b>Housing Type 12</b>		

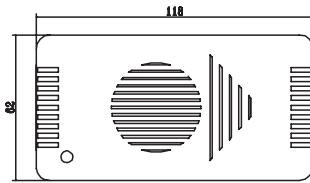
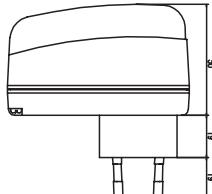
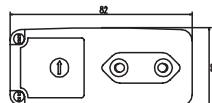
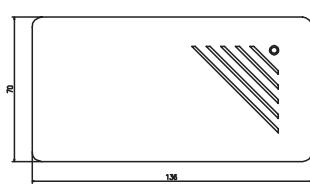
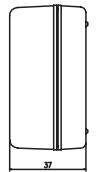
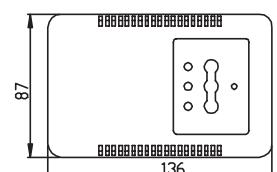
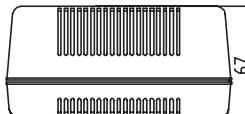
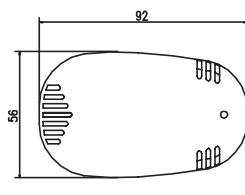
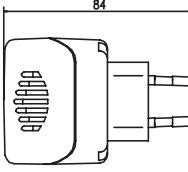
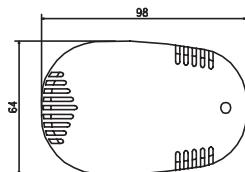
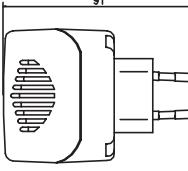
Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
7	20	40	21	19.5	49 x 22 x 33	0.036	31080
8	12	24	22	19	45 x 23 x 36	0.037	18144
9	8	16	21	18	33 x 25 x 38	0.031	14576
10	-	-	-	-	-	-	-
11	-	10	18.6	17.8	45 x 22 x 26	0.0257	10750
12	-	6	15.5	14.4	35 x 24 x 30	0.0252	6780

## Housing

<b>Housing Type 13</b>			
<b>Housing Type 14</b>			
<b>Housing Type 15</b>			
<b>Housing Type 16</b>			
<b>Housing Type 17</b>			
<b>Housing Type 18</b>			

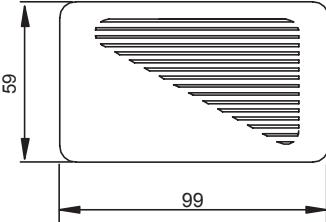
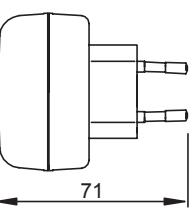
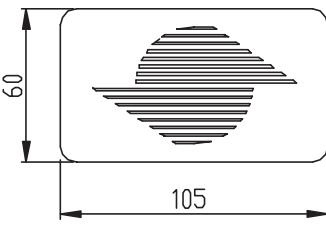
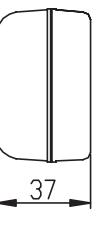
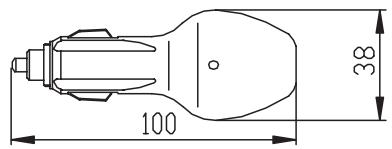
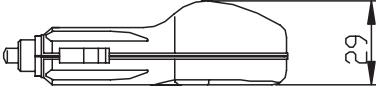
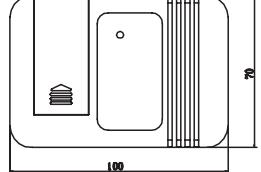
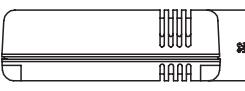
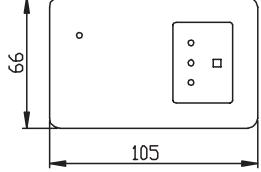
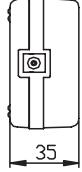
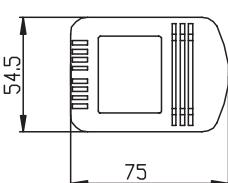
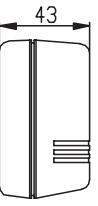
Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
13	-	5	18	17	62 x 27 x 19	0.0318	4480
14	-	100	20.2	19.4	37 x 35 x 24	0.0311	91600
15	30	60	22.3	21	47 x 22 x 43	0.0445	38400
16	20	40	22.7	21.5	51 x 23 x 33	0.0375	29440
17	15	30	25.7	24.1	42 x 36 x 39	0.0590	14490
18	20	40	11.2	10	52 x 22 x 35	0.0400	28480

## Housing

<b>Housing Type 19</b>			
<b>Housing Type 20</b>			
<b>Housing Type 21</b>			
<b>Housing Type 22</b>			
<b>Housing Type 23</b>			
<b>Housing Type 24</b>			

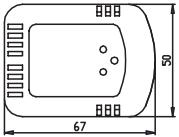
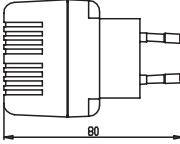
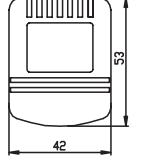
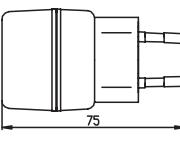
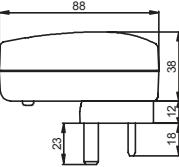
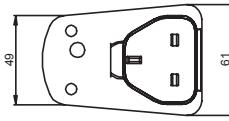
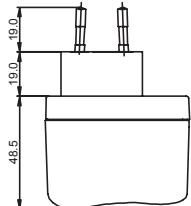
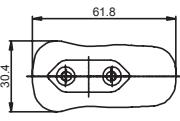
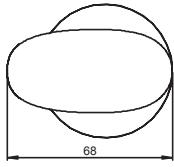
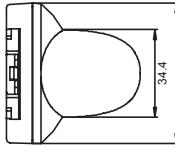
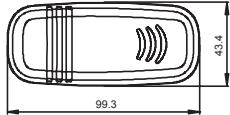
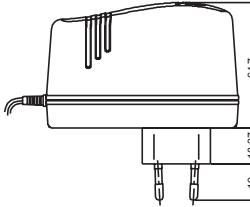
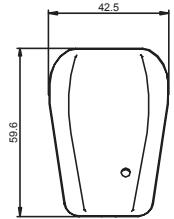
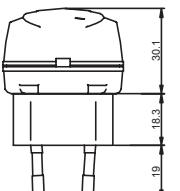
Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
19	20	40	15.5	14	46 x 30 x 33	0.0455	25040
20	-	100	17.7	17	41 x 22 x 53	0.0478	59500
21	15	30	16.4	14.5	39 x 21 x 50	0.0410	20850
22	-	10	18	17	40 x 20 x 31	0.0248	8930
23	20	40	17.7	16.3	49 x 24 x 31	0.0365	31200
24	15	30	17.5	16.2	53 x 27 x 25	0.0358	23800

## Housing

<b>Housing Type 25</b>		 
<b>Housing Type 26</b>		 
<b>Housing Type 27</b>		 
<b>Housing Type 28</b>		 
<b>Housing Type 29</b>		 
<b>Housing Type 30</b>		 

Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
25	20	40	11	9.5	41 x 27 x 33	0.0365	31200
26	20	40	14.3	12.8	50 x 27 x 35	0.0473	24080
27	30	60	7	5.8	30 x 28 x 30	0.0252	67800
28	25	50	14.8	12.5	59 x 37 x 37	0.081	17600
29	-	-	-	-	-	-	-
30	25	50	23.4	21.9	49 x 26 x 33	0.042	33900

## Housing

Housing Type 31		 67 50 50 67	 80
Housing Type 34		 42 53 53 42	 75
Housing Type 37		 88 38 38 23 23 18 18 12	 49 61 61 49
Housing Type 38		 48.5 19.0 19.0 19.0 19.0 4.4	 30.4 61.8 61.8 30.4
Housing Type 39		 68	 34.4
Housing Type 40		 99.3 43.4 43.4	 64.7 18.37 18.37 19
Housing Type 41		 42.5 59.6	 30.1 18.3 18.3 19

Housing	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Measurement (cm)	CBM	Pcs per 20' Cotainer
31	20	80	30.5	28.5	43 x 39 x 29	0.0486	41920
34	-	100	20.2	19.4	37 x 35 x 24	0.0311	91600
37	15	30	9.3	8.1	48 x 29 x 24	0.0334	25598
38	20	40	6.2	5.2	44 x 22 x 27	0.0261	43678
39	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-
41	30	60	5.8	5.0	37 x 18 x 31	0.0206	83009

## Housing Finishing Services

In order to enhance our clients' competitiveness, Minwa is now offering a value-added housing service. Clients may select their housing colour from the following colour-list. The service applies to all our products at additional cost. The minimum quantity per model for each shipment is 3000pcs. If you are interested in the services, please feel free to contact us.

### UV Curing Paint



New!



UV Black

New!



UV White

### Metallic Painted Colour



Gold - PA01



Gold - PA02



Blue - PB01



Dark Blue - PB02



Cyan - PB03



Copper - PC01



Green - PG01



Purple - PP01



Violet - PP02

Housing in Light grey (PX03) colour



Deep Violet - PP03



Deep Purple - PP04



Light Purple - PP05



Red - PR01



Silver - PS01



Silver - PS02



Pearl - PW01



White - PW02



Grey - PX01



Deep Grey - PX02



Light Grey - PX03



Dark Grey - PX04

### Dedicated Colour



Housing in  
Orange (MO02)  
colour



Grey Blue - MB01



Light Blue - MB02



Blue - MB03



Coffee - ME01



Green - MG01



Green - MG02



Creamy - MK01



Orange - MO01



Orange - MO02



Housing in  
Green (MG01)  
colour



Purple - MP01



Deep Purple - MP02



Violet - MP03



Red - MR01



Khaki - MT01



White - MW01



Housing in  
Grey (MX01)  
colour



Grey - MX01



Deep Grey - MX02



Light Grey - MX03



Yellow - MY01



# Power Supply

We provide a full range of **Power Supply** for different kinds of electronic products to assure all-round satisfaction

As our best-selling product, we are dedicated to provide excellent quality power supplies with competitive prices. With years of experience, we have developed our manufacturing skills in a wide range of switching mode and linear adaptors with different features which are tailor-made for various purposes.

With the growing popularity of electronic products with USB usage, we developed a new switching AC/DC adaptor series with USB outlet for USB application.

Our innovative power supplies make changes in the way that they are capable for all electronic appliances. They come with different output plugs which can be adapted to different kinds of consumer electronic products.



# Introduction

**Minwa** manufactures a large variety of power supplies. Most of the products shown in this section are multi-voltage products. They are therefore able to work with various appliances such as CD players, radios, tape recorders, calculators, TV game players, televisions, mini computers, portable phones, keyboards, toys, walkmans and some other battery-operated appliances. Followings are a list of power supplies for various usages;

- 1. Multiple Output Voltage:** The power supply could be adjusted to various output voltages with a switch or a dial. A set of standard output plugs are provided for use with different appliance
  - 2. Single Output:** The power supply is tailored for specific application only, with a defined output current and voltage. You may refer to the OEM section for further information.
  - 3. Pulse Width Modulation:** Products with a circuit of Pulse Width Modulation (PWM) technique to regulate its output voltage. The circuit is energy efficient. It has short circuit protection, automatic thermal cutoff and automatic overload cutoff.
  - 4. AC/DC Primary Switched:** The power supplies provided a regulated DC output. Its efficiency is high, the unit is light and with compact size. There are two versions; one is for 230V European input and the other one is for 100-240V input. With the exchangeable plugs, the 100-240V version is suitable for worldwide use.
  - 5. Regulated:** The power supplies have constant output voltage regardless of the load and mains supply's deviation. The unit has a small ripple.
  - 6. Non-regulated:** The output of the power supplies are in DC voltage. The strength of the output voltage is depended on the mains' input and the loading rate.
  - 7. Plug-in:** AC plug moulded in the power supply for a direct plug-in to the mains.
  - 8. Desktop:** The power supply has an AC-cord for connection to a mains socket.
  - 9. Travelers:** The power supply has changeable input plugs for world wide use. It is highly recommended to travelers.

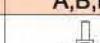
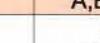
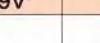
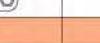


**Products which have marked with this Green logo, it represents the models are conformed to ErP 2nd enforcement stage (2009/125/EC), which is the directive of energy efficiency and saving for external power supply by the EU since April-2010.**

As the ERP 2nd stage is much more rigorous than the CEC and MEPS ones, these power supplies are therefore also comply with CEC level V (U.S. market) and MEPS level V (Australian market).

Please refer to the OEM section for a list of input plugs and output plugs, our most popular output plugs' configuration are listed below. Configuration are listed below.

Cross Plugs

Ordering Code	/4	/4+W	/5	/6	/6H
Plugs	A,B,D,G	A,B,D,G,H	A,B,D,G,9V	A,B,D,G,H,9V	A,B,D,G,H,S
Diagram					
Ordering Code	/6O	/6R	/6U	/6V	/7A
Plugs	C,D,G,H,I,S	A,B,D,G,I,S	B,D,G,H,I,S	D,E,G,H,I,S	A,B,D,G,H,I,S
Diagram					

### ***Detachable Plugs***

**MW 3MU2HT****USB SWITCHING ADAPTOR**

- 1000mA
- With 2 USB outlets
- With 4 detachable input plugs (U, UK, SAA, AF)
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz

Output voltage: 5VDC

Output current: 1000mA(max. of 2 USB outlets)

Dimension: 75 x 46 x 73.8mm

Packing: Individual clamshell blister



\* More international approvals could be provided on requested.

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	7.5	6	47 x 25 x 33	0.0387	28880

**MW 3NU10GT****USB SWITCHING ADAPTOR**

- 1000mA
- With USB outlet
- With 4 detachable input plugs (U, UK, SAA, AF)
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz

Output voltage: 5.2VDC

Output current: 1000mA(max)

Dimension: 69 x 27 x 42.5mm

Packing: Individual clamshell blister



\* More international approvals could be provided on requested.

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	8.9	6.4	57 x 41 x 38	0.0888	12612

**MW 3NU10GS****SWITCHING ADAPTOR**

- 1000mA
- With USB outlet
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz

Output voltage: 5.2VDC

Output current: 1000mA(max)

Dimension: 72 x 46 x 33mm

Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	4.5	2.8	51 x 26 x 32	0.0424	26415



**MW 3FU2GS****USB SWITCHING ADAPTOR**

- 2000mA
- With 2 USB outlets
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 5VDC  
 Output current: 2000mA(max. of 2 USB outlets)  
 Dimension: 75 x 46 x 73.8mm  
 Packing: Individual clamshell blister



New!



"Piano" Black finishing

**MW CS1210****AC/DC SWITCHING ADAPTOR**

- 1000mA
- With cigarette lighter socket
- With 4 detachable input plugs (U, UK, SAA, AF)
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 12VDC  
 Output current: 1000mA(max.)  
 Dimension: 88 x 60 x 53.1mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	-	-	43 x 19 x 27	0.0221	50678



HTUK

HTAF

HTSAA



New!

**MW SU10****USB SWITCHING ADAPTOR**

- 1000mA
- Plug-in
- With USB outlet

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 5VDC  
 Output current: 1000mA(max.)  
 Dimension: 51.8 x 56.6 x 32.2mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	5	4	55x33x28	0.0508	27550

**MW 7MU10GT****USB SWITCHING ADAPTOR**

- 1000mA
- With 4 detachable input plugs (U, UK, SAA, AF)
- With USB outlet
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 5VDC  
 Output current: 1000mA(max.)  
 Dimension: 68 x 55 x 52.5mm  
 Packing: Individual clamshell blister

\* USB cable is not included. Customers may choose the appropriate USB cables from our accessories section.



**MW 3A03GS****SWITCHING ADAPTOR**

- 300mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output plug: 6XC detachable plugs  
 Dimension: 69 x 39 x 31mm  
 Packing: Individual color giftbox

Output Current	
Output Voltage	Output Current
3/4.5/5/6VDC	600mA
7.5VDC	480mA
9VDC	400mA
12VDC	300mA



New!

**Optional: Add-on USB Outlet**

FUSB: 5VDC/600mA(for USB Type A)  
 FMUSB: 5VDC/600mA(for MicroUSB)  
 FNUSB: 5VDC/600mA(for Mini USB)

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	5.4	4.8	41 x 20 x 24	0.0197	56852

**MW 3N06GS****SWITCHING ADAPTOR**

- 600mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output current: 600mA(Max.)  
 Dimension: 69 x 39 x 31mm  
 Packing: Individual color giftbox



New!

**Optional: Add-on USB Outlet**

FUSB: 5VDC/600mA(for USB Type A)  
 FMUSB: 5VDC/600mA(for MicroUSB)  
 FNUSB: 5VDC/600mA(for Mini USB)

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	5.3	4.4	44 x 22 x 27	0.0261	42911

**MW 3N06HT****SWITCHING ADAPTOR**

- 600mA
- Rotary Switch
- Plug-in
- With 4 detachable input plugs (U, UK, SAA, AF)

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output current: 600mA(max.)  
 Dimension: 69 x 74 x 41mm  
 Packing: Individual color giftbox



New!

**Optional: Add-on USB Outlet**

FUSB: 5VDC/600mA(for USB Type A)  
 FMUSB: 5VDC/600mA(for MicroUSB)  
 FNUSB: 5VDC/600mA(for Mini USB)

\* More international approvals could be provided on requested.

**MW 7E08GS****SWITCHING ADAPTOR**

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz 12.5W  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
     Regulated, 9.6(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 36 x 88mm  
 Packing: Individual colour giftbox

**Output Current**

Output Voltage	For 240VAC input	For 100VAC input
Output Voltage	Output Current	Output Current
3.0V	1600mA	1200mA
4.5V	1600mA	1200mA
6.0V	1500mA	1200mA
7.5V	1200mA	900mA
9.0V	1000mA	900mA
12.0V	800mA	700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	17.7	17	41 x 22 x 53	0.0478	59600

**MW 7EA08EL****SWITCHING ADAPTOR**

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz 12.5W  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
     Regulated, 9.6(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 36 x 88mm  
 Packing: Individual colour giftbox

**Output Current**

Output Voltage	For 240VAC input	For 100VAC input
Output Voltage	Output Current	Output Current
3.0V	1600mA	1200mA
4.5V	1600mA	1200mA
6.0V	1500mA	1200mA
7.5V	1200mA	900mA
9.0V	1000mA	900mA
12.0V	800mA	700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	18	17	51 x 21 x 41	0.0439	64920

**MW 7F08TGS****SWITCHING ADAPTOR**

- 800mA
- Rotary Switch
- With 4 changeable plugs
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
     Regulated, 9.6(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 50 x 23 x 33mm  
 Packing: Individual colour giftbox

**Output Current**

Output Voltage	For 240VAC input	For 100VAC input
Output Voltage	Output Current	Output Current
3.0V	1600mA	1200mA
4.5V	1600mA	1200mA
6.0V	1500mA	1200mA
7.5V	1200mA	900mA
9.0V	1000mA	900mA
12.0V	800mA	700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	11.6	10.4	50 x 23 x 33	0.0378	30158

**MW 7F08TEL****SWITCHING ADAPTOR**

- 800mA
- Rotary Switch
- With 4 changeable plugs
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
     Regulated, 9.6(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 50 x 23 x 33mm  
 Packing: Individual colour giftbox

**Output Current**

Output Voltage	For 240VAC input	For 100VAC input
Output Voltage	Output Current	Output Current
3.0V	1600mA	1200mA
4.5V	1600mA	1200mA
6.0V	1500mA	1200mA
7.5V	1200mA	900mA
9.0V	1000mA	900mA
12.0V	800mA	700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	11.7	10.4	50 x 23 x 33	0.0410	27200



## Switching Power Supply

### MW 7L08GS

#### SWITCHING ADAPTOR

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz 12.5W  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
 Regulated, 9.6(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 80 x 50 x 73.4mm  
 Packing: Individual colour giftbox

#### Output Current

Output Voltage	For 240VAC input	For 100VAC input
3.0V	1600mA	1200mA
4.5V	1600mA	1200mA
6.0V	1500mA	1200mA
7.5V	1200mA	900mA
9.0V	1000mA	900mA
12.0V	800mA	700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	17.7	17	41 x 22 x 53	0.0478	59600

### MW 3K10GS

#### SWITCHING ADAPTOR

- 1000mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output current: 1000mA(max.)  
 Dimension: 75 x 43 x 32mm  
 Packing: Individual color giftbox

#### Optional: Add-on USB Outlet

FUSB: 5VDC/1000mA(for USB Type A)  
 FMUSB: 5VDC/1000mA(for MicroUSB)  
 FNUSB: 5VDC/1000mA(for Mini USB)



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	9.3	7	45 x 44 x 38	0.0752	14893



V# GS CE



New!



### MW 3K10HT

#### SWITCHING ADAPTOR

- 1000mA
- Rotary Switch
- Plug-in
- With 4 detachable input plugs (U, UK, SAA AF)

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output current: 1000mA(max.)  
 Dimension: 69 x 74 x 42mm  
 Packing: Individual color giftbox

#### Optional: Add-on USB Outlet

FUSB: 5VDC/1000mA(for USB Type A)  
 FMUSB: 5VDC/1000mA(for MicroUSB)  
 FNUSB: 5VDC/1000mA(for Mini USB)



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10	8.8	47 x 25 x 33	0.0381	28940

\* More international approvals could be provided on requested.



### MW 7E301GS

#### SWITCHING ADAPTOR

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz 12.5W  
 Output voltage: 3.3/4.5/5/6/6.5/7VDC  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 36 x 88mm  
 Packing: Individual colour giftbox

#### Output Current

Output Voltage	Output Current
3.3/4.5V	1600mA
5/6V	1500mA
6.5/7V	1200mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	18	17	52 x 22 x 43	0.0492	57926



**MW 7E12GS****SWITCHING ADAPTOR**

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC Regulated, 14.4VA(max.)  
 Output Current: 1200mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 36 x 88mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	20.8	19.8	41 x 22 x 53	0.0478	59616

**MW 7P12GTGS****TRAVELER SWITCHING ADAPTOR**

- 1200mA
- With 4 detachable input plugs
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Current: 1200mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 88 x 61 x 38mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	30	9.3	8.1	48 x 29 x 24	0.0334	25590

**MW 3R15GS****SWITCHING ADAPTOR**

- 1500mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/5/6/7.5/9/12VDC  
 Output current: 1500mA(max.)  
 Dimension: 82 x 52 x 36mm  
 Packing: Individual color giftbox

**Optional: Add-on USB Outlet**  
 FUSB: 5VDC/1500mA(for USB Type A)  
 FMUSB: 5VDC/1500mA(for MicroUSB)  
 FNUSB: 5VDC/1500mA(for Mini USB)

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	8	6.5	43 x 23 x 30	0.0296	37837

**MW 3G15GS****SWITCHING ADAPTOR**

- 1500mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 9/12/13.5/15/18/20/24VDC  
 Dimension: 88 x 51 x 42mm  
 Packing: Individual color giftbox

**Output Current**

Output Voltage	Output Current
9/12/13.5/15V	1500mA
18/20V	1200mA
24V	1000mA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10.9	9.5	47 x 25 x 30	0.0352	31818



**MW 7C20TGS****SWITCHING ADAPTOR**

- 2000mA
- Rotary Switch
- With 4 changeable input plugs
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz 32W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 24VA(max.)  
 Output Current: 2000mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 118 x 62 x 84mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	17.3	15.7	46 x 29 x 43	0.0574	19860

**MW 3IP25GS****SWITCHING ADAPTOR**

- 2250mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
 Output Current: 2250mA(max.)  
 Dimension: 88 x 51 x 42mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13	10.5	50 x 43 x 38	0.0817	13708



New!

**MW 3I25GS****SWITCHING ADAPTOR**

- 2250mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
 Output Current: 2250mA(max.)  
 Dimension: 95 x 50 x 30mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.4	12.2	42 x 32 x 29	0.0389	28791



New!

**MW 3H36GS****SWITCHING ADAPTOR**

- 3000mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 5/6/7.5/9/12/13.5/15VDC  
 Output Current: 3000mA(max.)  
 Dimension: 110 x 50 x 30mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14.5	13	42 x 40 x 27	0.0453	24724



New!



**MW 7H380GTGS****POWER KING-SWITCHING ADAPTOR**

- 3000mA
- Resistors for output voltage adjustment
- With 4 detachable input plugs
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output Plug: 6XC detachable plugs  
 Dimension: 136 x 38 x 37mm  
 Packing: Individual colour giftbox

## Output Voltage &amp; Current:

Output Voltage	Output Current	Output Voltage	Output Current
5/6/7/8/9/10/11/12V	3000mA	19V	1880mA
13V	2700mA	20V	1800mA
14V	2500mA	21V	1700mA
15V	2400mA	22V	1630mA
16V	2200mA	23V	1560mA
17V	2100mA	24V	15700mA
18V	2000mA		



ErP compliance



Resistors for output voltages adjustment

**MW 7H230GS****POWER KING-SWITCHING ADAPTOR**

- 2300mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 12/15/18/20/22/24VDC, 28.8VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 136 x 38 x 37mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.

## Output Current

Output Voltage	Output Current
12.0V	2300mA
15.0V	1900mA
18.0V	1600mA
20.0V	1400mA
22.0V	1300mA
24.0V	1200mA

**MW 7H350GS****POWER KING-SWITCHING ADAPTOR**

- 3500mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 12/15/18/20/22/24VDC  
 Output Current: 15/16/17/19/20/22/24VDC-3500mA, 24VDC-3000mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 146 x 65 x 39mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.

## Output Current

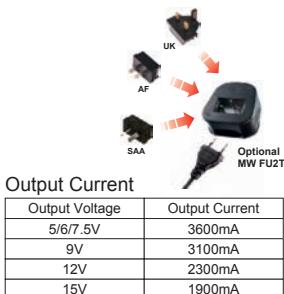
Output Voltage	Output Current
15/16/18V	3500mA
19/20/22V	3500mA
24V	3000mA



**MW 7H360GS****POWER KING-SWITCHING ADAPTOR**

- 3600mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 5/6/7.5/9/12/15VDC, 28.5VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 136 x 70 x 37mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.

**MW 7H390GS****POWER KING-SWITCHING ADAPTOR**

- 5000mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 15/16/18/19/20/22/24VDC  
 Output Current: 15/16/18/19/20VDC-6000mA, 22/24VDC-5000mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 175.5 x 70.8 x 38mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.

**MW 7H50GS****POWER KING-SWITCHING ADAPTOR**

- 5000mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 60/50Hz  
 Output voltage: 6/7.5/9/12/13.5/15VDC, 60VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 136 x 70 x 37mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.

Output Current	
Output Voltage	Output Current
6.0/7.5/9.0/12.0V	5000mA
13.5/15.0V	3800mA

**MW 7H30GS****POWER KING-SWITCHING ADAPTOR**

- 3500mA
- Rotary Switch
- Desktop

Input voltage: 100V-240VAC ~ 50/60Hz  
 Output voltage: 6/7.5/9/12/13.5/15VDC, 45VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 136 x 70 x 37mm  
 Packing: Individual colour giftbox  
 Option: It can be used with our FU2T for worldwide travel.



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	16.2	14.5	40 x 40 x 27	0.0432	19791

## MW 7G1207GS



## Switching Adaptor

- 700mA
- Rotary Switch
- Plug-in

Input voltage: 100V-240VAC ~ 60/50Hz  
Output voltage: 12VDC  
Output Current: 700mA (max.)  
Dimension: 82 x 36 x 88mm  
Packing: Individual colour giftbox



Intertek GS CE

Intertek GS CE

## MW 7A12GS



## MW 7A12NGS



## MW 7B12TGS



## MW 7B12TNGS



## MW 7B12T-1GS



## Switching Adaptor

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 18.8W  
Output voltage: 3/4.5/6/7.5/9/12VDC, Regulated 14.4VA(max.)  
Output Current: 1200mA (max.)  
Output Plug: 6XC detachable plugs  
Dimension: 99 x 59 x 71mm  
Packing: Individual colour giftbox



Intertek GS CE

Intertek GS CE

## Switching Adaptor

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz 330mA  
Output voltage: 3/4.5/6/7.5/9/12VDC, Regulated 14.4VA(max.)  
Output Current: 1200mA (max.)  
Output Plug: 6XC detachable plugs  
Dimension: 99 x 59 x 71mm  
Packing: Individual colour giftbox



Intertek GS CE

Intertek GS CE

## Switching Adaptor

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
Output voltage: 3/4.5/6/7.5/9/12VDC, Regulated 14.4VA(max.)  
Output Current: 1200mA (max.)  
Output Plug: 6XC detachable plugs  
Dimension: 105 x 60 x 80mm  
Packing: Individual colour giftbox



Intertek GS CE

Intertek GS CE

## Switching Adaptor

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz 330mA  
Output voltage: 3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
Output Plug: 6XC detachable plugs  
Dimension: 105 x 60 x 80mm  
Packing: Individual colour giftbox



Intertek GS CB Scheme CE

Intertek GS CB Scheme CE

## Switching Adaptor

- 1200mA
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
Output voltage: 9/12/15/18VDC  
Output Plug: 6XC detachable plugs  
Dimension: 105 x 60 x 80mm  
Packing: Individual colour giftbox

### Output Current

Output Voltage	Output Current
9/12V	1200mA
15/18V	800mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14.5	13.0	50 x 28 x 33	0.0462	24675

**MW S1883GS****AC/DC REGULATED ADAPTOR**

- 300mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 8.7W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated, 3.6VA(max.)  
 Output Current: 300mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 86.4 x 58 x 91.6mm  
 Packing: Individual colour giftbox

**MW S1895GS****AC/DC REGULATED ADAPTOR**

- 500mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 14W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated,  
 6.0VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 94.5 x 61.5 x 91.5mm  
 Packing: Individual colour giftbox

**MW S1928GS****AC/DC REGULATED ADAPTOR**

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 18.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated,  
 9.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98.8 x 69 x 102mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
14	28	17	15.7	55 x 25 x 29	0.0399	19999

**MW RS893GS**
**TWIRL  
AC/DC REGULATED ADAPTOR**

- 300mA
- With Rotary Input Plug
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 10.2W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC  
 Regulated, 3.6VA(max.)  
 Output Current: 300mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 94mm  
 Packing: Individual colour giftbox

**MW RS895GS**
**TWIRL  
AC/DC REGULATED ADAPTOR**

- 500mA
- With Rotary Input Plug
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 14W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC  
 Regulated, 6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 94mm  
 Packing: Individual colour giftbox

**MW RS9211GS & MW RS8211GS**
**TWIRL  
SWITCHING ADAPTOR**

- 1200mA
- With Rotary Input Plug
- Rotary Switch
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC  
 Regulated, 12VA(max.)  
 Output Current: 1200mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 101mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10.5	9.2	52 x 24 x 31	0.0387	29440

**MW S893GS****AC/DC REGULATED ADAPTOR**

- 300mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 10.2W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Current: 300mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 94mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	15.5	14.2	49 x 23 x 31	0.0349	24675

**MW S895GS****AC/DC REGULATED ADAPTOR**

- 500mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 14W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC  
 Regulated, 6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 84mm  
 Packing: Individual colour giftbox

Output Voltage	Output Current
1.5/3V	1000mA
4.5/6V	800mA
7.5V	700mA
9V	600mA
12V	500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	18.2	17	49 x 24 x 31	0.035	32571

**MW S927GS & MW S827GS****AC/DC REGULATED ADAPTOR**

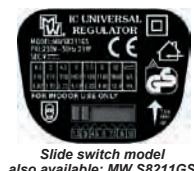
- 700mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 18.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9VDC, 700mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 91mm  
 Packing: Individual colour giftbox

**MW S9211GS & MW S8211GS****EVOLUTION AC/DC REGULATED ADAPTOR**

- 1000mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 21W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 91mm  
 Packing: Individual colour giftbox



Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW S9211GS	15	30	17.5	16.2	53 x 27 x 25	0.0358	23880
MW S8211GS	15	30	16.5	15.2	53 x 27 x 25	0.0358	23880

**MW S9113GS & MW S8113GS****EVOLUTION  
AC/DC REGULATED ADAPTOR**

- 1200mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 122 x 76 x 60mm  
 Packing: Individual colour giftbox



*Slide switch model*  
also available: MW S8113GS

**MW S9117GS****EVOLUTION  
AC/DC REGULATED ADAPTOR**

- 1700mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz 36W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 20.4VA(max.)  
 Dimension: 136 x 87.5 x 67mm  
 Packing: Individual colour giftbox

Output Voltage	Output Current
1.5/3/4.5V	2500mA
6V	2500mA
7.5V	2000mA
9/12V	1700mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	10	14.3	13.4	40 x 20 x 31	0.0248	11180

**MW S9125GS****EVOLUTION  
AC/DC REGULATED ADAPTOR**

- 2500mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz 54W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 30VA(max.)  
 Dimension: 136 x 87 x 67mm  
 Packing: Individual colour giftbox

Output Voltage	Output Current
1.5/3V	4000mA
4.5/6V	4000mA
7.5/9V	3000mA
12V	2500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	10	18	17.1	40 x 20 x 31	0.0248	8880



## Approved Regulated Adaptor

### MW S935GS AC/DC Regulated Adaptor



### MW S935CE AC/DC Regulated Adaptor



### MW S693GS AC/DC Regulated Adaptor



### MW 300GS AC/DC Regulated Adaptor



### AC/DC Regulated Adaptor

- 500mA

- Rotary Switch

- Plug-in

Input voltage: 230VAC ~ 50Hz, 14W

Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, Regulated, 6VA(max.)

Output Plug: 6XC detachable plugs

Dimension: 84 x 56 x 40mm

Packing: Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
1.5/3V	1000mA
4.5/6V	800mA
7.5V	700mA
9V	600mA
12V	500mA

Pcs per Inner Ctn.

Pcs per Exp. Ctn.

Gross Weight (kg)

Net Weight (kg)

Dimension (cm)

CBM



Pcs per 20' Container

15

30

16.4

15.2

53 x 26 x 27

0.0372



22983

Pcs per 20' Container

● 500mA

● Rotary Switch

● Plug-in

Input voltage: 110/230VAC ~ 50/60Hz, 14W

Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, Regulated, 6VA(max.)

Output Plug: 6XC detachable plugs

Dimension: 84 x 56 x 40mm

Packing: Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
1.5/3V	1000mA
4.5/6V	800mA
7.5V	700mA
9V	600mA
12V	500mA

Pcs per Inner Ctn.

Pcs per Exp. Ctn.

Gross Weight (kg)

Net Weight (kg)

Dimension (cm)

CBM

Pcs per 20' Container

20

40

16.8

15.3

51 x 24 x 35

0.0429

26573

Pcs per 20' Container

● 300mA

● Rotary Switch

● Plug-in

Input voltage: 230VAC ~ 50Hz, 10.2W

Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)

Output Plug: 6XC detachable plugs

Dimension: 82 x 56 x 80mm

Packing: Individual colour giftbox

Pcs per Inner Ctn.

Pcs per Exp. Ctn.

Gross Weight (kg)

Net Weight (kg)

Dimension (cm)

CBM

Pcs per 20' Container

30

60

22.3

21

47x 22 x 43

0.0445

38400

Pcs per 20' Container

● 300mA

● Slide Switch

● Plug-in

Input voltage: 230VAC ~ 50Hz, 9W

Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)

Output Plug: 6way universal connector

Dimension: 82 x 56 x 80mm

Packing: Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
1.5V	100mA
3V	200mA
4.5/6/7.5/9/12V	300mA

Pcs per Inner Ctn.

Pcs per Exp. Ctn.

Gross Weight (kg)

Net Weight (kg)

Dimension (cm)

CBM

Pcs per 20' Container

20

60

22.5

21

49 x 21 x 46

0.0473

36180

Pcs per 20' Container

## Approved Regulated Adaptor

### MW 300UK AC/DC Regulated Adaptor



- 300mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 9W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 87.6 x 61.8 x 89.95mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	18.8	17.4	51 x 22 x 32	0.036	31666

### MW S70GS AC/DC Regulated Adaptor



- 300mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 10.2W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 58 x 84mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	16.6	15.1	50 x 25 x 32	0.04	28500

### MW 500GS AC/DC Regulated Adaptor



- 500mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 14.2W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 92 x 63 x 94mm  
 Packing: Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
3V	110mA
4.5V	190mA
6V	260mA
7.5V	330mA
9V	560mA
12V	380mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	21.4	19.9	54 x 24 x 35	0.0454	25120

### MW 500UK AC/DC Regulated Adaptor



- 500mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 14.2W  
 Output voltage: 3/6/9/12VDC, 6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 92 x 63 x 94mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	23	21.5	52 x 25 x 35	0.0455	25054

## Approved Regulated Adaptor

### MW S18GS AC/DC Regulated Adaptor



● 500mA	● Slide Switch	● Plug-in
Input voltage:	230VAC ~ 50Hz, 14W	
Output voltage:	1.5/3.4.5/6/7.5/9/12VDC,Regulated, 6VA(max.)	
Output Plug:	6XC detachable plugs	
Dimension:	80 x 56 x 86mm	
Packing:	Individual colour giftbox	

Charge Current Table

Output Voltage	Output Current
1.5/3V	1000mA
4.5/6V	800mA
7.5V	700mA
9V	600mA
12V	500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	17.5	16.2	51 x 22 x 31	0.0348	32760

### MW 501GS AC/DC Regulated Adaptor



- 500mA
- Slide Switch
- Plug-in

Input voltage:	230VAC ~ 50Hz, 15.4W
Output voltage:	1.5/3.4.5/6/7.5/9/12VDC,Regulated, 6VA(max.)
Output Plug:	6 way universal connector
Dimension:	92 x 63 x 97.6mm
Packing:	Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22.4	20.9	54 x 24 x 35	0.0454	25120

### MW 650GS AC/DC Regulated Adaptor

#### MW 650UK (UK Input Version)



- 595mA
- Slide Switch
- Plug-in

Input voltage:	230VAC ~ 50Hz, 17.2W
Output voltage:	1.5/3.4.5/6/7.5/9/12VDC, 7.14VA(max.)
Output Plug:	6 way universal connector
Dimension:	98 x 63 x 93mm
Packing:	Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
1.5V	145mA
3V	190mA
4.5V	250mA
6V	290mA
7.0V	350mA
9V	440mA
12V	500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22.7	21.3	50 x 24 x 35	0.042	27142

### MW S716GS AC/DC Regulated Adaptor



- 650mA
- Rotary Switch
- Plug-in

Input voltage:	230VAC ~ 50Hz, 18.2W
Output voltage:	1.5/3.4.5/6/7.5/9VDC, 650mA/12VDC, 600mA, 7.14VA(max.)
Output Plug:	6XC detachable plugs
Dimension:	85 x 62 x 88mm
Packing:	Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

## Approved Regulated Adaptor

### MW 700GS AC/DC Regulated Adaptor



- 650mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18.2W  
 Output voltage: 1.5/3/4.5/6/7.5/9VDC, 650mA,  
 12VDC, 600mA, 7.2VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 87.5 x 65.75 x 89.3mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	24.5	23	54 x 25 x 31	0.05	22800

### MW 651GS AC/DC Regulated Adaptor



- 700mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18.2W  
 Output voltage: 1.5/3/4.5/6/7.5/9VDC, 700mA,  
 12VDC, 650mA, 7.8VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 94 x 66 x 93.4mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	23.5	22.1	52 x 24 x 35	0.0437	26086

### MW S9210GS AC/DC Regulated Adaptor MW S8210GS



- 800mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 91mm  
 Packing: Individual colour giftbox

Charge Current Table

Output Voltage	Output Current
1.5V	1400mA
3V	1300mA
4.5V	1200mA
6V	1100mA
7.0V	1000mA
9V	1000mA
12V	800mA

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW S9210GS	15	30	17.5	16.2	53 x 27 x 25	0.0358	23880
MW S8210GS	15	30	17.5	16.2	53 x 27 x 25	0.0358	23880

### MW 9110GS AC/DC Regulated Adaptor



- 1000mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 28W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 1000mA  
 Output Plug: 6 way universal connector  
 Dimension: 109 x 76.5 x 62mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	22	20.5	53 x 38 x 22	0.0443	12860

## MW 1000GS AC/DC Regulated Adaptor



- 1000mA
- Slide Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 28W  
 Output voltage: 3/6/9/12VDC, 1000mA, 12VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 120.4 x 76.4 x 66.5mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	21	19.5	40 x 36 x 29	0.0418	13640

## MW 9112GS AC/DC Regulated Adaptor



- 1200mA
- Slide Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 36.1W  
 Output voltage: 3/6/9/12VDC, 14.4VA(max.)  
 Output Plug: 6XC way detachable plugs  
 Dimension: 135 x 86 x 75mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	28.2	27.3	40 x 27 x 41	0.0443	12860

## MW 9115GS AC/DC Regulated Adaptor



- 1500mA
- Rotary Switch
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 18VA(max.)  
 Dimension: 157 x 99 x 76.5mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	10	18.6	17.8	45 x 22 x 26	0.0257	10750

## MW 9120GS AC/DC Regulated Adaptor



- 2000mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 48W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 24VA(max.)  
 Dimension: 157 x 99 x 77mm  
 Packing: Individual colour giftbox  
 Including one 04B-FX2 cable and 6XC detachable plugs

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	10	18.2	17.5	45 x 22 x 26	0.0257	10990

**MW 9130GS**



04B-FX2

**AC/DC Regulated Power Supply**



- 3000mA
- Rotary Switch
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 36VA(max.)  
 Including one 04B-FX2 cable and 6XC detachable plugs  
 Dimension: 174 x 122 x 96mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	6	15	14	70 x 24 x 17	0.0286	5979

**MW P1230GS AC/DC Regulated Power Supply**



04B- FCP1

- 3000mA
- Desktop

Input voltage: 230VAC ~ 50Hz, 70W  
 Output voltage: 13.8VDC, 36VA(max.)  
 Including one 04B-FCP1  
 Dimension: 174 x 122 x 96mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	6	15.5	14.4	69 x 24 x 17	0.0282	6060

**MW P1240GS AC/DC Regulated Power Supply**



**MW P1240UK  
(UK Input Version)**

- 4000mA
- Desktop



04B- FCP1

Input voltage: 230VAC ~ 50Hz, 94W  
 Output voltage: 12VDC, 48VA(max.)  
 Including one 04B-FCP1  
 Dimension: 201 x 136 x 101mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18	17.1	63 x 28 x 19	0.0335	4253

**MW P1250GS AC/DC Regulated Power Supply**



04B- FCP1

- 5000mA
- Desktop

Input voltage: 230VAC ~ 50Hz, 105W  
 Output voltage: 12VDC, 60VA(max.)  
 Including one 04B-FCP1  
 Dimension: 201 x 136 x 101mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18.6	17.6	62 x 27 x 19	0.0318	4480

**MW 1883GS****AC/DC PLUG-IN ADAPTOR**

- **300mA**
- **Rotary Switch**

Input voltage: 230VAC ~ 50Hz 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 86.4 x 58 x 91.6mm  
 Packing: Individual colour giftbox



Switch at the back!



Output voltages are indicated by LEDs!

**MW 1895GS****AC/DC PLUG-IN ADAPTOR**

- **500mA**
- **Rotary Switch**

Input voltage: 230VAC ~ 50Hz 12W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6.0VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 94.5 x 61.5 x 91.5mm  
 Packing: Individual colour giftbox



Switch at the back!



Output voltages are indicated by LEDs!

**MW 1928GS****AC/DC PLUG-IN ADAPTOR**

- **800mA**
- **Rotary Switch**

Input voltage: 230VAC ~ 50Hz 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98.8 x 69 x 102mm  
 Packing: Individual colour giftbox



Switch at the back!



Output voltages are indicated by LEDs!

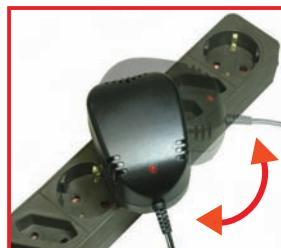


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
14	28	17	15.1	58 x 26 x 30	0.0452	17654

**MW R883GS & MW R773GS**
**TWIRL  
AC/DC NON-REGULATED ADAPTOR**

- 300mA
- With Rotary Input Plug
- Rotary Switch (MW R883GS)
- Slide Switch (MW R773GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 56 x 84mm  
 Packing: Individual colour giftbox

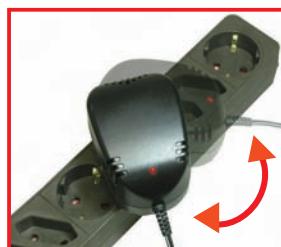


Model.	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MWRS773GS	20	40	13.2	12	50 x 22 x 30	0.0330	34520
MWRS883GS	20	40	13.2	12	50 x 22 x 30	0.0330	34520

**MW R895GS & MW R795GS**
**AC/DC NON-REGULATED ADAPTOR**

- 500mA
- Rotary Switch (MW R895GS)
- Slide Switch (MW R795GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 12W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6.0VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 84mm  
 Packing: Individual colour giftbox



Model.	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MWR795GS	20	40	17.3	16	55 x 22 x 33	0.0399	31640
MWR895GS	20	40	17.3	16	55 x 22 x 33	0.0399	28560



**MW 883GS & MW 773GS****AC/DC NON-REGULATED ADAPTOR**

- 300mA
- Rotary Switch (MW 883GS)
- Slide Switch (MW 773GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 56 x 84mm  
 Packing: Individual colour giftbox



Slide switch model  
also available: MW 773GS



Switch at the back

**MW 895GS & MW 795GS****AC/DC NON-REGULATED ADAPTOR**

- 500mA
- Rotary Switch (MW 895GS)
- Slide Switch (MW 785GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 12W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 56 x 84mm  
 Packing: Individual colour giftbox



Slide switch model  
also available: MW 795GS



Switch at the back

**MW 928GS & MW 828GS****AC/DC NON-REGULATED ADAPTOR**

- 800mA
- Rotary Switch (MW 928GS)
- Slide Switch (MW 828GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 91mm  
 Packing: Individual colour giftbox



Slide switch model  
also available: MW 828GS



Switch at the back

**MW 9210GS & MW 8210GS****AC/DC NON-REGULATED ADAPTOR**

- 1000mA
- Rotary Switch (MW 9210GS)
- Slide Switch (MW 8210GS)
- Plug-in

Input voltage: 230VAC ~ 50Hz 20W  
 Output voltage: 3/4.5/6/7.5/9VDC, 1000mA, 12VDC, 900mA, 10.8VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 98 x 64 x 91mm  
 Packing: Individual colour giftbox



Slide switch model  
also available: MW 8210GS



Switch at the back



Model.	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW8210GS	15	30	17.5	16.2	53 x 27 x 25	0.0358	23880
MW9210GS	15	30	17.5	16.2	53 x 27 x 25	0.0358	23880

**MW 108GS****PRAGMATIC AC/DC NON-REGULATED ADAPTOR**

- 300mA      ● Slide Switch      ● Plug-in

Input voltage: 230VAC ~ 50Hz 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Current: 300mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 85.2mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	30.7	29.5	45 x 36 x 31	0.0502	56772

**MW 96GS****PRAGMATIC AC/DC NON-REGULATED ADAPTOR**

- 300mA      ● Slide Switch      ● Plug-in

Input voltage: 230VAC ~ 50Hz 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Current: 300mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 86.2mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	30.2	29	44 x 37 x 30	0.0488	58400

**MW 17GS & MW17UK (UK Input Version)****PRAGMATIC AC/DC NON-REGULATED ADAPTOR**

- 500mA      ● Slide Switch      ● Plug-in

Input voltage: 230VAC ~ 50Hz 13W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Current: 500mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 87.6 x 61.8 x 97.6mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW17GS	20	40	20	18.8	51 x 23 x 32	0.0375	30400
MW17UK	20	40	20	18.8	51 x 23 x 32	0.0375	30400

**MW 18GS****PRAGMATIC AC/DC NON-REGULATED ADAPTOR**

- 500mA      ● Slide Switch      ● Plug-in

Input voltage: 230VAC ~ 50Hz 12W  
 Output voltage: 3/4.5/6/7.5/9/12V, 12VDC, 6VA  
 Output Current: 500mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 80 x 61 x 96mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	60	25.2	23.5	47 x 21 x 47	0.0464	36840

**MW 79GS & MW79UK (UK Input Version)****PRAGMATIC AC/DC NON-REGULATED ADAPTOR**

- 800mA      ● Slide Switch      ● Plug-in

Input voltage: 230VAC ~ 50Hz 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 9.6VA (max.)  
 Output Current: 800mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 98 x 68 x 93mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW79GS	20	40	22.2	20.6	37x 24 x 47	0.0417	27320
MW79UK	20	40	23.6	22.2	50 x 24 x 35	0.042	27160



## Approved Adaptor

### MW 683GS



### AC/DC Non-regulated Adaptor

- 300mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Current: 6XC detachable plugs  
 Dimension: 72 x 53.9 x 80mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	19.6	18.3	46 x 20 x 42	0.0386	44280



### MW 70GS



### AC/DC Non-regulated Adaptor

- 500mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 12W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 92 x 58 x 84mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	18.1	16.8	49 x 25 x 33	0.0404	28200



### MW 695GS



### AC/DC Non-regulated Adaptor

- 500mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 12W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 82 x 56 x 80mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	25.2	23.7	47 x 22 x 43	0.0445	38400



### MW 1205CS



### AC/DC Non-regulated Adaptor

- 500mA
- With Cigarette Lighter Socket
- Plug-in

Input voltage: 230VAC ~ 50Hz, 12W  
 Output voltage: 12VDC, 6VA(max.)  
 Dimension: 85 x 56 x 84mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	23.2	22	45 x 20 x 41	0.0369	46320



### MW 1208CS



### AC/DC Non-regulated Adaptor

- 800mA
- With Cigarette Lighter Socket
- Plug-in

Input voltage: 230VAC ~ 50Hz, 19.8W  
 Output voltage: 12VDC, 9.6VA(max.)  
 Dimension: 88 x 62 x 89mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	20.8	19.5	48 x 22 x 33	0.0348	32760



### MW 88GS



### AC/DC Non-regulated Adaptor

- 300mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 8.7W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 85.2mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	30.3	29.2	44 x 37 x 30	0.0488	58400



## Approved Adaptor

### MW 998GS



### AC/DC Non-regulated Adaptor

- 700mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 8.4VA(max.)  
 Output Current: 6 way universal connector  
 Dimension: 90 x 65 x 94mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	21.5	19.7	50 x 23 x 39	0.0449	25400

### MW 718GS



### AC/DC Non-regulated Adaptor

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Current: 6XC detachable plugs  
 Dimension: 85 x 62 x 88mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	23	21.6	51 x 23 x 34	0.0399	28560

### MW 80GS



### AC/DC Non-regulated Adaptor

- 800mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 20W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Current: 6 way universal connector  
 Dimension: 87.5 x 65.75 x 89.3mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22.8	21.4	51 x 23 x 34	0.0399	28560

### MW 81GS



### AC/DC Non-regulated Adaptor

- 1200mA
- Slide Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 27.4W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 120.4 x 76.4 x 66.5mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	19.8	18.5	40 x 36 x 29	0.0418	13640

### MW 82GS



### AC/DC Non-regulated Adaptor

- 1200mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 27.4W  
 Output voltage: 3/4.5/6/7/9/12VDC, 14.4VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 109 x 76.5 x 62mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	20.8	19.5	45 x 19 x 47	0.0402	14180

### MW 83GS



### AC/DC Non-regulated Adaptor

- 1500mA
- Slide Switch
- Desktop

Input voltage: 230VAC ~ 50Hz, 34W  
 Output voltage: 3/6/9/12VDC, 18VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 135 x 86 x 75mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	27	25	41 x 40 x 32	0.0525	10860

**MW 26**



**AC/DC Regulated Adaptor**



- 350mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz,10W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 4.2VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 90 x 56 x 86mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	60	22.8	21	49 x 21 x 47	0.0484	35340

**MW S27**



**AC/DC Regulated Adaptor**



- 600mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz,17W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 7.2VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 92 x 63 x 97.6mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	21.5	19.8	54 x 24 x 35	0.0454	25120

**MW 29**



**AC/DC Regulated Adaptor**

- 1000mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 26.4W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 87.5 x 65.75 x 89.3mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	26.5	25	51 x 23 x 35	0.0411	27720

**MW 30**



**AC/DC Regulated Adaptor**

- 1200mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 35.1W  
 Output voltage: 3/6/9/12VDC, 14.4VA(max.)  
 Output Plug: 6 way universal connector  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	19	17.7	57 x 29 x 23	0.038	15000

**MW P29-1**



**AC/DC Regulated Adaptor**



- 800mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 88 x 66 x 90mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	23.2	21.8	51 x 23 x 34	0.0399	28560

**MW P28-1GS**



**AC/DC Regulated Adaptor**



- 800mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz, 18.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 94 x 66 x 94mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	26.8	25.4	38 x 25 x 47	0.0447	25503

**MW S28**



**AC/DC Regulated Adaptor**



- 1000mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 26W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 94 x 66 x 93.4mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	26.8	25.4	52 x 24 x 36	0.0437	26080

**MW 32**



**AC/DC Regulated Adaptor**



- 1200mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz 32.4W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 109 x 76.5 x 62mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	21.7	20.2	41 x 36 x 29	0.0428	13300

## Standard Adaptor

### MW 108CE



### AC/DC Non-regulated Adaptor

CE

- 500mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 12.5W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Current: 500mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 85.2mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	34	33	44 x 37 x 31	0.0505	56400

### MW 961CE



### AC/DC Non-regulated Adaptor

CE

- 500mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 12.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Current: 500mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 76 x 53 x 81.5mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	33	32	43 x 35 x 31	0.0467	61027

### MW 681CE



### AC/DC Non-regulated Adaptor

CE

- 300mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 9W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 3.6VA(max.)  
 Output Current: 300mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 66 x 53 x 80.4mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	27.3	26.3	41 x 35 x 31	0.0445	64000

### MW 691CE



### Pragmatic-AC/DC Non-regulated Adaptor

CE

- 500mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 12.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Current: 500mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 80.4mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14.5	13.4	45 x 21 x 31	0.0293	38903

### MW 701CE



### Pragmatic-AC/DC Non-regulated Adaptor

CE

- 1000mA
- Rotary Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 23.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Current: 1000mA (max.)  
 Output Plug: 6 way universal connector  
 Dimension: 86 x 60 x 87mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	24	22.6	50 x 24 x 32	0.0345	33040

MW 78



**AC/DC Non-Regulated Adaptor**



- 700mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 18W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 8.4VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 98 x 68 x 93mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	21	19.5	50 x 24 x 35	0.042	27160

MW 79



**AC/DC Non-Regulated Adaptor**



- 1000mA
- Slide Switch
- Plug-in

Input voltage: 230VAC ~ 50Hz 23.5W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 98 x 68 x 93mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	25.3	23.9	38 x 24 x 47	0.0429	26560

MW 82



**AC/DC Non-Regulated Adaptor**



- 1200mA
- Rotary Switch
- Desktop

Input voltage: 230VAC ~ 50Hz 27.4W  
 Output voltage: 3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 109 x 76.5 x 62mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	21.3	20	45 x 19 x 47	0.0402	14180

MW 83



**AC/DC Non-Regulated Adaptor**



- 1500mA
- Slide Switch
- Desktop

Input voltage: 230VAC ~ 50Hz 34W  
 Output voltage: 3/6/9/12VDC, 18VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 135 x 86 x 75mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	26	24	41 x 40 x 32	0.0525	10860

## AR/DR Adaptor

### MW 681AR/DR



### AR/DR Adaptor

- 350mA
- Slide Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz(DR) 9.6W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 4.2VA(max.)  
 Output Current: 350mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 69 x 48 x 60mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW681AR	30	60	15.4	14.3	40 x 19 x 39	0.0296	57780
MW681DR	30	60	16.3	15.2	40 x 19 x 39	0.0296	57780

### MW 691AR/DR



### AR/DR Adaptor

- 550mA
- Rotary Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz(DR) 13.6W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6.6VA(max.)  
 Output Current: 550mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 66 x 53 x 63mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW691AR	20	40	12.6	11.6	42 x 19 x 29	0.0231	49360
MW691DR	20	40	13.1	12.1	42 x 19 x 29	0.0231	49360

### MW 79NAR/NDR



### AR/DR Adaptor

- 1000mA
- Slide Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz 24.6W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
 Output Current: 1000mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 98 x 68 x 49.5mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22	20.5	37 x 24 x 37	0.0329	34640

### MW 1081AR/DR



### AR/DR Adaptor

- 550mA
- Slide Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz 13.6W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6.6VA(max.)  
 Output Current: 550mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 67.2mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW1081AR	-	100	30.3	29	47 x 30 x 31	0.0423	66000
MW1081DR	-	100	31	29.8	47 x 30 x 31	0.0423	64500

### MW 811AR/DR



### AR/DR Adaptor

- 800mA
- Rotary Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz 19W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Current: 800mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 75 x 53 x 63mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	16.6	15.6	36 x 20 x 29	0.0209	48160

### MW 18AR/DR



### AR/DR Adaptor

- 800mA
- Slide Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz 19W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Current: 800mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 80 x 56 x 67.5mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	60	25.4	23.9	45 x 21 x 31	0.0439	38952

### MW 701AR/DR



### AR/DR Adaptor

- 1200mA
- Rotary Switch

- Plug-in

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz 27W  
 Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
 Output Current: 1200mA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 80 x 60 x 69.5mm  
 Packing: Individual colour giftbox

Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW701AR	20	40	23	21.8	42 x 22 x 32	0.0296	34800
MW701DR	20	40	24	22.8	42 x 22 x 32	0.0296	33320

## AR/DR Adaptor

### MW 881AR/DR



### AR/DR Adaptor

- 550mA
- Plug-in
- Slide Switch

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz(DR) 13.6W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6.6VA(max.)  
Output Current: 550mA(max.)  
Output Plug: 6 way universal connector  
Dimension: 75 x 53 x 63mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	60	18.8	17.6	37 x 19 x 41	0.0288	59400

### MW 961AR/DR



### AR/DR Adaptor

- 550mA
- Plug-in
- Slide Switch

Input voltage: 220VAC ~ 50Hz(AR) 100VAC ~ 60Hz and 220VAC ~ 50Hz(DR) 13.6W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6.6VA(max.)  
Output Current: 550mA(max.)  
Output Plug: 6 way universal connector  
Dimension: 75 x 53 x 67.2mm  
Packing: Individual colour giftbox

Model	Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW961AR		100	30.2	29	38 x 37 x 31	0.0436	65400
MW961DR		100	31	29.8	38 x 37 x 31	0.0436	65400

### MW 791AR/DR



### AR/DR Adaptor

- 1200mA
- Plug-in
- Slide Switch

Input voltage: 220VAC ~ 50Hz(791AR)27W 100VAC ~ 60Hz and 220VAC ~ 50Hz(791DR) 27W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 14.4VA(max.)  
Output Current: 1200mA(max.)  
Output Plug: 6 way universal connector  
Dimension: 98 x 68 x 75.4mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	24.6	23.2	51 x 25 x 35	0.0446	25560

### MW 78AR



### AR/DR Adaptor

- 700mA
- Plug-in
- Slide Switch

Input voltage: 220-240VAC ~ 50Hz 18W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 8.4VA(max.)  
Output Current: 700mA(max.)  
Output Plug: 6 way universal connector  
Dimension: 98 x 68 x 75.4mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	19.7	18.5	37 x 25 x 37	0.0342	33333

### MW 80AR



### AR/DR Adaptor

- 1000mA
- Plug-in
- Rotary Switch

Input voltage: 220-240VAC ~ 50Hz 25W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 12VA(max.)  
Output Current: 6 way universal connector  
Dimension: 87.5 x 65.75 x 89.3mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22.6	21	50 x 24 x 35	0.042	27142

### MW 81DR



### AR/DR Adaptor

- 1500mA
- Desktop
- Slide Switch

Input voltage: 110-220VAC ~ 50/60Hz and 220-240VAC ~ 50Hz 33W  
Output voltage: 1.5/3/4.5/6/7.5/9/12VDC, 18VA(max.)  
Output Current: 6 way universal connector  
Dimension: 120 x 76 x 67mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	19.5	18	40 x 36 x 29	0.0418	13640

### MW 81AR



### AR/DR Adaptor

- 1500mA
- Desktop
- Slide Switch

Input voltage: 220-240VAC ~ 50Hz 34.2W  
Output voltage: 3/4.5/6/7.5/9/12VDC, 18VA(max.)  
Output Current: 6 way universal connector  
Dimension: 120.4 x 76.4 x 66.5mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	19.5	18	40 x 36 x 29	0.0418	13640



# Battery Charger

Our full range of **Battery Charger** meeting all your sourcing needs for lifestyle-oriented accessories

Designed and tested by Minwa professional engineers, our battery chargers are of high value in the area. With regarding quality and product design are our valuable assets, we will never cease to improve. The different lines of our battery charger in catalogue and all OEM/ODM products are our pride today. We offer a large variety of battery chargers for charging Nickel-Cadmium (Ni-Cd) batteries, Rechargeable alkaline batteries (RAM), Nickel Metal-Hydride (Ni-MH) batteries, Lead Acid batteries, Li-Ion & Li-Polymer batteries and so forth.



# Introduction

**Minwa** offers a large variety of battery chargers for charging Nickel-Cadmium (Ni-Cd) batteries, Nickel Metal-Hydride (Ni-MH) batteries, Rechargeable Alkaline batteries (RAM), Lead Acid batteries and Li-Ion batteries.

Rechargeable batteries and battery chargers provide an economical solution for powering battery-operated equipment. They are commonly applied for digital cameras, audio products, toys and portable equipment.

## Charging Techniques

Minwa's chargers employ various charging techniques. There are three types of chargers employing constant-current charging technique which are: standard charger, charger with timer control and charger with  $\Delta V$  detection.

### Standard Charger

Standard charger normally takes 14 hours or longer for a complete charging cycle. There is no circuit protection to prevent the batteries from overcharge. The charging current of standard charger is around 0.1-0.2C (C=battery's capacity). Minwa's standard chargers are price competitive.

### Charger with Timer Control

A series of chargers have timers to prevent overcharge of batteries by switching the charge cycle from fast mode to trickle mode after a predetermined time. The charging current of timer-charger is usually less than 0.2-0.3C (C = battery's capacity).

### Charger with $\Delta V$ Detection

Chargers with  $\Delta V$  detection could effectively prevent overcharge of batteries by switching the charge cycle from fast mode to trickle mode when the charger detected the abrupt change of voltage and other parameters. Since the chargers with  $\Delta V$  detection usually have a well-designed protection circuit, the charging current of this kind of chargers is around 0.25C-1C (C=battery's capacity). Minwa has developed several new ICs which enhance the development of price-competitive chargers.

### Lead Acid and Battery Pack Charger

Minwa offers a range of battery charger for use with lead acid batteries and Ni-Cd/Ni-MH battery-packs. A number of charging techniques are incorporated in these chargers. They are listed in the description of individual product.

### Li-Ion Battery Charger

Minwa has an excellent IC control system of Li-Ion battery chargers which effectively prevents the batteries from overcharge. For details, please refer to the Li-Ion battery charger section in the OEM section.

### Custom-designed Charger

Minwa provides custom-designed battery chargers. We understand that customers may have specific needs for chargers. Minwa has a team dedicated to handle OEM products. Please send us your special requirements, Minwa is all ready to provide you response and quality products.

**MW L2111(A)****ALUMINUM BATTERY CHARGER**

- Aluminum housing
- ΔV detection
- LCD with backlight
- 4 channels
- Desktop
- For AA or AAA Ni-Cd/Ni MH batteries

\* other international approvals could be provided under requested.



ErP compliance



Backlight display



Charge Current Table

	AA	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA

MW standard

Model	NL120P050PGS	MW CP1	Batteries	Approval
MW L2111(A)	✓	✓	-	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW L2112(A)****ALUMINUM BATTERY CHARGER**

- Aluminum housing
- ΔV detection
- 2 channels
- Desktop
- For AA or AAA Ni-Cd/Ni MH batteries



ErP compliance



\* other international approvals could be provided under requested.

Input voltage: MW L2112(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 124.5 x 72 x 30mm

Packing: Individual clamshell blister

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

Charge Current Table

	AA	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA



MW standard

Model	MW 7N06	MW CP1	Batteries	Approval
MW L2112(A)	✓	✓	-	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW 6878****UNIVERSAL LCD BATTERY CHARGER**

- $\Delta V$  detection
- Desktop
- Ni-Cd/Ni MH/RAM
- 4 channels
- For 1-4 pcs AA, AAA, C, D & 1 pc 9V battery

\* other international approvals could be provided under requested.

Input voltage: AC 100-240V ~ 60/50Hz, DC 12V

Dimension: 170.3 x 130 x 54mm

Packing: Individual clamshell blister



New!



Charging Current:

	AA/AAA/C/D (Ni-Cd/Ni-MH)	AA/AAA/C/D (RAM)	9V (Ni-Cd/Ni-MH)
Fast Charge	1000mA	130mA	65mA
Trickle Charge	100mA	< 1mA	-

LED Indication:

Status	LED
Fast charge	Red
Trickle charge	Green

Battery condition is shown on LCD panel

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	22.8	21.5	65 x 54 x 33	0.1158	9671

**MW 6678(A) Series****CAM PLUS-INTERCERCEPT ONE HOUR LCD BATTERY CHARGER**

- $\Delta V$  detection
- Desktop
- LCD with backlight
- For AA or AAA
- 4 channels
- Ni-Cd/Ni MH batteries

\* other international approvals could be provided under requested.

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 124 x 72 x 32mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	2000mA	800mA
Trickle charge	200mA	80mA

MW standard

Model	MW 3K10NGS	MW CP1	Batteries	Approval
MW 6678(A)	✓	✓	-	GS, CE, E4
MW 6678(A)/25AA4	✓	✓	4 x 2500mAh AA	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance



MW 3K10NGS

**MW 6778(A)/(B) Series****CAM PLUS-INTERCERCEPT ONE HOUR LCD BATTERY CHARGER**

- $\Delta V$  detection
- Desktop
- 4 channels
- For AA or AAA Ni-Cd/Ni MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 6778(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 6778(A)/25AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 6778(B): AC 100-240V ~ 60/50Hz, DC 12-13.8V DC 5V (USB)

MW 6778(B)/25AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V DC 5V (USB)

Dimension: 130 x 75 x 35mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
USB Input	750mA for 2 batteries/ 500mA for 4 batteries	300mA
AC/DC Input	Fast charge Trickle charge	800mA 80mA



ErP compliance



Battery condition will be shown on LCD display

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW 6178(A) Series**
**CAM PLUS-INTERCERCEPT  
RAPID LCD BATTERY CHARGER**

- ΔV detection
- Discharge function
- 4 channels
- Desktop
- For AA or AAA Ni-Cd/Ni MH batteries



ErP compliance



\* other international approvals could be provided under requested.  
 Input voltage: MW 6178(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
 MW 6178(A)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 140 x 75 x 28mm  
 Packing: Individual clamshell blister

## LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

Battery condition will be shown on LCD display



## Charge Current Table

	AA	AAA
Fast charge	1000mA	500mA
Trickle charge	100mA	50mA

## MW standard

Model	NK120P100PGS	MW CP1	Batteries	Approval
MW 6178(A)	✓	✓	-	GS, CE, E4
MW 6178(A)/22AA4	✓	✓	4 x 2200mAh AA	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 6278**
**INTERCERCEPT  
UNIVERSAL LCD BATTERY CHARGER**

- ΔV detection
- Discharge function
- 4 channels
- Desktop
- For 1-4 pcs AA, AAA, C, D, or 1-2 pcs 9V Ni-Cd/Ni MH batteries



ErP compliance



Input voltage: AC 100-240V ~ 60/50Hz  
 Dimension: 190 x 128.5 x 61mm  
 Packing: Individual clamshell blister

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow



	AA/C/D	AAA	9V
Fast charge	1000mA	500mA	13mA
Trickle charge	100mA	50mA	-

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	15	14	36x32x61	0.073	8000



Battery condition will be shown on LCD display



**MW 3276**
**CAM PLUS-INTERCERCEPT**  
**15 MINUTES ULTRA FAST BATTERY CHARGER**

- $\Delta V$  detection      ● 4 channels
- Desktop                 ● For 1-4pcs AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 133.5 x 77 x 45mm

Packing: Individual clamshell blister

\* Should be used with our 15 mins batteries.

AA-2300mAh

AAA-900mAh

Charge Current Table:

	AA	AAA
Fast charge	6000mA	2400mA
Trickle charge	300mA	120mA



LED Indication	
Status	LED
Fast charge	Red
Trickle charge	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3273**
**CAM PLUS-INTERCERCEPT**  
**30 MINUTES SUPER FAST BATTERY CHARGER**

- $\Delta V$  detection      ● 4 channels
- Desktop                 ● For 1-4pcs AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 116 x 105 x 45mm

Packing: Individual clamshell blister

Charge Current Table:

	AA	AAA
Fast charge	3000mA	1200mA
Trickle charge	300mA	120mA



ErP compliance



MW standard			
Model	MW 7M25	MW CP1	Batteries
MW 3273	✓	✓	-
MW 3273/26AA4	✓	✓	4 x 2600mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3277(A)**
**CAM PLUS-INTERCERCEPT**  
**1 HOUR FAST CHARGER**

- $\Delta V$  detection      ● 4 channels
- Desktop                 ● For 1-4pcs AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 71 x 30mm

Packing: Individual clamshell blister

Charge Current Table:

	AA	AAA
Fast charge	2000mA	1000mA
Trickle charge	200mA	100mA



ErP compliance

MW standard				
Model	MW 3K10NGS	MW CP1	Batteries	Approval
MW 3277(A)	✓	✓	-	GS, CE, E4
MW 3277(A)/24AA4	✓	✓	4 x 2400mAh AA	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	18.4	16	54 x 54 x 42	0.1225	9306



**MW 1236GT**
**CAM PLUS-TRAVELER WORLDWIDE BATTERY CHARGER**

- Timer function (pre-set timer : 8hrs)
- Plug-in
- 4 changeable input plugs
- For 2 or 4 pcs of AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz

Dimension: 105 x 65 x 28mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	300mA	150mA
Trickle charge	30mA	15mA

MW standard

Model	Batteries
MW1236GT	-
MW1236GT/18AA4	4 x 1800mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	3.2	2.6	52 x 27 x 16	0.0225	25333

LED Indication

Status	LED
Charge	Red
8hrs reached	Green LED off

**MW 1237GT**
**CAM PLUS-TRAVELER WORLDWIDE BATTERY CHARGER**

- $\Delta V$  detection
- 4 changeable input plugs
- Discharge function
- Plug-in
- 2/4 switch
- For 2 or 4 pcs of AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 34mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1237GT	✓	-
MW 1237GT/20AA4	✓	4 x 2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	6.6	5.9	58 x 48 x 20	0.0557	10233

**MW 1238GT**
**CAM PLUS-TRAVELER WORLDWIDE BATTERY CHARGER**

- $\Delta V$  detection
- 4 channels
- 4 changeable input plugs
- Plug-in
- For AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 34mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1238GT	✓	-
MW 1238GT/24AA4	✓	4 x 2400mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	6.9	5.9	58 x 48 x 20	0.0585	9743

**MW 1239GT**
**CAM PLUS-TRAVELER WORLDWIDE BATTERY CHARGER**

- $\Delta V$  detection
- 2 channels
- 4 changeable input plugs
- Plug-in
- For 2 or 4 pcs of AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 34mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1239GT	✓	-
MW 1239GT/22AA4	✓	4 x 2200mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	5.5	4.5	37 x 18 x 25	0.0162	35180



**MW 1236F****CAM PLUS-FALTE RAPID BATTERY CHARGER**

- Timer function (pre-set timer : 8hrs)
- Plug-in
- Foldable input plug
- For 2 or 4 pcs of AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz

Dimension: 105 x 65 x 28mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	300mA	150mA
Trickle charge	30mA	15mA

MW standard

Model	Batteries
MW1236F	-
MW1236F/18AA4	4 x 1800mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	4.2	3.6	46 x 27 x 16	0.0199	28643

LED Indication

Status	LED
Charge	Red
8hrs reached	Green LED off


**CB** Scheme **PS E JET** **E 4** **CSA US**
**MW 1237F****CAM PLUS-FALTE RAPID BATTERY CHARGER**

- $\Delta V$  detection
- Foldable input plug
- Discharge function
- Plug-in
- 2/4 switch
- For AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 28mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1237F	✓	-
MW 1237F/20AA4	✓	4 x 2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	40	7.8	7	49 x 27 x 16	0.0212	53760


**CB** Scheme **PS E JET** **E 4** **CSA US**
**MW 1238F****CAM PLUS-FALTE RAPID BATTERY CHARGER**

- $\Delta V$  detection
- 4 channels
- Foldable input plug
- Plug-in
- For AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 28mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1238F	✓	-
MW 1238F/24AA4	✓	4 x 2400mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	40	7.8	7	49 x 27 x 16	0.0212	53760


**CB** Scheme **PS E JET** **E 4** **CSA US**
**MW 1239F****CAM PLUS-FALTE RAPID BATTERY CHARGER**

- $\Delta V$  detection
- 4 channels
- Foldable input plug
- Plug-in
- For 2 or 4 pcs of AA or AAA Ni-Cd/Ni MH batteries

Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 28mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

MW standard

Model	MW CP1	Batteries
MW 1239F	✓	-
MW 1239F/22AA4	✓	4 x 2200mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	40	7.8	7	49 x 27 x 16	0.0212	53760



**MW 1289GS**
**Ni-Cd/Ni-MH BATTERY CHARGER  
WITH BUILT-IN SWITCHING POWER SUPPLY**

- 2 Channels
- Plug-in
- For 2 or 4 pcs AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: 100-240VAC, 60/50Hz

Dimension: 200 x 138 x 37mm

Packing: Individual clamshell blister

Charging current:

	AA/AAA
Fast charge	500mA
Trickle charge	50mA

LED Indication:

Status	LED
Fast charge	Flashes constantly
Trickle charge	Stops flashing and lights on
Alkaline/Bad batteries	Stops flashing and lights on

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	7.9	5.5	52 x 41 x 34	0.0724	15469



New!

**MW U1269GS**
**AA/AAA STANDARD NI-CD/NI-MH BATTERY CHARGER WITH USB OUTLET**

- 2 Channels
- Plug-in
- With USB Outlet
- For 2 or 4 pcs AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: 100-240VAC, 60/50Hz

Dimension: 108 x 45.5 x 40mm

Packing: Individual color giftbox

Charging current:

	AA/AAA
Fast charge	150mA
Trickle charge	60mA

USB output: 5V/1000mA (USB charging only)

5V/852mA (USB &amp; 2 pcs batteries charging)

5V/700mA (USB &amp; 4 pcs batteries charging)



Front



Back

# Put same size of batt.  
in each channel

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	5.7	4.7	45 x 26 x 284	0.0327	34250



## MW 1276(A) Series

### CAM PLUS-INTERCEPT RAPID BATTERY CHARGER

- $\Delta V$  detection ● 2/4 switch
- Desktop ● For AA or AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1276(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1276(A)22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1276(A)24AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 28.5mm  
Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	1400mA	700mA
Trickle charge	140mA	70mA

LED Indication

Status	LED
Power	Red
Charge/Ready	Red/Green



ErP compliance



MW CP1



NK120P100PGS



Built-in  
temp-sensors



## MW 1277(A) Series

### CAM PLUS-INTERCEPT RAPID BATTERY CHARGER

- $\Delta V$  detection ● 2/4 switch
- Desktop ● For AA or AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1277(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1277(A)22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1277(A)24AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 105 x 65 x 28.5mm  
Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green



ErP compliance



MW-CP1



NL120P050PGS



Built-in  
temp-sensors



## MW 1271(A) Series

### CAM PLUS-INTERCEPT

- $\Delta V$  detection ● Discharge function ● 4 channels
- Desktop ● For AA & AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1271(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1271(A)20AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 1271(A)22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 120 x 78 x 34.8mm  
Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Red, Green blinking



ErP compliance



MW CP1

NK120P100PGS



## MW 1280(A)/(B) Series

### CAM PLUS-INTERCEPT RAPID BATTERY CHARGER FOR DIGITAL CAMERA

- $\Delta V$  detection ● 2 channels
- Desktop ● For AA & AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1280(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 1280(B): AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

MW 1280(A)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 1280(B)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

MW 1280(B)/24AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

Dimension: 120 x 68 x 30.5mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
USB Input	750mA for 2 batteries/ 500mA for 4 batteries	300mA
AC/DC Input	Fast charge Trickle charge	800mA 30mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green

MW standard

Model	NL120P050PGS	MW CP1	MW UP1	Batteries	Approval
MW 1280(A)	✓	✓		-	GS, CE, E4
MW 1280(A)/22AA4	✓	✓		4 x 2200mAh AA	GS, CE, E4
MW 1280(B)	✓	✓	✓	-	GS, CE, E4
MW 1280(B)/22AA4	✓	✓	✓	4 x 2200mAh AA	GS, CE, E4
MW 1280(B)/24AA4	✓	✓	✓	4 x 2400mAh AA	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight(kg)	Net Weight(kg)	Dimension(cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance



## MW 1270(A)/(B) Series & MW 2078(A)/(B) Series

### INTERCEPT RAPID BATTERY CHARGER

- $\Delta V$  detection ● Discharge function ● 2/4 switch
- Desktop ● For AA & AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1270(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 1270(B): AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

MW 1270(A)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 1270(B)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

Dimension: 113 x 72 x 23.8mm

Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
USB Input	750mA for 2 batteries/ 500mA for 4 batteries	300mA
AC/DC Input	Fast charge Trickle charge	800mA 30mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

MW standard

Model	NL120P060PGS	MW CP1	MW UP1	Batteries	Approval
MW 1270(A)	✓	✓		-	GS, CE, E4
MW 1270(A)/22AA4	✓	✓		4 x 2200mAh AA	GS, CE, E4
MW 1270(B)	✓	✓	✓	-	GS, CE, E4
MW 1270(B)/22AA4	✓	✓	✓	4 x 2200mAh AA	GS, CE, E4
MW 1270(B)/24AA4	✓	✓	✓	4 x 2400mAh AA	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight(kg)	Net Weight(kg)	Dimension(cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance



## MW 9988(A)

### SONICKID BATTERY CHARGER FOR AUDIO PRODUCTS

- $\Delta V$  detection ● 2 channels
- Desktop ● For AA AAA & Prismatic (LF6) Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 9988(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 9988(A)/22AA2: AC 100-240V ~ 60/50Hz, DC 12-13.8V

MW 9988(A)/7AAA2: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 96 x 45 x 36.5mm

Packing: Individual clamshell blister

Charge Current Table

	AA/LF6	AAA
Fast charge	1000mA	700mA
Trickle charge	100mA	70mA

LED Indication

Status	LED
Charge	Red
Ready	Green



ErP compliance



**MW 6988(A)****INTERCEPT  
VERSATILE BATTERY CHARGER**

- $\Delta V$  detection
- Safety timer function
- Car use
- One channel
- Plug-in
- For 2pcs of AA & AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 6988(1): AC 230V ~ 50Hz, DC 12-13.8V

Dimension: 100 x 57 x 40mm

Packing: Individual clamshell blister

LED Indication

	LED
Fast charge	Red
Trickle charge	Green

Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

**MW 8268****INTERCEPT  
VERSATILE BATTERY CHARGER**

- $\Delta V$  detection ● Alkaline & Bad Battery Detection
- 2 channels ● For 2 or 4pcs AA, AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~50Hz

Dimension: 120 x 68 x 81 mm

Packing: Individual colour gift box

LED Indication

Status	AAA/AA
Fast charge	Red
Trickle charge	Green

Charge Current Table:

Type	AA	AAA
Fast charge	500mA	500mA
Trickle charge	50mA	50mA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
16	32	10.8	9.6	38 x 28 x 35	0.03724	24489

**MW 8998(A)****12 CHANNELS BATTERY CHARGER**

- $\Delta V$  detection ● Discharge function
- Desktop ● For 1-10pcs AA, AAA & 1-2pcs 9V Ni-CD/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 8998(A): AC 100~240V ~ 60/50Hz, DC 12-13.8V

Dimension: 223 x 98 x 84.5mm

Packing: Individual colour gift box

Charge Current Table:

Type	AA	AAA	9V
Fast charge	250mA	250mA	30mA
Trickle charge	25mA	25mA	13mA

LED Indication

Status	AAA/AA
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

MW Standard

Model	MW 3K10NGS	MW CP1	Approval
MW 8998(A)	✓	✓	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



Discharge button



**MW 6378****INTERCEPT****UNIVERSAL BATTERY CHARGER**

- $\Delta V$  detection
- 4 channels
- Desktop
- For 1-4pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 100-240V ~ 60/50Hz

Dimension: 190 x 128.5 x 61mm

Packing: Individual colour gift box

LED Indication

Status	AAA/AA
Fast charge	Red
Trickle charge	Green



MW 3K10NGS

Charge Current Table

	AA, C & D	AAA	9V
Fast charge	2000mA	1000mA	13mA
Trickle charge	200mA	100mA	-

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	16.8	14.5	60 x 37 x 34	0.07548	7552

**MW 6388****INTERCEPT****UNIVERSAL BATTERY CHARGER**

- $\Delta V$  detection
- Discharge function
- 4 channels
- Desktop
- For 2, 4 or 6 pcs AA, AAA, C, D & 2-pcs 9V Ni-Cd/Ni-MH batteries

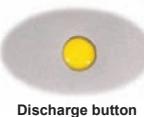
Input voltage: 100-240VAC, 60/50Hz

Dimension: 173.5 x 149.5 x 60mm

Packing: Individual colour giftbox

LED Indication

	AA/AAA/C/D	9V
Fast charge	Red	Red
Trickle charge	Green	



Charge current table

Type	AAA	AA	C	D	9V
Fast charge (4 cells)	300mA	800mA	800mA	800mA	-
Trickle charge (4 cells)	30mA	80mA	80mA	80mA	13mA
Fast charge (6 cells)	250mA	600mA	-	-	-
Trickle charge (6 cells)	25mA	60mA	-	-	-

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	13.5	12	40x36x44	0.063	8880

**MW 9268GS****INTERCEPT****UNIVERSAL BATTERY CHARGER**

- $\Delta V$  detection
- 2 channels
- Desktop
- For 2 or 4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 170.5 X 140.5 X 60mm

Packing: Individual colour giftbox

Charge current table

	AA/C/D	AAA	9V
Fast charge	800mA	300mA	13mA
Trickle charge	80mA	30mA	-



Status	AAA/AA/C/D	9V
Power On	Red	Red
Fast charge	Red	Red
Trickle charge	Green	

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	16.4	15	39x39x44	0.067	8340



## Ni-Cd/Ni-MH Charger with $\Delta V$ Sensing Technique

### MW 3279



### CamPlus-Intercept-30 Minutes Super Fast Battery Charger

- $\Delta V$  detection
- Desktop
- 4 channels
- For AA, AAA Ni-Cd/Ni-MH batteries



Input voltage: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
Dimension: 128 x 82 x 50mm  
Packing: Individual clamshell blister

Charge Current Table

	AA	AAA
Fast charge	3000mA	1200mA
Trickle charge	300mA	120mA
When the lid is opened	300mA	120mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Trickle charge time over 10 hours	Off

MW standard

Model	MW 7M25GS	MW CP1	Batteries	Approval
MW 3279	✓	✓		GS, CE, E4
MW 3279/22AA4	✓	✓	4 x 2200mAh AA	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
5	20	13.7	11.7	56 x 33 x 44	0.0813	7011

### MW 3278(A) & MW 2073(A)



### CamPlus-Intercept-1 Hour Fast Charger

- $\Delta V$  detection
- 4 channels
- Desktop
- For AA, AAA & 1-2pcs 9V Ni-Cd/Ni-MH batteries



Input voltage: MW3278(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW3278(A)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW3278(A)/24AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 154 x 88 x 42.5mm  
Packing: Individual clamshell blister

LED Indication

Status	AA/AAA	9V
Power On	Off	Off
Fast charge	Red	Red
Trickle charge	Green	-
Trickle charge time over 10 hours	Off	-

MW standard

Model	MW 3K10NGS	MW CP1	Batteries	Approval
MW 3278(A)	✓	✓		GS, CE, E4
MW 3278(A)/22AA4	✓	✓	2 x 2200mAh AA	GS, CE, E4
MW 3278(A)/24AA4	✓	✓	2 x 2400mAh AA	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
5	10	10.5	9	38 x 27 x 50	0.0513	5555

### MW 2270TGS & MW 2009TGS



### Intercept-Worldwide Battery Charger

- $\Delta V$  detection
- Desktop
- Discharge function
- For AA & AAA Ni-Cd/Ni-MH batteries
- 2/4 switch



Input voltage: AC 100-240V ~ 60/50Hz

Dimension: 113 x 71 x 41mm

Packing: Individual colour giftbox/ individual clamshell blister (combo with batteries)

Charge Current Table

	AA	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	12.2	10.7	48 x 26 x 37	0.0462	24640

### Intercept-5 Hours Battery Charger

- $\Delta V$  detection
- Plug-in
- Discharge function
- For AA & AAA Ni-Cd/Ni-MH batteries
- 2/4 switch



Input voltage: AC 230V ~ 50Hz

Dimension: 119 x 71 x 83mm

Packing: Individual colour giftbox

Charge current table

	AA	AAA
Fast charge	500mA	300mA
Trickle charge	50mA	30mA

LED Indication

Status	Charge/Ready/Discharge
Power On (No battery is connected)	Off
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.7	17.7	49 x 28 x 39	0.0535	26635

### MW 8168GS & MW 2002GS



# Ni-Cd/Ni-MH Charger with $\Delta V$ Sensing Technique

## MW 1278(A)/(B) Series



MW UP1



MW CP1



NL120P050PGS



ErP compliance



## MW 1268(A)/(B) Series



MW UP1



MW CP1



NL120P050PGS



ErP compliance



## MW 2076(A)/(B) Series



MW UP1



MW CP1



NL120P050PGS



ErP compliance



## MW 2072(A)/(B) Series



MW UP1



MW CP1



NL120P050PGS



ErP compliance



## Intercept-Rapid Battery Charger

- $\Delta V$  detection
- 2/4 switch
- Desktop
- For AA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 1278(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
 MW 1278(A)/18AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
 MW 1278(B)/20AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)  
 MW 1278(B)/22AA4: AC 100-240V ~ 60/50Hz, DC 12-13.8V, DC 5V (USB)

Dimension: 110.3 x 70 x 29.5mm

Packing: Individual clamshell blister

Charge Current Table

	AA
Fast charge	800mA
Trickle charge	80mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green

MW standard

Model	NL120P050PGS	MW CP1	MW UP1	Batteries	Approval
MW 1278(A)	✓	✓	-	-	GS, CE, E4
MW 1278(A)/18AA4	✓	✓	-	4 x 1800mAh AA	GS, CE, E4
MW 1278(B)/20AA4	✓	✓	✓	4 x 2000mAh AA	GS, CE, E4
MW 1278(B)/22AA4	✓	✓	✓	4 x 2200mAh AA	GS, CE, E4

Pcs per Inner Ctn.

Pcs per Exp. Ctn.

Gross Weight (kg)

Net Weight (kg)

Dimension (cm)

CBM

Pcs per 20' Container

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## Ni-Cd/Ni-MH Charger with $\Delta V$ Sensing Technique

### MW 8988GS



The switch to choose  
2 / 4 batteries charging



### MW 2988GS



### MW 1988GS



### MW 9168GS



The switch to choose  
2 / 4 batteries charging and  
Memory Refresh Function!



### Intercept 5-Hour Battery Charger



- $\Delta V$  detection
- Discharge function
- 2 or 4pcs
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz 6.6W  
Dimension: 119 x 71 x 83mm  
Packing: Individual colour giftbox

#### LED Indication

Status	Charge/Ready/Discharge
Power on (No battery is connected)	Off
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

#### Charge current table

Status	AA	AAA
Fast charge	500mA	300mA
Trickle charge	50mA	30mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	30	12	10.7	48 x 29.4 x 26.8	0.0584	22265

### SonicKid

### Battery Charger for Audio Products



- 1 or 2pcs
- Plug-in
- For AA, AAA & Prismatic (LF6) Ni-Cd/Ni-MH batteries

Input voltage: 230VAC ~ 50Hz  
Dimension: 123 x 55.2 x 83.75mm  
Packing: Individual clamshell blister

#### MW standard

Model	Batteries
MW2988	-
MW2988/14LF6	1 x 1400mAh LF6
MW2988/18AA2	2 x 1800mAh AA
MW2988/7AAA2	2 x 700mAh AAA

#### Charge Current Table

Type	Charge Current
AA/LF6	250mA
AAA	100mA

#### LED Indication

Status	AAA/AA/LF6
Charging	Red

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.6	11.9	56 x 39 x 33	0.0721	15811

### SonicKid

### Battery Charger for Audio Products



- $\Delta V$  detection
- 1 or 2pcs
- Plug-in
- For AA, AAA & Prismatic (LF6) Ni-Cd/Ni-MH batteries

Input voltage: 230VAC ~ 50Hz  
Dimension: 123 x 55.2 x 83.75mm  
Packing: Individual clamshell blister

#### MW standard

Model	Batteries
MW1988	-
MW1988/14LF6	1 x 1400mAh LF6
MW1988/18AA2	2 x 1800mAh AA
MW1988/7AAA2	2 x 700mAh AAA

#### Charge Current Table

Type	Charge Current
AA/LF6	550mA
AAA	55mA

#### LED Indication

Status	AAA/AA/LF6
Fast charge	Red
Trickle charge	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.6	11.9	51 x 30 x 34	0.052	21920

### Intercept-Universal Battery Charger



- $\Delta V$  detection
- Discharge function
- Memory Refresh Function
- 2 or 4pcs
- Desktop
- For 2 or 4 pcs AA, AAA, C, D & 1 pc 9V Ni-Cd/Ni-MH

Input voltage: AC 230V ~ 50Hz  
Dimension: 178 x 168 x 64mm  
Packing: Individual colour giftbox

#### LED Indication

Status	Charge/Ready/Discharge	Memory Refresh
Power On	Off	Off
Fast charge	Red	Off
Trickle charge	Green	Off
Discharge	Yellow	Off
Memory Refresh	Off	Yellow
Memory Refresh completed	Off	Off

#### Charge current table

	AA/C/D	AAA	9V
Fast charge	800mA	300mA	13mA
Trickle charge	80mA	30mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
16	32	30	27	59 x 43 x 46	0.1167	7814

## Ni-Cd/Ni-MH Charger with $\Delta V$ Sensing Technique

### MW 4798



### Microprocessor Battery Charger



- $\Delta V$  detection
- Desktop
- Discharge function
- For AA or AAA Ni-Cd/Ni-MH batteries
- 2/4 switch

Input voltage: DC 12-13.8V  
 Output voltage: DC 1.5/3/4.5/6/7.5/9 V (for 12-13.8 VDC input) and DC 1.5/3/4.5/6/7.5/9/12 V (for 24VDC input)  
 Charging current: 800mA  
 Dimension: 130 x 88 x 54mm  
 Packing: Individual colour giftbox

Charge Current Table

Fast Charge Current	800mA
Trickle Charge Current	80mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	15.8	14.2	41 x 34 x 35	0.0488	11680

### MW 4798N



### Intelligent Battery Charger



- $\Delta V$  detection
- Desktop
- Discharge function
- For AA or AAA Ni-Cd/Ni-MH batteries
- 2 channels

Input voltage: DC 12-13.8V  
 Dimension: 130 x 88 x 54mm  
 Packing: Individual clamshell blister

LED Indication

Status	Charge/Ready	Discharge
Power On	Off	Off
Fast Charging	Red	Off
Trickle Charging	Green	Off
Discharge	Off	Yellow

Charge Current Table

Fast Charge Current	800mA
Trickle Charge Current	80mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	8	5.7	40 x 37 x 39	0.0577	9880

### MW 5798N



### Universal Battery Charger



- $\Delta V$  detection
- Discharge function
- 2 channels
- Desktop
- For 2 or 4 pcs AA, AAA, C, D & 2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 100-240V ~ 60/50Hz  
 Dimension: 203 x 148 x 75.5mm  
 Packing: Individual colour giftbox

LED Indication

Status	Charge/Ready	Discharge
Power On	Off	Off
Fast Charging	Red	Off
Trickle Charging	Green	Off
Discharge	Off	Yellow

Charge current table

	AA/C/D	AAA
Fast charge	800mA	300mA
Trickle charge	80mA	30mA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	25.8	24	56 x 47 x 35	0.0954	5960

### MW 7198



- $\Delta V$  detection
- Discharge function
- Desktop
- For various sizes of batteries for video camera and mobile phone

Input voltage: AC 230V ~50Hz, DC 12-13.8V  
 Dimension: 150 x 101 x 36mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	20.3	19	52 x 35 x 29	0.0528	10800

**MW 3288GS****VERSATILE BATTERY CHARGER**

- Discharge function
- Battery Tester
- Plug-in
- For 1-4 pcs AA, AAA & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 130 x 88 x 54mm  
 Packing: Individual colour giftbox

LED Indication

	AAA/AA	9V
Power On (no battery is connected)	Off	Off
Charging for AA/AAA battery	On	Off
Charging for 9V battery	Off	On

Charge Current Table

	AA	AAA	9V
Charge current	150mA	150mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.7	17.8	49 x 26 x 39	0.0497	28650



For Argentina version MW328BARG

**MW 3398GS****UNIVERSAL BATTERY CHARGER**

- Discharge function
- Battery Tester
- Desktop
- For 1-4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 198 x 105 x 55mm  
 Packing: Individual colour giftbox



	AAA/AA/C/D	9V
Charge current	120mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	13.7	12	48 x 33 x 30	0.0475	12000



For Argentina version MW339BARG

**MW 6398GS****UNIVERSAL BATTERY CHARGER**

- Discharge function
- Battery Tester
- Desktop
- For 1-4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 203 x 110 x 59mm  
 Packing: Individual colour giftbox



	AAA/AA/C/D	9V
Charge current	120mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	14.7	13	46 x 35 x 31	0.0499	11420



**MW 6288GS****9V BATTERY CHARGER**

- $\Delta V$  detection
- Discharge function
- 2 channels
- Plug-in
- For 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 98 x 64 x 91.75mm  
 Packing: Individual colour giftbox

## LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green
Discharge	Yellow

## Charge current table

Fast charge	70mA
Trickle charge	7mA

**MW 698****9V BATTERY CHARGER**

- 1 or 2pcs
- Plug-in
- For 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Output voltage: 9V  
 Dimension: 80 x 56 x 80mm  
 Packing: Individual colour giftbox

## Charge Current Table

	9V
Charge current	15mA

**MW 7988****UNIVERSAL BATTERY CHARGER**

- Desktop
- For 2, 4, 6, 8pcs AA, AAA & 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz 6.4w  
 Dimension: 190 x 110 x 46mm  
 Packing: Individual colour giftbox



## Charge Current Table

Type	AA	AAA	9V
Ni-Cd	100mA	55mA	15mA
Ni-MH	200mA	80mA	15mA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	12.5	11	57 x 23 x 30	0.0393	14493

**MW 3312****EMERGENCY CHARGER WITH USB OUTLET**

- Portable
- Instant USB Output
- Battery charging & testing
- For 2 pcs AA Ni-Cd/Ni-MH batteries
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz, 12-13.8VDC, 2.8VDC  
 USB output: 5VDC/800mA  
 Dimension: 66 x 60 x 25mm  
 Packing: Individual clamshell blister

Charging current:

	AA
Fast charge	1000mA
Trickle charge	100mA

LED Indication:

Status	Red LED (Left)	Green LED (Right)
"Charge/out" (charging batteries)	Light on	Off
Trickle charge	Flash	Off
Alkaline/Bad batteries	Off	Light on
Fast charge	Off	Light for 6 sec.
Trickle charge	Off	Light for 6 sec.
Alkaline/Bad batteries	Off	Off

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.2	11	54 x 43 x 38	0.0823	12694

**"Piano" Black finishing**

ErP compliance



New!

**MW SO1****EMERGENCY CHARGER WITH SOLAR PANEL**

- Portable
- Instant USB Output
- Battery charging & testing
- For 2 pcs AA Ni-Cd/Ni-MH batteries
- Desktop
- Hybrid: Saving 20% power by using solar energy

Input voltage: 100-240VAC ~ 60/50Hz, 12VDC  
 Solar Panel: 4VDC, 80mA

Charging current: 2.4VDC/500mA  
 Solar Panel: 30-120mA  
 USB output: 5VDC/500mA  
 Dimension: 100 x 75 x 32mm  
 Packing: Individual clamshell blister

LED Indication:

Item	Function		Indication
Dual LED with dual function (green/red)	Power & capacity indicator	Power on & battery capacity is normal	Green flash
		Power on & battery capacity is medium	Orange flash
		Power on & battery capacity is low	Red flash
		Power off & battery capacity is empty	No LED indication
	Charge indicator (DC power sourceplug in)	Charging	Red
		Finish	Green
		Precharge	Red
		Error	Red flash
		No battery	No LED indication
Solar panel charge LED	Charging batteries by solar requested		Red



ErP compliance



New!

**MW U4HT****4 IN 1 MULTI-INPUT CHARGER**

- 1000mA
- 4 Multi-Input: AC / Vehicle / USB / 9V Battery
- With 4 changeable Plugs (UK,SAA,AF,U)
- With 4 Changeable Tips (4PPM) for Digital Devices

Input : 1. AC (built-in switching): 100-240VAC ~ 60/50Hz  
 2. Cigarette lighter plug: 12-13.8VDC  
 3. USB: 5VDC  
 4. 9V: 1pc 9V battery

Output : 5VDC/1000mA  
 Output socket: 3.5mm female  
 Output plug: 4PPM  
 (Micro USB, Mini USB, Nokia, Female USB)  
 Dimension: 97 x 75 x 27mm  
 Packing: Individual clamshell blister

**"Piano" Black finishing**

ErP compliance



New!



\* More international approvals could be provided on requested.



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14.7	11.2	56 x 51 x 48	0.1371	8159

**MW I311(A)****UNIVERSAL CHARGING DOCKING**

- $\Delta V$  detection
- Adjustable contact to fit different battery size
- Flexible mounting design
- For 1 or 2pcs Li-ion / Li-polymer batteries

\* other international approvals could be provided under requested.

Input voltage: MW I311(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

Output voltage: DC 3.7V/7.4V autodetect (Li-ion / Li-polymer)

Output Current: 600mA / 400mA selectable

Dimension: 143 x 64 x 30mm

Packing: Individual clamshell blister

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green

MW standard

Model	NL120P050PGS	MW CP1	Approval
MW 1311(A)	✓	✓	GS, CE, E4



Moveable



ErP compliance



MW CP1 NL120P050PGS

**MW 2079(A)****CAMPLUS-INTERCEPT****BATTERY CHARGER FOR DIGITAL CAMERA**

- $\Delta V$  detection
- Desktop
- For Ni-MH RCRV3 battery

\* other international approvals could be provided under requested.

Input voltage: MW 2079(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 45 x 85 x 31.5mm

Packing: Individual clamshell blister

\* Standard packing is included 1pc of Ni-MH RCRV3 battery

LED Indication

Status	LED
Fast Charge	Red
Trickle Charge	Green

MW standard

Model	NL120P050PGS	MW CP1	Batteries	Approval
MW 2079(A)	✓	✓	1 x Ni-MH RCR-V3	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance



MW CP1 NL120P050PGS

**MW 2080(A)****CAMPLUS-INTERCEPT****BATTERY CHARGER FOR DIGITAL CAMERA**

- $\Delta V$  detection
- Desktop
- For Li-ion RCRV3 battery

\* other international approvals could be provided under requested.

Input voltage: MW 2080(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 45 x 85 x 31.5mm

Packing: Individual clamshell blister

\* Standard packing is included 1pc of Li-ion RCRV3 battery

LED Indication

Status	LED
Fast Charge	Red
Trickle Charge	Green

MW standard

Model	NL120P050PGS	MW CP1	Batteries	Approval
MW 2080(A)	✓	✓	1 x Li-ion RCR-V3	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance



MW CP1 NL120P050PGS



**MW 302CR****CONSTANT CURRENT BATTERY PACK CHARGER**

- Car Use
- Reverse polarity protection
- For Ni-Cd/Ni-MH battery pack

Input voltage: DC 12V - 13.8V  
 Output voltage: 1.4V (1 battery)- 8.4V (6 batteries)  
 Charge current: 100/ 200/ 400/ 600/ 800/ 1000mA  
 Output plug: F01D  
 Dimension: 80 x 57 x 28.5mm  
 Packing: Individual clamshell blister



\*Please use the formula ( time = battery cap x 1.4 / charging current) to calculate the estimated time for the charging process.

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	13	10	63 x 48 x 35	0.658	13468

**MW 301CR****LEAD ACID BATTERY CHARGER**

- 1000mA
- Reverse polarity protection
- Car Use
- For 2V/6V batteries

Input voltage: DC 12-13.8V  
 Output voltage: DC 2V/ 6V  
 Charge current: 1000mA  
 Output plug: 01F  
 Dimension: 80 x 57 x 82.5mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	14.2	12.5	63 x 47 x 40	0.1184	12035

**MW 3178CR****LEAD ACID BATTERY CHARGER**

- 6000mA
- Reverse polarity protection
- Car Use
- For 12V batteries

Input voltage: DC 12-13.8VDC  
 Output voltage: DC 12V  
 Charge current: 6000mA  
 Output plug: CP1 ( 01F-FCP1 is included)  
 Dimension: 120 x 120 x 90mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	16.2	16.0	73 x 33 x 47	0.1132	5035

**MW 8878GS Series****COMPACT OVERNIGHT BATTERY CHARGER**

- Timer Function ● 2 or 4pcs
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries
- Pre-set timer : 14 hrs

Input voltage: AC 230V ~ 50Hz

Dimension: 106 x 51.5 x 91mm

Packing: Individual colour giftbox/  
Individual clamshell blister  
(combo with batteries)

## LED Indication

Status	LED
Charge	Red
Ready	Green
Time's up	Green (Timer LED)

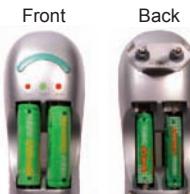
## Charge Current Table

	MW 8878GS	MW 8878-1GS	MW 8878-2GS	MW 8878-3GS
Charge current	120mA	150mA	200mA	250mA

## MW standard

Model	Batteries
MW 8878GS	~
MW 8878GS/12AA4	4 x 1200mAhAA
MW 8878-1GS	~
MW 8878-1GS/15AA4	4 x 1500mAhAA
MW 8878-2GS	~
MW 8878-2GS/18AA4	4 x 1800mAhAA
MW 8878-3GS	~
MW 8878-3GS/20AA4	4 x 2000mAhAA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 8878GS****MW 8878-1GS****MW 8878-2GS****MW 8878-3GS**

Timer LED

\* Put same size of batteries in each channel.

**MW 8278GS****DETERMINANT VERSATILE BATTERY CHARGER**

- Timer Function
- Plug-in
- 2 or 4pcs
- For 2 or 4pcs AA, AAA & 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 119 x 71 x 51.1mm

Packing: Individual colour giftbox

## LED Indication

Status	AAA/AA	9V
Fast charge	Red	Red
Trickle charge	Green	

## Charge Current Table

Type	AA	AAA	9V
Fast charge	300mA	150mA	13mA
Trickle charge	30mA	15mA	

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	17.2	15.6	50 x 28 x 37	0.0518	22008



Selectable Timer



**MW 3698GS****INTERCEPT****UNIVERSAL BATTERY CHARGER**

- Discharge function
- Battery Tester
- 2 channels
- Desktop
- For 2 or 4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 210 x 111 x 61mm

Packing: Individual colour giftbox

LED Indication

Status	LED
Charge	Red
Discharge	Yellow



Discharge/Tester Switch

**MW 9398GS****DETERMINANT****UNIVERSAL BATTERY CHARGER**

- Timer Function
- Discharge function
- Battery Tester
- 4 channels
- Desktop
- For 1-4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 210 x 105 x 53mm

Packing: Individual colour giftbox

LED Indication

Status	L1(Red)	L2(Red)	L3(Green)	L4(Clear)
Power On	Off	Off	Off	Off
Testing	Off	Off	Off	On
Fast charge for 1-2 pcs 9V	On	Off	Off	Off
Fast charge for 1-4 pcs AA/ AAA/ C/ D	Off	On	Off	Off
Trickle charge for 1-4 pcs AA/ AAA/ C/ D	Off	Off	On	Off



Timer Control

**MW 9399GS****UNIVERSAL BATTERY CHARGER**

- Timer Function
- Discharge function
- Battery Tester
- 4 channels
- Desktop
- For 1-4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz 1.5VA

Dimension: 210 x 105 x 53mm

Packing: Individual colour giftbox

LED Indication

Status	AAA/AA/C/D	9V	Clear LED
Fast Charge	Red	Red	Off
Trickle Charge	Green	-	Off
Test	Off	Off	Yellow
	Off	Off	Off



Timer Selector



Test &amp; Discharge selector



	AAA/AA/C/D	9V
Fast charge	270mA	13mA
Trickle charge	50mA	-

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

## Ni-Cd/Ni-MH Charger with Timer Control

### MW 3798GS



### Compact Battery Charger

- Discharge Function
- 1-hour timer pre-set
- 2 or 4 pieces
- Desktop
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 155 x 125 x 55mm  
 Packing: Individual colour giftbox

Charge Current Table

	AA	AAA
Fast charge	600mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	16.5	15.5	35 x 32 x 36	0.0403	14140



### MW 9798GS



### Compact Universal Battery Charger

- Discharge Function
- 2-hour timer pre-set
- 2 or 4 pieces
- Desktop
- For AA, AAA, C & D Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 187 x 162 x 63mm  
 Packing: Individual colour giftbox

Charge Current Table

	AA/AAA	C/D
Fast Charge	270mA	800mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	21.5	20	42 x 39 x 41	0.0672	8480



### MW 1798GS



### Compact Universal Battery Charger

- 10-hour timer pre-set
- Battery tester
- Desktop
- For 2 or 4 pcs AA, AAA, C, D & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 243.5 x 126.5 x 60mm  
 Packing: Individual colour giftbox

Charge Current Table

	AA/AAA	C/D	9V
Fast charge	260mA	500mA	45mA
Trickle charge	110mA	130mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	20.5	19.3	51 x 34 x 34	0.059	9660



### MW 1898GS



### Compact Battery Charger

- 10-hour timer pre-set
- 2 or 4 pieces
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 119 x 71 x 83mm  
 Packing: Individual colour giftbox

Charge Current Table

	AA	AAA
Fast charge	250mA	148mA
Trickle charge	32mA	31mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.8	17.7	49 x 27 x 39	0.0516	27600



### MW 2898GS



### Compact Battery Charger

- 3-hour timer pre-set
- 2 or 4 pieces
- Plug-in
- For 2 or 4 pcs AA or AAA & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 119 x 71 x 83mm  
 Packing: Individual colour giftbox

Charge current table

	AA	AAA	9V
Fast charge	200mA	80mA	40mA
Trickle charge	35mA	32mA	10mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.6	17.5	49 x 26 x 39	0.0516	27600



### MW 5898GS



### Compact Battery Charger

- 5-hour timer pre-set
- 2 or 4 pieces
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 119 x 71 x 83mm  
 Packing: Individual colour giftbox

Charge current table

	AA	AAA
Fast charge	250mA	100mA
Trickle charge	33mA	29mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.7	17.8	49 x 26 x 39	0.0497	28650



**MW 1286****FOLDER STANDARD BATTERY CHARGER**

- Plug-in
- Foldable cap
- For 1 or 2pcs of AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Charging Current: 200mA (AA)/ 100mA (AAA)  
 LED indicator: RED charging LED  
 Dimension: 77.5 x 41.7 x 77mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 1287(A)****STANDARD BATTERY CHARGER WITH USB OUTLET**

- USB outlet
- Detachable battery case
- For 4pcs of AANi-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: AC 100-240V ~60/50Hz, DC 12V-13.8V

Charging Current: 250mA (AA/AAA)

LED indicator: RED charging LED

USB Output: DC 5V, 500mA

Combo included: MW CP1  
 NL120P050PGS  
 MW BC2 (Battery case)

Dimension: 66 x 36 x 23.1mm (Charger)  
 66 x 93.4 x 23.2mm (Battery case)

Packing: Individual clamshell blister

MW standed

Model	NL120P050PGS	MW CP1	Approval
MW 1287(A)	✓	✓	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



MW CP1 NL120P050PGS



**MW U111****USB CHARGER**

- Portable
- Extendable
- For 1pc Ni-Cd/Ni-MH batteries

Input voltage: DC 5V  
 Output Current: 200mA (max)  
 Dimension: 20 x 17 x 87.6mm  
 Packing: Individual sealed blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	8.8	8.0	45 x 24 x 26	0.0281	40569

**MW U112****USB CHARGER**

- Portable
- Extendable
- For 1 or 2 pcs Ni-Cd/Ni-MH batteries

Input voltage: DC 5V  
 Output Current: 200mA (max)  
 Dimension: 20 x 17 x 87.6mm  
 Packing: Individual sealed blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 1282GS Series****MINI STANDARD BATTERY CHARGER**

- 2 or 4pcs
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 102 x 41 x 78mm  
 Packing: Individual colour giftbox

Charge current table

Charge current	MW 1282 -2GS	MW 1282 -3GS	MW 1282 -4GS
AA	120mA	150mA	200mA
AAA	120mA	150mA	200mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



\* Put same size of batteries in each channel.



**MW1282-2GS**



**MW1282-3GS**



**MW1282-4GS**

**MW 1283GS Series****MINI STANDARD BATTERY CHARGER**

- 1 or 2pcs
- Plug-in
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 102 x 41 x 78mm  
 Packing: Individual colour giftbox

Charge current table

Charge current	MW 1283 -2GS	MW 1283 -3GS	MW 1283 -4GS
AA	120mA	150mA	200mA
AAA	54mA	70mA	100mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW1283-2GS**



**MW1283-3GS**



**MW1283-4GS**

**MW 1222GS Series****HAPPY CHARGER  
COMPACT OVERNIGHT BATTERY CHARGER**

- 2 or 4pcs
- Plug-in

● For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 106 x 51.5 x 91mm  
 Packing: Individual colour giftbox



\* Put same size of batteries in each channel.

**MW 1222-5GS**

Charge current table

Charge current	MW 1222GS	MW 1222-1GS	MW 1222-2GS	MW 1222-3GS	MW 1222-4GS	MW 1222-5GS
AA	55mA	70mA	120mA	150mA	200mA	250mA
AAA	24mA	30mA	54mA	70mA	100mA	120mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW 1222GS**



**MW 1222-1GS**



**MW 1222-2GS**



**MW 1222-3GS**



**MW 1222-4GS**

**MW 1221GS Series****HAPPY CHARGER  
COMPACT OVERNIGHT BATTERY CHARGER**

- 1 or 2pcs
- Plug-in

● For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 106 x 51.5 x 91mm  
 Packing: Individual colour giftbox



**MW 1221GS**

Charge current table

Charge current	MW 1221GS	MW 1221-1GS	MW 1221-2GS	MW 1221-3GS	MW 1221-4GS
AA	55mA	70mA	120mA	150mA	200mA
AAA	24mA	30mA	54mA	70mA	100mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW 1221-1GS**



**MW 1221-2GS**



**MW 1221-3GS**



**MW 1221-4GS**

**MW 1281GS Series****COMPACT OVERNIGHT BATTERY CHARGER**

- 2 or 4pcs
- Plug-in

● For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 105 x 44 x 80mm  
 Packing: Individual colour giftbox



\* Put same size of batteries in each channel.

**MW 1281-5GS**

Charge current table

Charge current	MW 1281GS	MW 1281-1GS	MW 1281-2GS	MW 1281-3GS	MW 1281-4GS
AA	55mA	70mA	120mA	150mA	200mA
AAA	24mA	30mA	54mA	70mA	100mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	8.8	8.0	45 x 24 x 26	0.0281	40569



**MW 1281GS**

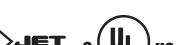


**MW 1281-1GS**

**MW 1281-2GS**



**MW 1281-4GS**





## MW R1291GS Series

### TWIRL COMPACT OVERNIGHT BATTERY CHARGER

- 1 or 2pcs (for MWR 1291GS Series)
- For AA Ni-Cd/Ni-MH batteries
- Rotary Input Plug
- Plug-in

Input voltage: AC 230V ~ 50Hz  
 Dimension: 118 x 52 x 87mm  
 Packing: Individual colour giftbox



MW R1291-1GS MW R1291-2GS MW R1291-3GS



MW R1291GS MW R1291-4GS MW R1291-5GS



Charge current table

Model	MW R1291GS	MW R1291 -1GS	MW R1291 -2GS	MW R1291 -3GS	MW R1291 -4GS	MW R1291 -5GS
Charge current	55mA	70mA	120mA	150mA	200mA	250mA
Pcs per Inner Ctn.	10	40	9.4	8.4	50 x 28 x 30	0.042
Net Weight (kg)				Dimension (cm)	CBM	Pcs per 20' Container
				50 x 28 x 30	0.042	27142

## MW R1292GS Series

### TWIRL COMPACT OVERNIGHT BATTERY CHARGER

- 2 or 4pcs
- For AA Ni-Cd/Ni-MH batteries
- Rotary Input Plug
- Plug-in

Input voltage: AC 230V ~ 50Hz  
 Dimension: 118 x 52 x 87mm  
 Packing: Individual colour giftbox



MW R1292-1GS MW R1292-2GS MW R1292-3GS



MW R1292GS MW R1292-4GS MW R1292-5GS



Charge current table

Model	MW R1292GS	MW R1292 -1GS	MW R1292 -2GS	MW R1292 -3GS	MW R1292 -4GS	MW R1292 -5GS
Charge current	55mA	70mA	120mA	150mA	200mA	250mA
Pcs per Inner Ctn	10	40	10.2	8.1	49 x 26 x 35	0.0446
Gross Weight (kg)			Net Weight (kg)	8.1	Dimension (cm)	0.0446
					49 x 26 x 35	25566

## MW 7278GS Series

### FALTE COMPACT OVERNIGHT BATTERY CHARGER

- Foldable Input Plug
- For AA Ni-Cd/Ni-MH batteries
- 1-4pcs
- Plug-in

Input voltage: AC 230V ~ 50Hz  
 Dimension: 119 x 71 x 40.5mm  
 Packing: Individual colour giftbox



MW 7278GS

MW 7278-1GS MW 7278-2GS MW 7278-3GS



Easier for storage!!



MW 7278-4GS MW 7278-5GS



Charge current table

Model	MW 7278GS	MW 7278 -1GS	MW 7278 -2GS	MW 7278 -3GS	MW 7278 -4GS	MW 7278 -5GS
Charge current	55mA	70mA	120mA	150mA	200mA	250mA
Pcs per Inner Ctn.	10	40	11.6	10.2	39 x 29 x 27	0.0305
Gross Weight (kg)			Net Weight (kg)	10.2	Dimension (cm)	0.0305
					39 x 29 x 27	37377

## MW 1296GS & MW 2007GS Series



MW1296GS

MW1296-1GS MW1296-2GS



MW1296-3GS MW1296-4GS MW1296-5GS

## MW 1293GS Series



MW1293GS

MW1293-1GS MW1293-2GS



MW1293-3GS MW1293-4GS MW1293-5GS

## MW 1288GS & MW 2003GS Series



MW1288GS

MW1288-1GS MW1288-2GS



MW1288-3GS MW1288-4GS MW1288-5GS

## EcoCharge Compact Overnight Charger



- 2 or 4pcs
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 41 x 103 x 74mm

Packing: Individual colour giftbox

Charge Current Table

	MW1296GS	MW1296-1GS	MW1296-2GS	MW1296-3GS	MW1296-4GS	MW1296-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	25	24	46 x 23 x 41	0.0434	65600

## EcoCharge Compact Overnight Charger



- 1 or 2pcs
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 41 x 103 x 74mm

Packing: Individual colour giftbox

Charge Current Table

	MW1293GS	MW1293-1GS	MW1293-2GS	MW1293-3GS	MW1293-4GS	MW1293-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	20.5	19.4	46 x 23 x 41	0.0434	65600

## EcoCharge Compact Overnight Charger



- 1-4pcs
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 70 x 106 x 76mm

Packing: Individual colour giftbox

Charge Current Table

	MW1288GS	MW1288-1GS	MW1288-2GS	MW1288-3GS	MW1288-4GS	MW1288-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	10	8.4	42 x 28 x 35	0.0412	27640

## Standard Ni-Cd/Ni-MH Charger

### MW 1298GS Series



### EcoCharge Compact Overnight Battery Charger



- 2 or 4 pieces
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 105 x 43 x 78mm

Packing: Individual colour giftbox

Charge Current Table

Model	MW1298GS	MW1298-1GS	MW1298-2GS	MW1298-3GS	MW1298-4GS	MW1298-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	18.2	17.2	47 x 26 x 45	0.0550	51800

### MW 1297GS Series



With vertical AC input plug configuration!

### EcoCharge Compact Overnight Battery Charger



- 1 or 2 pieces
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 103 x 41 x 74mm

Packing: Individual colour giftbox

Charge Current Table

Model	MW1297GS	MW1297-1GS	MW1297-2GS	MW1297-3GS	MW1297-4GS	MW1297-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	16.5	15.5	47 x 23 x 41	0.0443	64300

### MW 1299GS Series



With vertical AC input plug configuration!

### EcoCharge Compact Overnight Battery Charger



- 2 or 4 pieces
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 103 x 41 x 74mm

Packing: Individual colour giftbox

Charge Current Table

Model	MW1299GS	MW1299-1GS	MW1299-2GS	MW1299-3GS	MW1299-4GS	MW1299-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	16.5	15.7	47 x 23 x 41	0.0443	64300

## Standard Ni-Cd/Ni-MH Charger

### MW 3898GS



### Plug-in Overnight Battery Charger

- Discharge function
- 2 or 4pcs
- Plug-in
- For 2 or 4pcs AA, AAA & 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 119 x 71 x 83mm  
 Packing: Individual colour giftbox

Charge current table

	AA	AAA	9V
Charge current	75mA	24mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	18.7	17.8	49 x 27 x 30	0.0497	28650



### MW 7398GS



### MW 8398GS



### MW 398GS



### Versatile Battery Charger

- Desktop
- For 2 to 8pcs AA, AAA and 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 127 x 153 x 55mm  
 Packing: Individual colour giftbox

Charging current

	AAA	AA	9V
Ni-Cd	40mA	60mA	13mA
Ni-MH	60mA	120mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	13.6	12.6	38 x 32 x 37	0.045	12660



### Compact Battery Charger

- 1 to 4pcs
- Desktop
- For AA or AAA and Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 127 x 72 x 54mm  
 Packing: Individual colour giftbox

Charging current

	AAA	AA
Ni-Cd	40mA	60mA
Ni-MH	60mA	120mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	12.8	11.8	34 x 33 x 37	0.0415	20580



For Argentina version  
For MW8398ARG

### Universal Battery Charger

- Battery Tester
- Desktop
- For 1-4pcs AA, AAA, C, D and 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 215 x 107.5 x 55.5mm  
 Packing: Individual colour giftbox

Charging current

	AA/AAA/C/D	9V
Charge current	120mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	18.3	17.1	47 x 33 x 44	0.0682	12540



### MW 7798GS



### Universal Battery Charger

- Discharge function
- Desktop
- For 2 or 4pcs AA, AAA, C, D and 1-2pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 212 x 164 x 63mm  
 Packing: Individual colour giftbox

Charging current

	AAA/AA	C/D	9V
Charge current	60mA	180mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	18.8	17	46 x 38 x 43	0.0735	7760



## Standard Ni-Cd/Ni-MH Charger

### MW 798GS



### Universal Battery Charger

- Battery Tester
- 4 channels
- Desktop
- For 1-4 pcs AA/AAA/C/D, 1-2pcs 9V & 2 pcs button cells



Input voltage: AC 230V ~ 50Hz  
 Dimension: 186.6 x 155 x 56mm  
 Packing: Individual colour giftbox

Charge Current Table

	AAA	AA	C	D	9V	Button cell
Charge Current	70mA	70/120mA	120mA	120mA	13mA	4mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	23.8	22.2	41 x 36 x 61	0.09	9510

### MW 898GS



### Universal Battery Charger

- Battery Tester
- 4 channels
- Desktop
- For 1-4 pcs AA/C/D, 1-2pcs AAA/9V & 2 pcs button cells



Input voltage: AC 230V ~ 50Hz  
 Dimension: 241 x 110 x 58.5mm  
 Packing: Individual colour giftbox

Charge Current Table

	AAA	AA	C	D	9V	Button cell
Charge Current	70mA	70/120mA	120mA	120mA	13mA	8mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	15.2	14.1	51 x 33 x 32	0.0539	10580

### MW 1198



### Versatile Battery Charger

- Desktop
- For 2/4 pcs AA/AAA, 1 pc 9V & 1-2 pcs button cells



Input voltage: AC 230V ~ 50Hz  
 Dimension: 126 x 75 x 55mm  
 Packing: Individual colour giftbox

Charge current table

	AA/AAA	9V	Button cell
Fast charge	120mA	-	-
Trickle charge	85mA	10mA	3mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	17.1	16	34 x 32 x 53	0.0577	24700

### MW 198



### Overnight Battery Charger

- 2 or 4 pieces
- Desktop
- For AA & 1-2 pcs button cells



Input voltage: AC 230V ~ 50Hz  
 Dimension: 127 x 80 x 44.6mm  
 Packing: Individual colour giftbox

Charge current table

	AA
Fast charge	100mA
Trickle charge	55mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	17	15.8	63 x 28 x 32	0.0564	25250

### MW 298



### Overnight Battery Charger

- 2 or 4 pieces
- Desktop
- For AA Ni-Cd/Ni-MH batteries



Input voltage: AC 230V ~ 50Hz  
 Dimension: 105 x 77 x 39.6mm  
 Packing: Individual colour giftbox

Charge current table

	AA
Fast charge	120mA
Trickle charge	56mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	31.5	30	54 x 28 x 54	0.0816	34900

### MW 818GS



### Overnight Battery Charger

- 1-4 pieces
- Plug-in
- For AA Ni-Cd/Ni-MH batteries



Input voltage: AC 230V ~ 50Hz  
 Dimension: 121 x 70 x 80.6mm  
 Packing: Individual colour giftbox

Charge current table

	AA
Charge current	60mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	12.5	11.4	42 x 39 x 27	0.0442	32250

**MW 6CPA****LEAD ACID BATTERY CHARGER**

- Reverse polarity protection
- Plug-in
- For 6V lead acid battery

Input voltage: AC 230V ~ 50Hz  
 Output voltage: DC 6V  
 Charge current: 1000mA  
 Output plug: 1) Cable X2-01E 2) Plug E  
 Dimension: 52 x 56 x 80mm  
 Packing: Individual colour giftbox

LED Indication	
Status	LED
Power On	Green
Charge	Off
Ready	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	10.3	9	48 x 23 x 43	0.0475	36000

**MW 12CPA****LEAD ACID BATTERY CHARGER**

- Reverse polarity protection
- Plug-in
- For 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
 Output voltage: DC 12V  
 Charge current: 900mA  
 Output plug: 1) Cable X2-01E 2) Plug E  
 Dimension: 52 x 56 x 80mm  
 Packing: Individual colour giftbox

LED Indication	
Status	LED
Power On	Green
Charge	Off
Ready	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	13.2	11.8	48 x 23 x 43	0.0475	36000

**MW 126CPA****LEAD ACID BATTERY CHARGER**

- Reverse polarity protection
- Plug-in
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
 Output voltage: DC 6V/12V  
 Charge current: 1500mA  
 Output plug: 1) Cable X2-01E 2) Plug E  
 Dimension: 122 x 76 x 60mm  
 Packing: Individual colour giftbox

LED Indication	
Status	LED
Power On	Red & Green
Charge	Red
Ready	Red & Green

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	8.3	6.8	35 x 34 x 32	0.0381	11968

**MW BC126T****LEAD ACID BATTERY CHARGER**

- Reverse polarity protection
- Desktop
- For 2V/6V/12V lead acid battery
- 600mA

Input voltage: AC 230V ~ 50Hz  
 Output voltage: DC 2.3/6.9/13.8V 17.7W  
 Charge current: 600mA  
 Output plug: 1) Cable X2-01E 2) Plug E  
 Dimension: 122 x 76 x 60mm  
 Packing: Individual colour giftbox

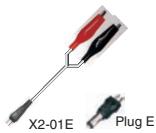
LED Indication	
Status	LED
Power On	Off
Charge	Green
Ready	Off

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	13.2	11.7	35 x 34 x 31	0.0369	12352

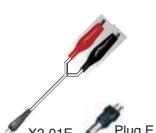


## Lead Acid Battery Charger

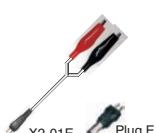
### MW 126C03GS & MW 126CB03CE



### MW 126C05GS & MW 126CB05CE



### MW 126C08GS & MW 126CB08CE



### MW 126C12GS & MW 126CB12CE



### MW 126C18GS & MW 126CB18CE



### MW 12C30 & MW 12CB30CE



### MW 126C50GS & MW 126CB50CE



## Lead Acid Battery Charger

- 300mA
- Reverse polarity protection
- Plug-in
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 3.6VA (max.)  
Charge current: 300mA  
Output plug: 1) Cable X2-01E 2) Plug E  
Dimension: 75 x 53 x 86mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
100	30.2	29	24 x 37 x 30	0.0488	58400	



For MW126C03GS



## Lead Acid Battery Charger

- 500mA
- Reverse polarity protection
- Plug-in
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 6.0VA (max.)  
Charge current: 500mA  
Output plug: 1) Cable X2-01E 2) Plug E  
Dimension: 80 x 56 x 83mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	17.7	16.3	52 x 24 x 35	0.0437	26080



For MW126C05GS



## Lead Acid Battery Charger

- 800mA
- Reverse polarity protection
- Plug-in
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 9.6VA (max.)  
Charge current: 800mA  
Output plug: 1) Cable X2-01E 2) Plug E  
Dimension: 98 x 68 x 93mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	24.2	22.8	37 x 24 x 47	0.0417	27320



For MW126C08GS

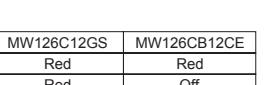


## Lead Acid Battery Charger

- 1200mA
- Reverse polarity protection
- Desktop
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 14.4VA (max.)  
Charge current: 1200mA  
Output plug: 1) Cable X2-01E 2) Plug E  
Dimension: 120 x 76 x 67mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	20.9	19.4	40 x 36 x 29	0.0418	13640



For MW126C12GS



## Lead Acid Battery Charger

- 1800mA
- Reverse polarity protection
- Desktop
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 21.6VA (max.)  
Charge current: 1800mA  
Output plug: 1) Cable X2-01E 2) Plug E  
Dimension: 135 x 86 x 75mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	26.8	25.8	40 x 27 x 41	0.0443	12860



For MW126C18GS



## Lead Acid Battery Charger

- 3000mA
- Reverse polarity protection
- Desktop
- For 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 12V, 36VA (max.)  
Charge current: 3000mA  
Output plug: Crocodile clip set 04B-01F  
Dimension: 174 x 122 x 96mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	6	15.5	14.4	69 x 24 x 17	0.0282	6060



For MW12C30

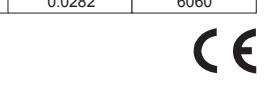


## Lead Acid Battery Charger

- 5000mA
- Reverse polarity protection
- Desktop
- For 6V & 12V lead acid battery

Input voltage: AC 230V ~ 50Hz  
Output voltage: DC 6V/12V, 60VA (max.)  
Charge current: 5000mA  
Output plug: Crocodile clip set 04B-01F  
Dimension: 198 x 136 x 101mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18.5	17.5	62 x 27 x 19	0.0318	4480



For MW126C50GS



**MW 1222GS/AA4 Series****HAPPY CHARGER  
COMPACT OVERNIGHT CHARGER COMBO**

- 2 or 4pcs
- Plug-in
- With 4 pcs AA batteries
- For AA & AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 106 x 51.5 x 91mm

Packing: Individual clamshell blister

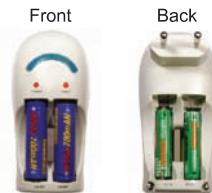
Charge current table

Charge Current	MW1222GS	MW1222-1GS	MW1222-2GS	MW1222-3GS	MW1222-4GS	MW1222-5GS
AA	55mA	70mA	120mA	150mA	200mA	250mA
AAA	24mA	30mA	55mA	70mA	100mA	120mA

MW standard

Model	MW 1222GS /5AA4	MW 1222-1GS /7AA4	MW 1222-2GS /12AA4	MW 1222-3GS /15AA4	MW 1222-4GS /18AA4	MW 1222-5GS /20AA4
Batteries	4 x 500mAh AA	4 x 700mAh AA	4 x 1200mAh AA	4 x 1500mAh AA	4 x 1800mAh AA	4 x 2000mAh AA

Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



\* Put same size of batteries in each channel.



MW1222GS



MW1222-1GS



MW1222-2GS



MW1222-3GS



MW1222-4GS



MW1221GS



MW1221-1GS



MW1221-2GS



MW1221-3GS



MW1221-4GS

MW1221-5GS

**MW 1281GS/AA Series****COMPACT OVERNIGHT CHARGER COMBO**

- 2 or 4pcs
- Plug-in
- With 4 pcs AA batteries
- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 105 x 44 x 80mm

Packing: Individual clamshell blister

Charge current table

Charge Current	MW1281GS	MW1281-1GS	MW1281-2GS	MW1281-3GS	MW1281-4GS	MW1281-5GS
AA	55mA	70mA	120mA	150mA	200mA	250mA
AAA	24mA	30mA	55mA	70mA	100mA	120mA

MW standard

Model	MW 1281GS /5AA4	MW 1281-1GS /7AA4	MW 1281-2GS /12AA4	MW 1281-3GS /15AA4	MW 1281-4GS /18AA4	MW 1281-5GS /20AA4
Batteries	4 x 500mAh AA	4 x 700mAh AA	4 x 1200mAh AA	4 x 1500mAh AA	4 x 1800mAh AA	4 x 2000mAh AA

Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10.4	7.9	53 x 36 x 37	0.0696	16360



MW1281-1GS



MW1281-2GS



MW1281-3GS



MW1281-4GS



MW1281-5GS



**MW R1291GS/AA2 Series****TWIRL  
COMPACT OVERNIGHT CHARGER COMBO**

- 1 or 2pcs
- Rotary Input Plug
- With 2 pcs AA batteries
- Plug-in
- For AA & AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 118 x 52 x 87mm

Packing: Individual clamshell blister

Charge current table

Model	MW R1291GS	MW R1291-1GS	MW R1291-2GS	MW R1291-3GS	MW R1291-4GS	MW R1291-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW standard

Model	MW R1291GS /5AA2	MW R1291GS /7AA2	MW R1291GS /12AA2	MW R1291GS /15AA2	MW R1291GS /18AA2	MW R1291GS /20AA2
Batteries	2 x 500mAh AA	2 x 700mAh AA	2 x 1200mAh AA	2 x 1500mAh AA	2 x 1800mAh AA	2 x 2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	12.2	9.5	58 x 34 x 35	0.0690	16522



MW R1291-1GS



MW R1291-2GS



MW R1291-3GS



MW R1291GS



MW R1291-4GS



MW R1291-5GS



MW R1292-1GS



MW R1292-2GS



MW R1292-3GS



MW R1292-4GS



MW R1292-5GS

**MW 7278GS/AA4 Series****FALTE  
COMPACT OVERNIGHT CHARGER COMBO**

- 1-4pcs
- Foldable Input Plug
- With 4 pcs AA batteries
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 119 x 71 x 40.5mm

Packing: Individual clamshell blister

Charge current table

Model	MW 7278GS	MW 7278-1GS	MW 7278-2GS	MW 7278-3GS	MW 7278-4GS	MW 7278-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW standard

Model	MW 7278GS /5AA2	MW 7278GS /7AA2	MW 7278GS /12AA2	MW 7278GS /15AA2	MW 7278GS /18AA2	MW 7278GS /20AA2
Batteries	4 x 500mAh AA	4 x 700mAh AA	4 x 1200mAh AA	4 x 1500mAh AA	4 x 1800mAh AA	4 x 2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	16.7	13.8	30 x 38 x 16	0.0134	38233



MW 7278-1GS



MW 7278-2GS



MW 7278-3GS



MW 7278GS



MW 7278-4GS



MW 7278-5GS



## Packaged Battery Charger

### MW 1288GS/AA4 Series



#### EcoCharge Compact Overnight Battery Charger Combo

- 1 - 4 pcs
- With 4 pcs AA batteries
- Plug-in
- For AA & AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 70 x 106 x 76mm  
 Packing: Individual clamshell blister

Charge Current Table

Model	MW1288GS	MW1288-1GS/7AA4	MW1288-2GS/12AA4	MW1288-3GS/15AA4	MW1288-4GS/18AA4	MW1288-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1288GS/5AA4	MW1288-1GS/7AA4	MW1288-2GS/12AA4	MW1288-3GS/15AA4	MW1288-4GS/18AA4	MW1288-5GS/20AA4
Batteries	4x500mAh AA	4x700mAh AA	4x1200mAh AA	4x1500mAh AA	4x1800mAh AA	4x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	9.2	8.3	40 x 26 x 31	0.0322	35400

### MW 1293GS/AA2 Series



#### EcoCharge Compact Overnight Battery Charger Combo

- 1 - 2 pcs
- With 2 pcs AA batteries
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 41 x 103 x 74mm  
 Packing: Individual clamshell blister

Charge Current Table

Model	MW1293GS	MW1293-1GS	MW1293-2GS	MW1293-3GS	MW1293-4GS	MW1293-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1293GS/5AA2	MW1293-1GS/7AA2	MW1293-2GS/12AA2	MW1293-3GS/15AA2	MW1293-4GS/18AA2	MW1293-5GS/20AA2
Batteries	2x500mAh AA	2x700mAh AA	2x1200mAh AA	2x1500mAh AA	2x1800mAh AA	2x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	11.3	8.6	57 x 34 x 36	0.0698	16320

### MW 1296GS/AA4 Series



#### EcoCharge Compact Overnight Battery Charger Combo

- 2 or 4 pcs
- With 4 pcs AA batteries
- Plug-in
- For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
 Dimension: 41 x 103 x 74mm  
 Packing: Individual clamshell blister

Charge Current Table

Model	MW1296GS	MW1296-1GS	MW1296-2GS	MW1296-3GS	MW1296-4GS	MW1296-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1296GS/5AA4	MW1296-1GS/7AA4	MW1296-2GS/12AA4	MW1296-3GS/15AA4	MW1296-4GS/18AA4	MW1296-5GS/20AA4
Batteries	4x500mAh AA	4x700mAh AA	4x1200mAh AA	4x1500mAh AA	4x1800mAh AA	4x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	13.7	11	57 x 34 x 36	0.0698	16320

## Packaged Battery Charger

### MW 1297GS/AA2 Series



#### EcoCharge Compact Overnight Battery Charger

- 1 or 2 pcs      ● With 2 pcs AA batteries
- Plug-in      ● For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 103 x 41 x 74mm

Packing: Individual clamshell blister



Charge Current Table

Model	MW1297GS	MW1297-1GS	MW1297-2GS	MW1297-3GS	MW1297-4GS	MW1297-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1297GS /5AA2	MW1297-1GS/ 7AA2	MW1297-2GS/ 12AA2	MW1297-3GS/ 15AA2	MW1297-4GS/ 18AA2	MW1297-5GS/ 20AA2
Batteries	2x500mAh AA	2x700mAh AA	2x1200mAh AA	2x1500mAh AA	2x1800mAh AA	2x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	11.6	9	60 x 34 x 36	0.0734	15520

### MW 1298GS/AA4 Series



#### EcoCharge Compact Overnight Battery Charger Combo

- 2 or 4 pcs      ● With 4 pcs AA batteries
- Plug-in      ● For AA & AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 105 x 43 x 78mm

Packing: Individual clamshell blister



Charge Current Table

Model	MW1298GS	MW1298-1GS	MW1298-2GS	MW1298-3GS	MW1298-4GS	MW1298-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1298GS /5AA4	MW1298-1GS/ 7AA4	MW1298-2GS/ 12AA4	MW1298-3GS/ 15AA4	MW1298-4GS/ 18AA4	MW1298-5GS/ 20AA4
Batteries	4x500mAh AA	4x700mAh AA	4x1200mAh AA	4x1500mAh AA	4x1800mAh AA	4x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	13	10.3	56 x 33 x 35	0.0641	17600

### MW 1299GS/AA4 Series



#### EcoCharge Compact Overnight Battery Charger

- 2 or 4 pcs      ● With 4 pcs AA batteries
- Plug-in      ● For AA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz

Dimension: 103 x 41 x 74mm

Packing: Individual clamshell blister



Charge Current Table

Model	MW1299GS	MW1299-1GS	MW1299-2GS	MW1299-3GS	MW1299-4GS	MW1299-5GS
Charge Current	55mA	70mA	120mA	150mA	200mA	250mA

MW Standard

Model	MW1299GS /5AA4	MW1299-1GS/ 7AA4	MW1299-2GS/ 12AA4	MW1299-3GS/ 15AA4	MW1299-4GS/ 18AA4	MW1299-5GS/ 20AA4
Model	MW1299GS /5AA4	MW1299-1GS/ 7AA4	MW1299-2GS/ 12AA4	MW1299-3GS/ 15AA4	MW1299-4GS/ 18AA4	MW1299-5GS/ 20AA4
Batteries	4x500mAh AA	4x700mAh AA	4x1200mAh AA	4x1500mAh AA	4x1800mAh AA	4x2000mAh AA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	13.4	11	57 x 34 x 36	0.0698	16320

## Packaged Battery Charger

### MW 8398GS/7AA4 MW 8398GS/12AA4



### MW 2898GS/5AA4\*P1



### MW 7398GS/7AA8\*P1



### MW 5898/7AA4 MW 5898/12AA4



### MW 6398/7AA4 MW 6398/12AA4



## Compact Battery Charger



- 1 - 4 pcs

- Desktop

- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
Dimension: 127 x 72 x 54mm  
Packing: Individual colour giftbox  
Charging current

	AAA	AA
Ni-Cd	40mA	60mA
Ni-MH	60mA	120mA

MW standard (MW 8398GS/7AA4)

MW standard (MW 8398GS/12AA4)

Model	Batteries
MW8398GS/7AA4	4 x 700mAh AA batteries

Model	Batteries
MW8398GS/12AA4	4 x 1200mAh AA batteries

	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW8398GS/7AA4	15	30	16	12.7	57 x 46 x 34	0.0891	9600
MW8398GS/12AA4	15	30	16	12.7	57 x 46 x 34	0.0891	9600

## Compact Battery Charger



- 3-hour timer pre-set

- 2/4 switch

- Plug-in

- For 2 or 4 pcs AA, AAA & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
Dimension: 119 x 71 x 83mm  
Packing: Individual colour giftbox

MW standard

Model	Batteries
MW 2898GS/5AA4*P1	4 x 500mAh AA batteries

Charge current table

	AA	AAA	9V
Fast charge	200mA	80mA	40mA
Trickle charge	35mA	32mA	10mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	21.5	18	51 x 34 x 67	0.1184	9640

## Versatile Battery Charger



- Desktop

- For 2 to 8 pcs AA, AAA & 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
Dimension: 127 x 153 x 55mm  
Packing: Individual colour giftbox

MW standard

Model	Batteries
MW 7398GS/7AA8*P1	8 x 700mAh AA batteries & 2 x 9V Ni-Cd batteries

Charge current table

	AA	AAA	9V
Fast charge	40mA	60mA	13mA
Trickle charge	60mA	120mA	13mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	18.2	17.2	42 x 32 x 37	0.0497	11460

## Compact Battery Charger



- Timer function

- 5-hour timer pre-set

- Plug-in

- For AA or AAA Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
Dimension: 119 x 71 x 83mm  
Packing: Individual clam shell blister

Charge current table

	AA	AAA
Fast charge	250mA	100mA
Trickle charge	33mA	29mA

MW standard (MW 5898/7AA4)

MW standard (MW 5898/12AA4)

Model	Batteries
MW5898/7AA4	4 x 700mAh AA batteries

Model	Batteries
MW5898/12AA4	4 x 1200mAh AA batteries

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	20	16.5	50 x 32 x 65	0.1040	10960
10	40	20.7	17.2	50 x 32 x 65	0.1040	10960

## Universal Battery Charger



- Discharge function

- Battery Tester

- 4 channels

- Desktop

- For 1-4 pcs AA, AAA, C, D and 1-2 pcs 9V Ni-Cd/Ni-MH batteries

Input voltage: AC 230V ~ 50Hz  
Dimension: 110 x 230 x 59mm  
Packing: Individual colour giftbox

Charging current

Charge current	AA/AAA/C/D	9V
120mA	120mA	13mA

MW standard (MW 6398/12AA)

Model	Batteries
MW6398GS/7AA4	4 x 700mAh AA batteries

Model	Batteries
MW6398GS/12AA4	4 x 1200mAh AA batteries

	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW6398GS/7AA4	10	20	16.4	14.7	53 x 36 x 31	0.0591	9640
MW6398GS/12AA4	10	20	16.7	15	53 x 36 x 31	0.0591	9640



# Accessories



# Introduction

**Minwa** offers a large variety of accessories for cellular phone, digital camera, PDA, audio players, notebook computer, video game machine, R/C model, vehicles and portable refrigerator. We also have batteries, battery-related accessories, output plugs, voltage converters and worldwide-use accessories for travelers.

## **Multi-media Accessories**

Full ranged of newly developed power supplies, DC/DC converters, USB cable, and changeable output connectors for charging various digital devices such as cellular phones / smart phones, MP3 players or portable game consoles (PSP , NDSL) for different brands.

The power supplies in this series conform with the energy efficiency & saving standard: ErP 2nd stage, CEC V, MEPS V.

## **Cellular Phone Accessories**

PhonoEner is a series of accessories for cellular phones. It includes power supplies, DC/DC converters, USB cable and handy chargers for different brands of mobile phone such as Nokia, Motorola, Siemens, Samsung, Sony Ericsson and so forth.

## **Digital Camera Accessories**

CamPlus is a series of accessories with high efficiency which is tailored for digital cameras. It includes power supplies, DC/DC converters and battery chargers for most of the digital cameras sold on the market.

## **PDA Accessories**

Companion is a series of accessories especially designed for PDA. There are different types of power supplies, DC/DC converters and handy chargers for various brands of PDA such as Sony, Compaq, Palm and so forth.

## **Audio Accessories**

SonicKid is a series of accessories especially designed for audio products such as MP3 players, MD player and iPod / iPhone. A series of chargers for charging LF6, AAA & AA batteries are available.

## **Notebook Accessories**

ComOn is a series of accessories especially designed for notebook computers. The series include power supplies, DC/DC converters and cord set for most of the notebook computers sold on the market.

## **Game Accessories**

Gamemate is a series of accessories for electronic game machines. We have a full range of power supplies, DC/DC converters, USB cables and chargers for Gameboy, Gameboy Advance, Gameboy Advance SP, Nintendo DS, NDSL, Sony Playstation, Play Station Portable (PSP) and Dreamcast.

## **R/C Model Accessories**

A wide range of battery pack chargers for remote-control models are available.

## **Battery and Accessories**

We have a large variety of rechargeable Ni-Cd/Ni-MH batteries and battery packs. Battery-related accessories like battery testers, battery holder and battery adaptors are also available.

## **Output Plug Accessories**

Minwa has a large no. of output plugs which could be applied to most of the electrical appliances sold on the market.

## **Auto Accessories**

Various products with 12VDC input are available in the auto accessories section. They include DC/DC converters, socket multipliers, car starters, battery analyzer and so forth.

## **Travel Accessories**

Minwa provides a wide range of converter plugs which are suitable for people who travel abroad.

## **Voltage Converters**

There is a list of step-up and step-down AC/DC voltage converters for those who need to use their appliances with different mains voltage. A newest series of DC/AC voltage converters are also available which could convert DC power to AC power.



# Audio & Game Accessories

We provide almost limitless range of **Audio & Games Accessories** to keep abreast of all the latest market conditions and demands

As a forward-looking company, we always keep an eye on the fast-changing market. With 3 decades of experience, we develop expertise in all-round accessories for Audio & Games application.

Our products are specially for iPod / iPhone family, all kinds of MP3 players, PSP, NDS, NDSL, GBASP, GBA, PSI & II and so forth. The range includes AD/DC adaptor, AC/DC adaptor with USB outlet, USB cable, DC/DC converter for car use, Emergency power by using primary cells, etc.

They come with different output plugs which can be adapted to different kinds of Audio & Games application.



**MW U2D20****DUAL INPUT SMPS WITH 2 USB OUTLETS**

- 1000mA ● With 2 USB Outlets
- AC and DC input in one (foldable "U" plug & cigarette lighter plug)

Input voltage: 100-240VAC ~ 60/50Hz, 12-13.8VDC  
 USB Output: 5VDC/1000mA(max. for 2 outlets use simultaneously)  
 Dimension: 78 x 54 x 30mm  
 Packing: Individual clamshell blister

\* More international approvals could be provided on requested.

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	7.6	5.4	55 x 39 x 34	0.0729	15363

"Piano" Black finishing



ErP compliance

**MW 3381****DC/DC ADAPTOR**

- 1000mA
- With USB Outlet

Input voltage: 12-13.8VDC  
 USB Output: 5VDC/1000mA(max.)  
 Dimension: 100 x 40 x 25mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	2.6	2	28 x 25 x 17	0.0119	94117

New!

**MW 7U2****DC/DC ADAPTOR**

- 1000mA
- With 2 USB Outlets

Input voltage: 12-13.8VDC  
 USB Output: 5VDC/1000mA(max. for 2 outlets use simultaneously)  
 Dimension: 100 x 40 x 25mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	4.5	2.5	40 x 39 x 33	0.0514	21789

New!

**MW 8U2****DC/DC ADAPTOR**

- 2000mA
- With 2 USB Outlets

Input voltage: 12-13.8VDC  
 USB Output: 5VDC/2000mA(max. for 2 outlets use simultaneously)  
 Dimension: 100 x 40 x 25mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	4.7	3	40 x 39 x 32	0.04992	22435

New!



**MW 9U2****DC/DC ADAPTOR**

- 2000mA
- With 2 USB Outlets

Input voltage: 12-13.8VDC  
 USB Output: 5VDC/1000mA x 2  
 Dimension: 100 x 40 x 25mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



E 4

**MW 2009GS****SMPS WITH 4 USB OUTLETS**

- 2000mA
- With 4 USB Outlets

Input voltage: 100-240VAC, 60/50Hz  
 Output voltage: 5VDC/2000mA(max. of 4 USB outlets)  
 Dimension: 82 x 54 x 30mm  
 Combo included: MWCP1 & One AC Cord (VDE)  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	-	-	53 x 28 x 34	0.0504	11111

**"Piano" Black finishing**

E 4

**MW A4U****USB POWER BAR**

- 2000mA
- With 4 USB Outlets

Input voltage: 100-240VAC ~ 60/50Hz, 12VDC  
 Output voltage: 5VDC/2000mA(max. of 4 USB outlets)  
 Dimension: 100 x 40 x 25mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14	12	57 x 48 x 38	0.1039	10779

**"Piano" Black finishing**

E 4

**MW 3312****EMERGENCY CHARGER WITH USB OUTLET**

- Portable
- Battery charging & testing
- Desktop
- Instant USB Output
- For 2 AANi-Cd/Ni-MH batteries

Input voltage: 100-240VAC ~ 60/50Hz, 12-13.8VDC, 2.4VDC  
 USB output: 5VDC/800mA  
 Dimension: 66 x 60 x 25mm  
 Packing: Individual clamshell blister

LED Indication:

Status	Red LED (Left)	Green LED (Right)
"Charge/out" (charging batteries)	Light on	Off
Trickle charge	Flash	Off
Alkaline/Bad batteries	Off	Light on
Fast charge	Off	Light for 6 sec.
Trickle charge	Off	Light for 6 sec.
Alkaline/Bad batteries	Off	Off

Charging current:	
	AA
Fast charge	1000mA
Trickle charge	100mA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.2	11	54 x 43 x 38	0.0823	12694

**"Piano" Black finishing**

123

**MW 3397****HEADPHONE CONVERTER FOR IPHONE**

Input plug: 3.5mm audio plug (iPhone)  
 Output plug: 3.5mm audio socket  
 Dimension: 13 x 45mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3382****AUDIO SPLITTER**

- For iPod, PSP, audio, game products & notebook computer
- With 3.5mm audio plug
- With 3.5mm audio socket



Input: 3.5mm audio plug  
 Output: 3.5mm x 2 audio socket  
 Dimension: 30 x 26 x 13mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3383****FIREWIRE SYNC & CHARGER CABLE**

- For iPod, PSP, audio, game products & notebook computer
- With Type A USB plug
- With Firewire Cable



Input Voltage: DC 5V  
 Output Voltage : DC 5V  
 Cable Length : 1.8m  
 Output Plug: USB plug (Type A)  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW 7MU10GT****SWITCHING ADAPTOR**

- 1000mA
- With USB outlet
- With 4 changeable input plugs
- Plug-in

Input Voltage: 100-240VAC~ 60/50Hz  
 Output Voltage: 5VDC  
 Output Current: 1000mA(max.)  
 Dimension: 68 x 55 x 52.5mm  
 Packing: Individual clamshell blister



\*USB cable is not included. Customers may choose the appropriate USB cables from our accessories section.

**MW 210****DC/DC ADAPTOR**

- 1000mA
- With USB outlet
- Cigarette Lighter Plug

Input Voltage: 12-13.8VDC  
 Output Voltage: 5.0VDC  
 Output Current: 1000mA  
 Dimension: 99.5 x 38.5 x 30mm  
 Packing: Individual clamshell blister

\*USB cable is not included. Customers may choose the appropriate USB cables from our accessories section.

**MW 3303****EMERGENCY BATTERY PACK**

- Charge the built-in battery pack and device at the same time
- Built-in Li-polymer battery pack (1800mAh)
- With USB connector (input)
- With USB outlet (output)
- LEDs for power indication

Input Voltage: DC 5V / 700mA  
 Output Voltage: DC 5V / 400mA  
 Dimension: 80 x 70 x 19.6mm  
 Packing: Individual clamshell blister



Foldable input USB connector



\*Customers may choose the appropriate USB AC/DC adaptor or cables from our accessories section.

LED Indication

Status	With AC or DC Connection	Without AC or DC Connection
Battery Testing	Red (flash)	Red
Charging Mode	Blue	Blue
Charging Completed	Off	Off

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



MW A8871

CE

**PORTABLE COMPACT STEREO SPEAKER**

- For iPod, PSP, audio, game products & notebook computer
- Extendable slat
- 3-Way input
- Desktop



Input:	6VDC(4 x AAA battery)/5VDC(for 350mA adaptor) /5VDC(for USB)
Output Power:	2 x 0.7W RMS
Frequency response:	150Hz - 18kHz
Dimension:	227 x 64 x 30mm
Packing:	Individual clamshell blister
Combo included:	one 3.5mm stereo input connector & one USB cable

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



MW A8872

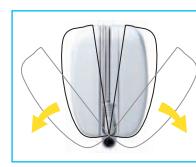
CE

**MINI PORTABLE STEREO SPEAKER**

- For iPod, PSP, audio, game products & notebook computer
- Unnecessary External Power
- Cable Storage



Input:	All audio sources with 3.5mm earphone jack
Output Power:	2 x 0.7W RMS
Frequency response:	150Hz - 18kHz
Dimension:	226 x 64.5 x 27mm
Packing:	Individual clamshell blister
Combo included:	One 3.5mm stereo



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



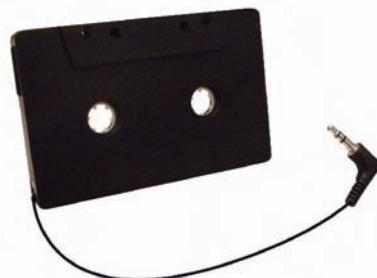
**MW 312****DC/DC & CASSETTE ADAPTOR COMBO****● 1200mA**

Input Voltage:	12VDC(For the DC/DC Converter)
Output Voltage:	1.5/3/4.5/6/7.5/9/12VDC (For the DC/DC Converter)
Output Plug:	6XC detachable plugs
Output Current:	1200mA (max.)
Dimension:	DC/DC Converter: 103 x 46 x 59mm Cassette: 100 x 64 x 12mm
Packing:	Individual clamshell blister

**MW 2381****CD TO CASSETTE ADAPTOR**

This cassette adaptor connects portable devices such as MP3, CD player, laptop and PC in your cars in-dash cassette player. It delivers high quality sound on the road.

Dimension:	100 x 64 x 12mm
Cable Length:	1m
Packing:	Individual clamshell blister

**MW CB1****USB DATA CABLE****● USB to Mini USB**

Input Voltage:	5VDC
Output Voltage:	5VDC
Output Plug:	Mini USB (5 pins)
Cable length:	1m
Packing:	Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	7.5	6	45x31x52	0.0725	38600

## MW 9988(A) Series



ErP compliance



### MW 1988



### MW 2988GS



## SonicKid Battery Charger for Audio Products



- $\Delta V$  detection
- 1 or 2pcs
- Desktop
- For AA, AAA & Prismatic (LF6) Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 9988(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 9988(A)/22AA2: AC 100-240V ~ 60/50Hz, DC 12-13.8V  
MW 9988(A)/7AAA2: AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 96 x 45 x 36.5mm

Packing: Individual clamshell blister

Charge Current Table

	AA/LF6	AAA
Fast charge	1000mA	500mA
Trickle charge	100mA	50mA

LED Indication

Status	LED
Fast charge	Red
Trickle charge	Green

MW standard

Model	NL120P050PGS	MW CP1	Batteries	Approval
MW 9988(A)	✓	✓	~	GS, CE, E4
MW 9988(A)/22AA2	✓	✓	2 x 2200mAh AA	GS, CE, E4
MW 9988(A)/7AAA2	✓	✓	2 x 700mAh AAA	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

## SonicKid Battery Charger for Audio Products



- 2 or 4pcs
- $\Delta V$  detection
- Plug-in
- For AA, AAA & Prismatic (LF6) Ni-Cd/Ni-MH batteries

Input voltage: 230VAC ~ 50Hz

Dimension: 123 x 55.2 x 83.75mm

Packing: Individual clamshell blister

Charge Current Table

	AA/LF6/AAA
AA/LF6	550mA
AAA	55mA

LED Indication

	AAA/AA/LF6
Fast charge	Red
Trickle charge	Green

MW standard

Model	Batteries
MW1988	~
MW1988/18AA2	2 x 1800mAh AA
MW1988/7AAA2	2 x 700mAh AA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.6	11.9	51 x 30 x 34	0.052	21920

## SonicKid Battery Charger for Audio Products



Input voltage: 230VAC ~ 50Hz

Dimension: 123 x 55.2 x 83.75mm

Packing: Individual clamshell blister

Charge Current Table

Type	Charge Current
AA/LF6	250mA
AAA	100mA

LED Indication

	AAA/AA/LF6
Charging	Red

MW standard

Model	Batteries
MW2988	~
MW2988/18AA2	2 x 1800mAh AA
MW2988/7AAA2	2 x 700mAh AA

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.6	11.9	51 x 30 x 34	0.052	21920

**MW 9979****Li-ION BATTERY CHARGER**

- For PSP
- For Charging Li-ion Battery
- 1000mA

\* other international approvals could be provided under requested.

Input Voltage:	100-240VAC ~ 60/50Hz, DC 12-13.8VDC
Output Voltage:	3.6VDC
Charging Current:	1000mA
Output Plug:	Specially for PSP
Packing:	Individual clamshell blister

\*Battery is not included.

Model	NL120P050PGS	MW CP1	Approval
MW 9979(A)	✓	✓	GS, CE, E4

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



ErP compliance

**MW CB2****USB DATA CABLE AND CHARGER**

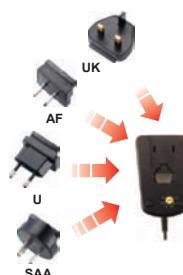
- For PSP
- Charge & transfer data at the same time

Input Voltage:	5VDC
Output Voltage:	5VDC
For data transfer:	Mini USB
For charging PSP:	Yellow head plug
Cable Length:	1m
Packing:	Individual clamshell blister

**MW 9901GS****SWITCHING ADAPTOR**

- For PSP
- 2000mA
- With 4 changeable input plugs
- Plug-in

Input Voltage:	100-240VAC ~ 60/50Hz
Output Voltage:	5.0VDC
Output Current:	2000mA
Output Plug:	Specially for PSP
Dimebsion:	88 x 61 x 38mm
Packing:	Individual clamshell blister



**MW 9971****DC/DC CONVERTER FOR PSP**

- Cigarette Lighter Plug
- For PSP
- 2000mA

Input Voltage: 12-13.8VDC  
 Output Voltage: 5.0VDC  
 Output Current: 2000mA  
 Output Plug: Specially for PSP  
 Dimension: 100 x 70 x 32mm  
 Packing: Individual clamshell blister

**MW 9977****PORTABLE EMERGENBY CHARGER**

- For PSP
- For use with 4pcs of AA-sized batteries

Input Voltage: 1.5 x 4 VDC  
 Output Voltage: 5.0VDC (rechargeable)  
 Output Current: 6.0VDC (alkaline)  
 Output Plug: Specially for PSP  
 Dimension: 34 x 47 x 82mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	8.7	5.7	56x48x37	0.0995	14050

Package with 4 dry AA alkaline batteries package is also available.

**MW 9978****DC/DC USB CABLE**

- For PSP
- For charging PSP

Input Voltage: 5.0VDC  
 Output Voltage: 5.0VDC  
 Output Plug: Specially for PSP  
 Cable Length: 1m  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	13.8	10	47x39x55	0.1008	27800



**MW 9996GS****Switching Adaptor**

- For NDSL
- 320mA
- Plug-in

Input Voltage: AC 100-240V ~ 60/50Hz  
 Output voltage: DC 5V  
 Output Current: 450mA  
 Output plug: specially for NDSL  
 LED indicator: Power LED  
 Dimension: 59.6 x 42.5 x 69.4mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	6.1	4.5	55x32x28	0.0493	22720

**MW 9997****DC/DC Converter**

- Cigarette lighter plug
- For NDSL
- 320mA

Input Voltage: DC 12V  
 Output voltage: DC 4.5V  
 Output Current: 320mA  
 Output plug: specially for NDSL  
 LED indicator: Power LED  
 Dimension: 100 x 38 x 29mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	6.7	5.4	45x44x33	0.0653	17160

**MW 9998****Gamemate USB Charging Cable**

- For NDSL

Input Voltage: DC 5.0V  
 Output voltage: DC 5.0V  
 Input plug: USB (type A)  
 Output plug: specially for NDSL  
 Length: 1m  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	7.2	5.5	57x40x28	0.0638	43900

### MW 9806GS



### Gamemate Switching Adaptor

- 320mA
- Plug-in

Input Voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 5.2VDC, 12.6VA(max.)  
 Output Current: 320mA  
 Output Plug: Specially for GBASP & NDS  
 Dimension: 52 x 80 x 37mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	12	9.5	44 x 44 x 35	0.06776	16824

### MW 9803GS



### Gamemate AC/DC Regulated Adaptor

- 320mA
- Plug-in

Input Voltage: 230V ~ 50Hz  
 Output voltage: 5.2VDC, 12.6VA(max.)  
 Output Current: 320mA  
 Output Plug: Specially for GBASP & NDS  
 Dimension: 53 x 42 x 75mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13.6	11.4	49 x 33 x 34	0.0550	20720

### MW 9878



### Gamemate DC/DC USB Cable

- For Gameboy Advance SP & NDS

Input Voltage: 5.0VDC  
 Output voltage: 5.0VDC  
 Output Current: 500mA  
 Output Plug: Specially for GBASP & NDS  
 Length: 1m  
 Packing: Individual clamshell blister

\*Please refer to P.120 for the accessories using with USB cable.

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	1.6	1.3	25 x 14 x 12	0.0042	203571

### MW 9877



### Gamemate Emergency Charger

- For Gameboy Advance SP & NDS

Input Voltage: 1.5X4VDC  
 Output voltage: 6.0VDC  
 Output Current: Specially for GBASP & NDS  
 Dimension: 34 x 47 x 82mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	9	5.7	60 x 46 x 37	0.1021	16740

**MW 9873**



**Gamemate  
DC/DC Converter**



- For Gameboy Advance SP & NDS
- Regulated
- Cigarette Lighter Plug

Input voltage: 12-24VDC  
Output voltage: 5.2VDC  
Output Current: 320mA  
Output Plug: Specially for GBASP & NDS  
Dimension: 96.5 x 38.4 x 29mm  
Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	10	6.5	60 x 49 x 37	0.1088	15717

**MW 9701**



**Gamemate  
AC/AC Voltage Converter**



- 30W
- For Playstation & Dreamcast
- Plug-in

Input voltage: 230VAC  
Output voltage: 110VAC  
Rated Load: 30W  
Dimension: 67 x 50 x 79.9mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
24	48	20	19	37 x 20 x 39	0.02886	47401

**MW 9876**



**Gamemate  
DC/DC Converter**



- 2000mA
- For Playstation I
- Cigarette Lighter Plug

Input voltage: 12-13.8VDC  
Output voltage: 7.5VDC. 14.0VA(max.)  
Output Plug: J (4.75X1.75mm)-Center Positive  
Dimension: 100 x 70 x 32mm  
Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	13.8	11.2	49 x 45 x 38	0.0838	17000

**MW 9703**



**Gamemate  
AC/AC Voltage Converter**



- 75W
- For Playstation II
- Desktop

Input voltage: 230VAC  
Output voltage: 110VAC  
Rated Load: 75W  
Dimension: 100 x 72 x 62mm  
Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
12	24	25	23.5	48 x 33 x 25	0.0396	17280

### MW 9801GS



### Gamemate AC/DC Adaptor



- 300mA
- Plug-in

Input voltage: 230VAC ~ 50Hz  
 Output voltage: 3VDC, 10.9VA(max.)  
 Output Plug: S(2.35X0.75mm) - Center Positive  
 Dimension: 53 x 42 x 75mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	26	22	45 x 42 x 69	0.1304	21856

### MW 9871



### MW 9802GS



### MW 9872



### Gamemate DC/DC Converter



- 300mA
- Cigarette Lighter Plug
- For Gameboy
- Regulated

Input voltage: 12-13.8VDC  
 Output voltage: 3VDC, 0.9VA(max.)  
 Output Plug: S(2.35X0.75mm) - Center Positive  
 Dimension: 100 x 70x 32mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	5.5	4.4	29 x 26 x 30	0.02262	75597

### Gamemate 2 in 1 Power Supply and Charger



- For Gameboy Advance
- Plug-in

Input voltage: 230 ~ 50Hz  
 Output voltage: 2.8VA, 0.99VA(max.)  
 Output Current: 180mA  
 Output Plug: GBA-3

It includes 2 x 1200mAh Ni-MH battery. With this 2 in 1 unit, you are able to charge up the battery pack and supply energy to Gameboy Advance at the same time.

Dimension: 53 x 42 x 75mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	14.7	11.5	52 x 49 x 40	0.1019	11160

### Gamemate 2 in 1 DC/DC Power Supply and Charger



- For Gameboy Advance
- Cigarette Lighter Plug
- Regulated
- Car use power supply

Input voltage: 12-13.8VDC  
 Output voltage: 2.8VA, 0.99VA(max.)  
 Output Current: 180mA  
 Output Plug: GBA-3

It includes 2 x 1200mAh Ni-MH battery. With this 2 in 1 unit, you are able to charge up the battery pack and supply energy to Gameboy Advance at the same time.

Dimension: 96.5 x 38.4 x 29mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	9.5	7.0	50 x 38 x 37	0.0703	16216



# Multi-media Accessories

We continue to develop **Multi-media Accessories** by keeping an eye on the fast-changing market

We have an experienced team specialized in development, construction and technical distribution of electronic products. Our newly developed Multi-media series is specially for those high-energy drained products, such as Digital camera (CamPlus), Notebook (ComOn), Cellular Phone (Phonoener), PDA (Companion) and so forth. We aim to provide various choices and flexibility to fit customer's needs.



**MW 2071****CAMPLUS-DC/DC CONVERTER FOR DIGITAL ACAMERA**

- 2100mA
- Regulated

Input voltage: DC12-13.8V  
 Output voltage: DC 3/3.3/5/6/6.5/7 VDC  
 Current: 2100mA  
 Output Plug: 100 x 70 x 32mm  
 Dimension: 7MC  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	11.5	11.1	61 x 53 x 36	0.1164	12250

**MW 2020GTGS****CAMPLUS-SMPS FOR DIGITAL CAMERA**

- 2500mA
- With 4 changeable input plugs
- Plug-in

Input voltage: AC 100-240V ~ 60/50Hz  
 Output voltage: 3.0/ 3.3/ 5.0/ 6.0/ 6.5/ 7.0/ 8.4VDC,  
 14.7VA (max.)  
 Output Plug: 7MC  
 Dimension: 88 x 61 x 38mm  
 Packing: Individual clamshell blister

Charge Current Table

Output Voltage	Output Current
3.0V / 3.3V / 5.0V	2500mA
6.0V / 6.5V / 7.0V	2100mA
8.4V	1500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	30	8.8	7	16 x 28 x 26	0.0335	25530

**MW 2006GS****CAMPLUS-SMPS FOR DIGITAL CAMERA**

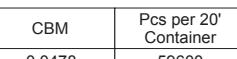
- 2500mA
- Plug-in

Input voltage: AC 100-240V ~ 60/50Hz  
 Output voltage: 3.0/ 3.3/ 5.0/ 6.0/ 6.5/ 7.0/ 8.4VDC,  
 14.7VA (max.)  
 Output Plug: 7MC  
 Dimension: 82 x 36 x 88mm  
 Packing: Individual clamshell blister

Charge Current Table

Output Voltage	Output Current
3.0V / 3.3V / 5.0V	2500mA
6.0V / 6.5V / 7.0V	2100mA
8.4V	1500mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	17.7	17	41 x 22 x 53	0.0478	59600

**MW 2001GS****CAMPLUS-SMPS FOR DIGITAL CAMERA**

- 2100mA
- With 4 changeable input plugs
- Plug-in

Input voltage: AC 100-240V ~ 60/50Hz  
 Output voltage: DC 3/3.3/5/6/6.5/7 VDC  
 Output Plug: 7MC  
 Dimension: 105 x 60 x 80mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	19	15.1	56 x 52 x 36	0.1048	10880

CamPlus is a series of accessories with high efficiency which is tailored for digital cameras. The followings are Ni-MH rechargeable batteries. These CamPlus batteries and our CamPlus chargers are indeed a perfect combination for customers.

## CamPlus

### RECHARGEABLE NI-MH BATTERIES FOR DIGITAL CAMERAS

New!



EM2200AA CM2900AA CM2800AA CM2700AA CM2600AA CM2500AA CM2400AA CM2300AA CM2200AA

Model	Size	Capacity	Dimension (mm)
EM2200AA	AA	2200mAh	50 x 14 x 14
CM2200AA	AA	2200mAh	50 x 14 x 14
CM2300AA	AA	2300mAh	50 x 14 x 14
CM2400AA	AA	2400mAh	50 x 14 x 14
CM2500AA	AA	2500mAh	50 x 14 x 14
CM2600AA	AA	2600mAh	50 x 14 x 14
CM2700AA	AA	2700mAh	50 x 14 x 14
CM2800AA	AA	2800mAh	50 x 14 x 14
CM2900AA	AA	2900mAh	50 x 14 x 14



CM2100AA CM2000AA CM1600AA CM1800AA CM1500AA CM1200AA CM700AA

Model	Size	Capacity	Dimension (mm)
CM700AA	AA	700mAh	50 x 14 x 14
CM1200AA	AA	1200mAh	50 x 14 x 14
CM1500AA	AA	1500mAh	50 x 14 x 14
CM1600AA	AA	1600mAh	50 x 14 x 14
CM1800AA	AA	1800mAh	50 x 14 x 14
CM2000AA	AA	2000mAh	50 x 14 x 14
CM2100AA	AA	2100mAh	50 x 14 x 14



EM900AAA CM1000AAA CM900AAA CM850AAA RCRV3-MH RCRV3-LI

Model	Size	Capacity	Dimension (mm)
EM900AAA	AAA	900mAh	45 x 10 x 10
CM850AAA	AAA	850mAh	45 x 10 x 10
CM900AAA	AAA	900mAh	45 x 10 x 10
CM1000AAA	AAA	1000mAh	45 x 10 x 10
RCRV3-MH	CRV3	2000mAh	52 x 28 x 14
RCRV3-LI	CRV3	1300mAh	52 x 28 x 14

The followings are packaged CamPlus batteries. You may order them individually or together with our battery chargers.



Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
CM700AA-4	25	100	10.5	9.5	34x25x28	0.0238	119700
CM1200AA-4	25	100	12.5	11.1	34x25x28	0.0238	119700
CM1500AA-4	25	100	12.5	11.5	34x25x28	0.0238	119700
CM1600AA-4	25	100	12.7	11.2	34x25x28	0.0238	119700
CM1800AA-4	25	100	12.8	11.3	34x25x28	0.0238	119700
CM2000AA-4	25	100	12.9	11.4	34x25x28	0.0238	119700
CM2100AA-4	25	100	13.0	11.2	34x25x28	0.0238	119700
CM2200AA-4	25	100	13.2	11.3	34x25x28	0.0238	119700
CM2300AA-4	25	100	13.2	11.4	34x25x28	0.0238	119700
CM2400AA-4	25	100	13.2	11.4	34x25x28	0.0238	119700
CM2500AA-4	25	100	13.2	11.4	34x25x28	0.0238	119700
CM2600AA-4	25	100	13.2	11.4	34x25x28	0.0238	119700
CM2700AA-4	25	100	13.0	11.2	34x25x28	0.0238	119700
CM2800AA-4	25	100	13.0	11.3	34x25x28	0.0238	119700
CM2900AA-4	25	100	13.0	11.3	34x25x28	0.0238	119700
EM2200AA-4	25	100	13.0	11.3	34x25x28	0.0238	119700
CM850AAA-4	25	100	5.6	11.5	29x21x22	0.0134	212600
CM900AAA-4	25	100	5.6	11.5	29x21x22	0.0134	212600
CM1000AAA-4	25	100	5.6	11.5	29x21x22	0.0134	212600
EM900AAA-4	25	100	5.6	11.5	29x21x22	0.0134	212600
RCRV3-MH	-	-	-	-	-	-	-
RCRV3-LI	-	-	-	-	-	-	-

### MW BC1 BATTERY CASE

This batteries' case is for 4pcs of AA sized or 4pcs of AAA sized batteries. Customers may use it for batteries' storage.



Model	Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MWBC1	-	-	-	-	-	-	-

**MW 2103GS**
**COMON**  
**SMPs FOR NOTEBOOK COMPUTER**

- 6000mA
- For Notebook Computer
- Rotary Switch
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 15/16/18/19/20/22/24VDC  
 Output Current: 15/16/18/19/20VDC-6000mA,  
 22/24VDC-5000mA  
 Output Plug: 6MC (NG, UH, NAA, UAB, NE, NJ)  
 \*MWFU2T is included in the package  
 which can be used all over the world  
 Dimension: 175.5 x 70.5 x 38mm  
 Packing: Individual clamshell blister

\*Please refer to P.183 for more choices of output plug.


**COMON**  
**SMPs FOR NOTEBOOK COMPUTER**

- 3500mA
- For Notebook Computer
- Rotary Switch
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 15/16/18/19/20/22/24VDC  
 Output Current: 15/16/18/19/20VDC-3500mA,  
 24VDC-3000mA  
 Output Plug: 6MC (NG, UH, NAA, UAB, NE, NJ)  
 \*MWFU2T is included in the package  
 which can be used all over the world  
 Dimension: 146 x 65 x 38mm  
 Packing: Individual clamshell blister

\*Please refer to P.183 for more choices of output plug.



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	16	14	70 x 49 x 20	0.0686	8309



**MW 2173**

### **ComON DC/DC CONVERTER FOR NOTEBOOK COMPUTER**

- **5000mA**
- **For Notebook Computer**
- **Regulated**
- **Rotary Switch**
- **Cigarette Lighter Plug**

Input voltage:	12-13.8VDC
Output voltage:	15/16/18/19/20/22/24VDC
Output Current:	15/16/18/19/20VDC-6A, 22/24VDC-5A
Output Plug:	6MC (NG, UH, NAA, UAB, NE, NJ)
Dimension:	140 x 67 x 34.5mm
Packing:	Individual clamshell blister

\*Please refer to P.183 for more choices of output plug.

**MW 2172**

### **ComON DC/DC CONVERTER FOR NOTEBOOK COMPUTER**

- **3500mA**
- **For Notebook Computer**
- **Rotary Switch**
- **Cigarette Lighter Plug**
- **Desktop**

Input voltage:	12-13.8VDC
Output voltage:	15/16/18/19/20/22/24VDC
Output Current:	3500mA
Output Plug:	6MC (NG, UH, NAA, UAB, NE, NJ)
Dimension:	130 x 65 x 25mm
Packing:	Individual clamshell blister

\*Please refer to P.183 for more choices of output plug.



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	9.8	7.8	41 x 36 x 36	0.0531	10720



MW 2101



### COMON SMPS FOR NOTEBOOK COMPUTER

- 2500mA
- For Notebook Computer
- Rotary Switch
- Desktop

Input voltage: 100-240VAC ~ 60/50Hz  
 Output voltage: 15/16/18/19/20/22VDC  
 Output Current: 2500mA  
 Output Plug: 6MC (NG, UH, NAA, UAB, NE, NJ)  
\*MWFU2T is included in the package which can be used all over the world  
 Dimension: 136 x 70 x 37mm  
 Packing: Individual clamshell blister



\*Please refer to P.183 for more choices of output plug.

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	15	13.2	69 x 53 x 21	0.0768	7420



MW 2171



### COMON DC/DC CONVERTER FOR NOTEBOOK COMPUTER

- 2500mA
- For Notebook Computer
- Regulated
- Cigarette Lighter Plug

Input voltage: 12-13.8VDC  
 Output voltage: 12/15/18/21/24VDC  
 Output Current: 2500mA  
 Output Plug: 6MC (NG, UH, NAA, UAB, NE, NJ)  
 Dimension: 122 x 76 x 60mm  
 Packing: Individual clamshell blister



\*Please refer to P.183 for more choices of output plug.

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	9.5	7	53 x 36 x 35	0.0668	6816



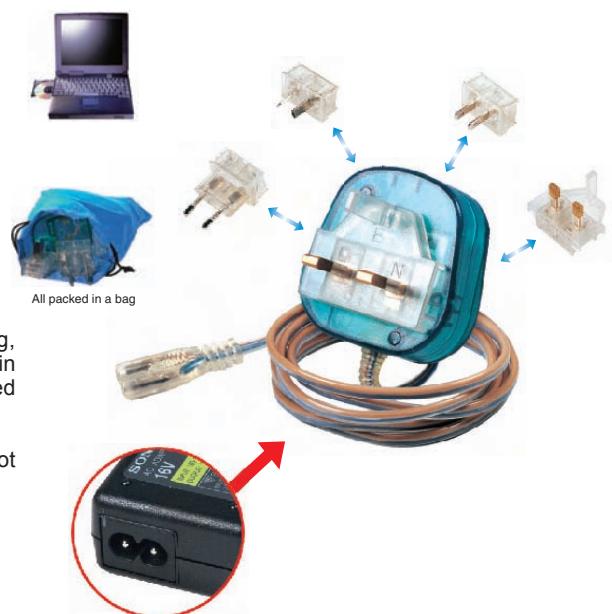
**MW SE2T1**
**COMON  
AC PLUG SET**

- For Notebook Computer
- Plug-in

This is a portable AC plug set with exchangeable plugs. They included AF plug, AV plug, UK plug and SAA plug. The output plug is SE22, which is widely used in switching power supplies for notebook and laptop computers. They can also be used in portable ZIP drives and other computer accessories.

With the use of the plug set, customers no longer worry about their adaptor are not suitable for other countries because they can be worldwide used.

Dimension: 62 x 62 x 22mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	13	10	51 x 48 x 34	0.0832	13680

**MW BT1**
**COMON  
AC PLUG SET**

- For Notebook Computer
- Plug-in

This is a portable AC plug set with exchangeable plugs. They included AF plug, AV plug, UK plug and SAA plug. The output plug is SE22, which is widely used in switching power supplies for notebook and laptop computers. They can also be used in portable ZIP drives and other computer accessories.

With the use of the plug set, customers no longer worry about their adaptor are not suitable for other countries because they can be worldwide used.

Dimension: 146 x 100 x 72.5mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	18.7	16.6	42 x 34 x 50	0.0714	15960



**MW CB8****USB TO 3.5MM FEMALE CHARGING CABLE FOR AUDIO & GAMES**

- With one 3.5mm female socket for changeable plugs

Input Voltage: 5VDC  
 Cable length: 1.5m  
 Output socket: 3.5mm female  
 Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	5.4	3.8	63 x 25 x 38	0.0598	18729

**MW CB9****RETRACTABLE USB TO 3.5MM FEMALE CHARGING CABLE FOR AUDIO & GAMES**

- With one 3.5mm female socket for changeable plugs

Input Voltage: 5VDC  
 Cable length: 1.5m  
 Output socket: 3.5mm female  
 Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	7	5	51 x 45 x 38	0.0872	16055

**MW DD6/USB****4 IN 1 USB TO 3.5MM FEMALE CHARGING CABLE FOR AUDIO & GAMES**

- 4 in 1
- With four 3.5mm female sockets for changeable plugs

Input Voltage: 5VDC  
 Cable length: 1.5m  
 Output socket: 4 x 3.5mm female  
 Output plug: 4PPM (Micro USB, Mini USB, -Nokia, Female USB)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW DD4/USB****4 IN 1 USB CHARGING SPLITTER**

- 4 in 1
- With four 3.5mm female sockets for changeable plugs

Input Voltage: 5VDC  
 Cable length: 1.5m  
 Output socket: 4 x 3.5mm female  
 Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	-	-	-	-	-

**MW 3601GS****SWITCHING MODE POWER SUPPLY**

- 2000mA
- With four 3.5mm female sockets for changeable plugs

Input Voltage: 100-240VAC ~ 60/50Hz

Output Voltage: 5VDC

Output Current: 2000mA(max.)

Output socket: 3.5mm female x 4 (MWDD4)

Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
(Please go to page 146 for more tips option or contact our sales person for details)

Dimension: 75 x 43 x 72 mm

Packing: Individual clamshell blister



New!



Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10.8	8	50 x 44 x 40	0.088	12727

**MW 3602HT****SWITCHING MODE POWER SUPPLY WITH 4 CHANGEABLE INPUT PLUGS**

- 2000mA
- With four 3.5mm female sockets for changeable plugs
- With 4 changeable input plugs

Input Voltage: 100-240VAC ~ 60/50Hz

Output Voltage: 5VDC

Output Current: 2000mA(max.)

Output socket: 3.5mm female x 4 (MWDD4)

Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
(Please go to page 146 for more tips option or contact our sales person for details)

Dimension: 69 x 74 x 42 mm

Packing: Individual clamshell blister



New!



Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50			73 x 49 x 45	0.1609	8701

**MW 3671****DC/DC ADAPTOR**

- 2000mA
- With four 3.5mm female sockets for changeable plugs

Input Voltage: 12-13.8VAC

Output Voltage: 5VDC

Output Current: 2000mA(max.)

Output socket: 3.5mm female x 4 (MWDD4)

Output plug: 4PPM (Micro USB, Mini USB, Nokia, Female USB)  
(Please go to page 146 for more tips option or contact our sales person for details)

Dimension: 96.5 x 38.4 x 29 mm

Packing: Individual clamshell blister



New!



Pcs per Inner Ctn	Pcs per Exp Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	10.6	9.6	52 x 50 x 41	0.1066	9671



**MW 3701GS****SWITCHING MODE POWER SUPPLY**

- 1000mA
- With 3.5mm female socket for changeable plugs

Input Voltage: 100-240VAC ~ 60/50Hz  
 Output Voltage: 5VDC  
 Output Current: 1000mA(Max.)  
 Output socket: 3.5mm female  
 Output plug: 5PPM (Micro USB, Mini USB, Nokia, Female USB, ipod/iphone)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Dimension: 69 x 39 x 31 mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
6	24	6.1	3.8	56 x 34 x 36	0.0685	9810

**MW 3702HT****SWITCHING MODE POWER SUPPLY WITH 4 CHANGEABLE INPUT PLUGS**

- 1000mA
- With 3.5mm female socket for changeable plugs
- With 4 changeable input plugs

Input Voltage: 100-240VAC ~ 60/50Hz  
 Output Voltage: 5VDC  
 Output Current: 1000mA(Max.)  
 Output socket: 3.5mm female  
 Output plug: 5PPM (Micro USB, Mini USB, Nokia, Female USB, ipod/iphone)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Dimension: 69 x 74 x 421 mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container

**MW 3771****DC/DC ADAPTOR**

- 1000mA
- With 3.5mm female socket for changeable plugs

Input Voltage: 12-13.8VDC  
 Output Voltage: 5VDC  
 Output Current: 1000mA(Max.)  
 Output socket: 3.5mm female  
 Output plug: 5PPM (Micro USB, Mini USB, Nokia, Female USB, ipod/iphone)  
 (Please go to page 146 for more tips option or contact our sales person for details)  
 Dimension: 96.5 x 38.4 x 29 mm  
 Packing: Individual clamshell blister

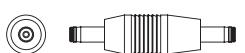
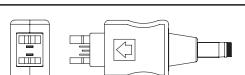
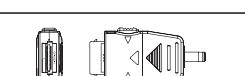
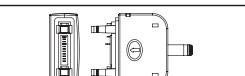
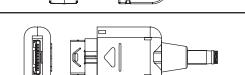
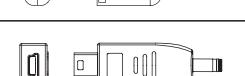
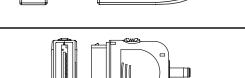
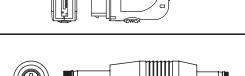
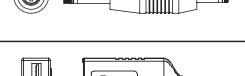
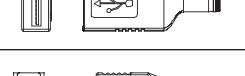
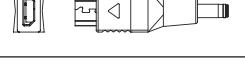
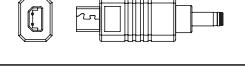
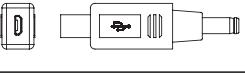
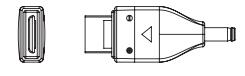
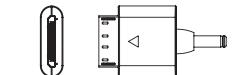
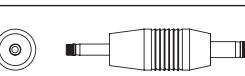


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	5.5	4	43 x 39 x 35	0.0586	19112



## MULTI-MEDIA OUTPUT CONNECTOR - PM DC TIPS *New!*

Below the PM plugs are for using with our AC/DC adaptors, DC/DC converters & USB cables. The standard versions have included the PM plug set. Please go to p.98, p.143-145 for products detail. Customers may also choose from below to make their own combo.

Ordering Code	Image	Diagram	Dimension (mm)	Brand(s)
PM01			3.5x1.1	NOKIA
PM02			13.2x3.9	SIEMENS
PM05			7.8x6.0	ERICSSON
PM06			12.65x2.3	SAMSUNG
PM07			7.9x2.35	MOTOROLA
PM11			20.5x3.9	SONY ERICSSON
PM12			9.0x1.8	LG
PM17			6.8x3.0	MINI USB
PM18			21.3x2.35	IPOD / IPHONE
PM20			4.0x1.7	PSP
PM21			7.8x3.05	FEMALE USB
PM22			7.8x3.05	NDSL
PM23			6.3x3.8	NDSi
PM24			6.8x3.0	8 PIN MINI USB
PM25			9.8x1.88	SAMSUNG
PM26			15.9x2.35	PSP GO
PM28			2.5x0.7	NOKIA
PM29			6.8x3.0	MICRO USB

**MW U3272****New!****EMERGENCY CHARGER WITH USB OUTLET**

- Portable
- With USB Outlet
- Operated by 2 Dry AA Alkaline Batteries

Input Voltage:	3VDC (2 pcs AAA-sized alkaline batteries)
Output Voltage:	5VDC
Output Current:	500mA
Dimension:	100 x 40 x 25 mm
Packing:	Individual clamshell blister

\* Please refer to P.143 for USB cable & P.146 for output plug.

Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	1.5	2.8	36 x 32 x 28	0.0313	35782

**MW 2272 Series****PHONEENER  
DC/DC EMERGENCY CHARGER**

- For Cellular Phone
- Operated by 2 Dry AA Alkaline Batteries

Input Voltage:	2x1.5VDC
Output Voltage:	5VDC
Output Plug:	Selectable
Standard version includes only ONE output plug.	
Pls contact our sales representatives for details.	
Dimension:	76 x 34 x 21mm
Packing:	Individual clamshell blister

\* Please refer to P.181 for more choices of output plug.



Total have 16 phone plugs. Please choose the appropriate plugs.



Phone Brand & Model	Model	Model (batteries packed)
Nokia (3210, 3310, 6210, 8210, 8250, 8850, 6610, 6100 and forth)	MW 2272NAC	MW 2272NAC/AA2
Siemens (C3508, C25, C35i, S35i, M35i and forth)	MW 2272N08A	MW 2272N08A/AA2
Motorola (T189, CD920, V3688, V8088, L2000i, StarTac and forth)	MW 2272N08B	MW 2272N08B/AA2
Ericsson (T10sc, T18sc, T28sc and forth)	MW 2272N08C	MW 2272N08C/AA2
Ericsson (T28sc, T66, T68i, R310s, R320s, A3618 and forth)	MW 2272N08D	MW 2272N08D/AA2
Samsung (R208, N628 and forth)	MW 2272N08G	MW 2272N08G/AA2
Motorola (V60, V66, V70 and forth)	MW 2272N08H	MW 2272N08H/AA2
Alcatel (OT511, OT512 and forth)	MW 2272N08I	MW 2272N08I/AA2
Panasonic (GD75, GD92, GD93 and forth)	MW 2272N08J	MW 2272N08J/AA2
Sagem (MW3020 and forth)	MW 2272N08K	MW 2272N08K/AA2
SonyEricsson (T68i, T610, T600 and T100)	MW 2272N08M	MW 2272N08M/AA2
NAC, N08A & N08B are included in the same package	MW 2272-3MC	MW 2272-3MC/AA2

The above models are for reference only

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	60	6	4.2	45 x 37 x 33	0.0549	31140



**MW 2276**
**PHONEENER**  
**DC/DC EMERGENCY CHARGER**

- For Cellular Phone
- Operated by 3 Dry AAA Alkaline Batteries

Input Voltage:	3x1.5VDC	Standard version includes only ONE output plug.
Output Voltage:	4.5VDC	Dimension: 36 x 70 x 17.3mm
Output Plug:	Selectable	Packing: Individual clamshell blister
Phone Brand & Model	Model	Model (batteries packed)
Nokia (3210, 3310, 6210, 8210, 8250, 8850 and forth)	MW 2276NAC	MW 2276NAC/AAA3
Siemens (C3508, C25, C35i, S35i, M35i and forth)	MW 2276N08A	MW 2276N08A/AAA3
Motorola (T189, CD920, V3688, V8088, L2000i, StarTac and forth)	MW 2276N08B	MW 2276N08B/AAA3
Ericsson (T28sc, T66, T68i, R310s, R320s, A3618 and forth)	MW 2276N08D	MW 2276N08D/AAA3
Motorola (V60, V66, V70 and forth)	MW 2276N08H	MW 2276N08H/AAA3
Alcatel (OT511, OT512 and forth)	MW 2276N08I	MW 2276N08I/AAA3
Panasonic (GD75, GD92, GD93 and forth)	MW 2276N08J	MW 2276N08J/AAA3
Sagem (MW3020 and forth)	MW 2276N08K	MW 2276N08K/AAA3
SonyEricsson (T68i, T610, T600 and T100)	MW 2276N08M	MW 2276N08M/AAA3
NAC, N08A & N08B are included in the same package	MW 2276-3MC	MW 2276-3MC/AAA3

The above models are for reference only

\*Please refer to P.182 for more choices of output plug



Total have 16 phone plugs.  
Please choose the appropriate plugs from pg 182.

**MW 2277**
**PHONEENER**  
**DC/DC EMERGENCY CHARGER**

- For Cellular Phone
- With 1 Dry 9V Alkaline Batteries

Input Voltage:	9.0VDC	Standard version includes only ONE output plug.
Output Voltage:	9.0VDC	Dimension: 36 x 70 x 22.7mm
Output Plug:	Selectable	Packing: Individual clamshell blister
Phone Brand & Model	Model	Model (batteries packed)
Nokia (3210, 3310, 6210, 8210, 8250, 8850 and forth)	MW 2277NAC	MW 2277NAC/9V1
Siemens (C3508, C25, C35i, S35i, M35i and forth)	MW 2277N08A	MW 2277N08A/9V1
Motorola (T189, CD920, V3688, V8088, L2000i, StarTac and forth)	MW 2277N08B	MW 2277N08B/9V1
Ericsson (T10sc, T18sc, T28sc and forth)	MW 2277N08C	MW 2277N08C/9V1
Ericsson (T28sc, T66, T68i, R310s, R320s, A3618 and forth)	MW 2277N08D	MW 2277N08D/9V1
Samsung (R208, N628 and forth)	MW 2277N08G	MW 2277N08G/9V1
Motorola (V60, V66, V70 and forth)	MW 2277N08H	MW 2277N08H/9V1
Alcatel (OT511, OT512 and forth)	MW 2277N08I	MW 2277N08I/9V1
Panasonic (GD75, GD92, GD93 and forth)	MW 2277N08J	MW 2277N08J/9V1
Sagem (MW3020 and forth)	MW 2277N08K	MW 2277N08K/9V1
SonyEricsson (T68i, T610, T600 and T100)	MW 2277N08M	MW 2277N08M/9V1
NAC, N08A & N08B are included in the same package	MW 2277-3MC	MW 2277-3MC/9V1

The above models are for reference only

\*Please refer to P.182 for more choices of output plug



Total have 16 phone plugs.  
Please choose the appropriate plugs from pg 182.

**MW 2281**
**PHONEENER**  
**DC/DC EMERGENCY CHARGER**

- For Cellular Phone
- With 4 Dry AA Alkaline Batteries

Input Voltage:	4X1.5VDC	Standard version includes only ONE output plug.
Output Voltage:	6.0VDC	Dimension: 34 x 47 x 82mm
Output Plug:	Selectable	Packing: Individual clamshell blister
Phone Brand & Model	Model	Model (batteries packed)
Nokia (3210, 3310, 6210, 8210, 8250, 8850, 6610, 6100 and forth)	MW 2281NAC	MW 2281NAC/AA4
Siemens (C3508, C25, C35i, S35i, M35i and forth)	MW 2281N08A	MW 2281N08A/AA4
Motorola (T189, CD920, V3688, V8088, L2000i, StarTac and forth)	MW 2281N08B	MW 2281N08B/AA4
Ericsson (T10sc, T18sc, T28sc and forth)	MW 2281N08C	MW 2281N08C/AA4
Ericsson (T28sc, T66, T68i, R310s, R320s, A3618 and forth)	MW 2281N08D	MW 2281N08D/AA4
Samsung (R208, N628 and forth)	MW 2281N08G	MW 2281N08G/AA4
Motorola (V60, V66, V70 and forth)	MW 2281N08H	MW 2281N08H/AA4
Alcatel (OT511, OT512 and forth)	MW 2281N08I	MW 2281N08I/AA4
Panasonic (GD75, GD92, GD93 and forth)	MW 2281N08J	MW 2281N08J/AA4
Sagem (MW3020 and forth)	MW 2281N08K	MW 2281N08K/AA4
SonyEricsson (T68i, T610, T600 and T100)	MW 2281N08M	MW 2281N08M/AA4
NAC, N08A & N08B are included in the same package	MW 2281-3MC	MW 2281-3MC/AA4

The above models are for reference only

\*Please refer to P.182 for more choices of output plug



Total have 16 phone plugs.  
Please choose the appropriate plugs from pg 182.



**MW 2273****PHONEENER DC/DC USB CABLE****For Cellular Phone**

Input Voltage: 5.0VDC Length: 36 x 70 x 17.3mm  
 Output Voltage: 5.0VDC Packing: Individual blister  
 Output Plug: Selectable (Standard version includes only ONE output plug.)  
 \*Please refer to P.182 for more choices of output plug

Phone Brand & Model	Model
Nokia (3210, 3310, 6210, 8210, 8250, 8850 and forth)	MW 2273NAC
Siemens (C3508, C25, C35i, S35i, M35i and forth)	MW 2273N08A
Motorola (T189, CD920, V3688, V8088, L2000i, StarTac and forth)	MW 2273N08B
Ericsson (T28sc, T66, T68i, R310s, R320s, A3618 and forth)	MW 2273N08D
Motorola (V60, V66, V70 and forth)	MW 2273N08H
Alcatel (OT511, OT512 and forth)	MW 2273N08I
Panasonic (GD75, GD92, GD93 and forth)	MW 2273N08J
Sagem (MW3020 and forth)	MW 2273N08K
SonyEricsson (T68i, T610, T600 and T100)	MW 2273N08M
NAC, N08A & N08B are included in the same package	MW 2273-3MC

The above models are for reference only

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	5	3.5	52 x 26 x 32	0.0420	33900



Total have 16 phone plugs.  
 Please choose the appropriate plugs from pg 182.  
 For details, pls contact our sales representatives.

**MW 2201GS****SMPS ADAPTOR**

- For Cellular Phone**
- Pluse Modulation**
- With 4 changeable input plugs**
- Plug-in**

Input Voltage: 100-240VAC ~ 50/60Hz  
 Output Voltage: 5VDC  
 Output Current: 500mA  
 Output Plug: 3MC (For most of the Nokia, Motorola and Siemeas mobile phone)  
 You may check Pg. 182 for other available mobile phones' plugs.  
 For details, pls contact our sales representatives  
 Dimension: 52x80x37mm  
 Packing: Individual clamshell blister  
 \*Please refer to P.182 for more choices of output plug

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	16.8	13	63 x 52 x 36	0.1179	12050

**MW 2271****UNIVERSAL DC/DC CONVERTER**

- For Cellular Phone**
- Pluse Modulation**
- Cigarette Lighter Plug**

Input Voltage: 12-13.8VDC  
 Output Voltage: 5VDC  
 Output Current: 500mA  
 Output Plug: 3MC (For most of the Nokia, Motorola and Siemeas mobile phone)  
 You may check Pg. 182 for other available mobile phones' plugs.  
 For details, pls contact our sales representatives  
 Dimension: 96.5x38.4x29mm  
 Packing: Individual clamshell blister  
 \*Please refer to P.182 for more choices of output plug

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	12.5	10	57 x 50 x 35	0.0998	17100

**MW 7198****SMART CHARGER**

- ΔV detection**
- Discharge Function**
- Input of 12V DC**
- Cigarette Lighter Plug**
- Three different charging current**

Each unit comes with  
 1) 1 AC/DC adaptor  
 2) 1 DC/DC Converter  
 3) 1 Battery Mounting Adaptor  
 Dimension: 150 x 101 x 36mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20 Container
-	20	20.4	19.2	52 x 35 x 29	0.0528	10800



**MW 2301GS**
**COMPANION  
UNIVERSAL SWITCHING ADAPTOR**

- 500mA
- Rotary Switch
- For PDA
- Plug-in
- With 4 changeable input plugs

Input Voltage: 100-240VAC 50~60Hz  
 Output Voltage: 5.0VDC  
 Output Current: 500mA  
 Output Plug: Selectable  
 Dimension: 52 x 80 x 37mm  
 Packing: Individual clamshell blister

\*Standard version includes only ONE output plug.



Phone Brand & Model	Model
Sony Clie S/N (PEG-S300HK, S300/SP, S320/G, S360/G, N710C/G, N760C/G)	MW 2301N09A
Sony Clie T/NR (NR/70V/H, T615C/G, TG50/H, SJ22/H, SJ33/H, SJ20/H, SJ30/H, T665C/H, TG50/H)	MW 2301N09B
Compaq (iPAQ 38XX/ 39XX Series-- H3830, H3835, H3850, H3870, H3950, H3970, H5455)	MW 2301N09D
Palm V	MW 2301N09E
Palm (Palm m130, m500, m505, m515, i705, Tungsten T, Tungsten W, Tungsten C, Zire 71)	MW 2301N09F
N09B, N09D, N09F are in the same package	MW 2301-3MC1

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	11.7	10.4	50 x 23 x 33	0.0380	30000



Total have 5 PDA plugs. Please choose the appropriate plugs. For details, pls contact our sales representatives.

**MW 2371**
**COMPANION  
DC/DC CAR-USE CHARGER**

- 500mA
- Cigarette Lighter Plug
- For PDA

Input Voltage: 12VDC  
 Output Voltage: 5.0VDC  
 Output Current: 500mA  
 Output Power: 2.5VA  
 Output Plug: Selectable  
 Dimension: 96.5 x 38.4 x 29mm  
 Packing: Individual clamshell blister



Phone Brand & Model	Model
Sony Clie S/N (PEG-S300HK, S300/SP, S320/G, S360/G, N710C/G, N760C/G)	MW 2371N09A
Sony Clie T/NR (NR/70V/H, T615C/G, TG50/H, SJ22/H, SJ33/H, SJ20/H, SJ30/H, T665C/H, TG50/H)	MW 2371N09B
Compaq (iPAQ 38XX/ 39XX Series-- H3830, H3835, H3850, H3870, H3950, H3970, H5455)	MW 2371N09D
Palm V	MW 2371N09E
Palm (Palm m130, m500, m505, m515, i705, Tungsten T, Tungsten W, Tungsten C, Zire 71)	MW 2371N09F
N09B, N09D, N09F are in same package	MW 2371-3MC1



Total have 5 PDA plugs. Please choose the appropriate plugs. For details, pls contact our sales representatives.

**MW 2373**
**COMPANION  
DC/DC EMERGENCY CHARGER**

- 500mA
- Operated by 4pcs of dry AA Alkaline Batteries
- For PDA

Input Voltage: 4x1.5VDC  
 Output Voltage: 6VDC  
 Output Current: 500mA  
 Output Plug: Selectable  
 Cable Length: 1m  
 Dimension: 34 x 47 x 82mm  
 Packing: Individual clamshell blister



Total have 5 PDA plugs. Please choose the appropriate plugs. For details, pls contact our sales representatives.



\*Standrad version includes only ONE output plugs.

Phone Brand & Model	Model
Sony Clie S/N (PEG-S300HK, S300/SP, S320/G, S360/G, N710C/G, N760C/G)	MW 2373N09A
Sony Clie T/NR (NR/70V/H, T615C/G, TG50/H, SJ22/H, SJ33/H, SJ20/H, SJ30/H, T665C/H, TG50/H)	MW 2373N09B
Compaq (iPAQ 38XX/ 39XX Series-- H3830, H3835, H3850, H3870, H3950, H3970, H5455)	MW 2373N09D
Palm V	MW 2373N09E
Palm (Palm m130, m500, m505, m515, i705, Tungsten T, Tungsten W, Tungsten C, Zire 71)	MW 2373N09F
N09B, N09D, N09F are in same package	MW 2373-3MC1

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	7.9	5.3	45 x 44 x 34	0.0673	25380



# AUTO Accessories

We provide almost limitless range of **Auto Accessories** to provide you unlimited power in different situations

With years of experience, we have developed our unique technologies and offered excellent products for various purposes to people around the world. We are providing a wide range of auto accessories for you to using in vehicles.

Our diversified series for auto accessories is DC/AC Power Inverters, DC / DC Multiplier, Car-use Battery Chargers, DC / DC converter with USB output, Step up/ Step down DC/DC converters, Car Starters and Car Battery Savers, etc. We aim to provide various choices and flexibility to fit customer's needs.



**MW DA150****DC TO AC INVERTER**

- 150W
- Cigarette lighter plug
- Desktop

Input: 12-13.8V  
 Output: 220V-240V ~ 50Hz  
 Dimension: 152 x 93.5 x 51mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	12.6	10	67x31x45	0.0934	6000

**MW DA75****DC TO AC INVERTER**

- 75W
- Cigarette lighter plug
- Plug-in

Input: 12-13.8V  
 Output: 220V-240V ~ 50Hz  
 Dimension: 121 x 67 x 47mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	18	15	59x51x45	0.1354	10350

**MW 6988(A)****DC TO AC INVERTER**

- $\Delta V$  detection
- Cigarette lighter input plug for use in car
- DC jack is available for AC power
- Foldable input plug for ease of storage
- For 2pcs of AA & AAA Ni-Cd/Ni-MH batteries

\* other international approvals could be provided under requested.

Input voltage: MW 6988(A): AC 100-240V ~ 60/50Hz, DC 12-13.8V

Dimension: 100 x 57 x 40mm

Packing: Individual clamshell blister



## LED Indication

	LED
Fast charge	Red
Trickle charge	Green

## Charge Current Table

	AA	AAA
Fast charge	800mA	400mA
Trickle charge	80mA	40mA

## MW Standard

Model	NL120P050PGS	Approval
MW 6988(A)	✓	GS, CE, E4

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	12.5	-	59x50x40	0.1354	11000



**MW 10230****10A SOCKET MULTIPLIER**

- Extension of cigarette lighter socket
- 10A detachable fuse

Input Voltage: 12V DC

Output Voltage: 12V DC

Output Current: 2 groups of 12VDC/ 10A mains sockets  
1 12VDC cigarette lighter socket

LED Indication: Power LED

Dimension: 90 x 69 x 35mm

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 10232****10A SOCKET MULTIPLIER**

- Extension of cigarette lighter socket
- 10A detachable fuse

Input Voltage: 12V DC

Output Voltage: 12V DC

Output Current: 2 groups of 12VDC/ 10A mains sockets  
1 12VDC cigarette lighter socket

LED Indication: Power LED

Dimension: 133 x 73 x 40mm

Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 10233****10A SOCKET MULTIPLIER**

- Extension of cigarette lighter socket
- 10A detachable fuse

Input Voltage: 12V DC

Output Voltage: 12V DC

Output Current: 2 groups of 12VDC/ 10A mains sockets

LED Indication: Power LED

Dimension: 65 x 55 x 34mm

Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-



**MW U10230****10A SOCKET MULTIPLIER**

- ONE USB outlet for using other electronic appliances
- Extension of cigarette lighter socket
- 10A detachable fuse

Input Voltage: 12V DC

Output Voltage: 12V DC

Output Current: 2 groups of 12VDC/  
10A mains sockets  
1 12VDC cigarette lighter socket

USB: 5VDC / 1000mA

LED Indication: Power LED

Dimension: 90 x 69 x 35mm

Packing: Individual clamshell blister



USB socket



Cigarette lighter plug with 10A fuse

**MW U10232****10A SOCKET MULTIPLIER**

- ONE USB outlet for using other electronic appliances
- Extension of cigarette lighter socket
- 10A detachable fuse

Input Voltage: 12V DC

Output Voltage: 12V DC

Output Current: 3 groups of 12VDC/  
10A mains sockets  
1 12VDC cigarette lighter socket

USB: 5VDC / 1000mA

LED Indication: Power LED

Dimension: 133 x 73 x 40mm

Packing: Individual clamshell blister



USB socket



Cigarette lighter plug with 10A fuse

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 231****MULTIPLIER**

- Cigarette Lighter Plug
- Extention of cigarette lighter socket

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Output Current: 2 groups of 12VDC/ 3.5A cigarette lighter socket  
 LED Indication: Power LED  
 Dimension: 130 x 68 x 32mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	9.8	7.0	47 x 42 x 33	0.065	21923

**MW 232****MULTIPLIER**

- Extention of cigarette lighter socket

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Output Current: 3 groups of 12VDC/ 1A mains sockets  
 1 12VDC cigarette lighter socket  
 LED Indication: Power LED  
 Dimension: 132 x 40 x 73mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	10.1	9.3	32 x 27 x 33	0.0285	30000

**MW 230****MULTIPLIER**

- Extention of cigarette lighter socket

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Output Current: 2 groups of 12VDC/ 1A mains sockets  
 1 12VDC cigarette lighter socket  
 LED Indication: Power LED  
 Dimension: 97 x 69 x 35mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	6.9	4.7	52 x 34 x 36	0.0636	8960

**MW 233****MULTIPLIER**

- Extention of cigarette lighter socket

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Output Current: 2 groups of 12VDC/ 1A mains sockets  
 LED Indication: Power LED  
 Dimension: 63.5 x 50 x 34mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	5.7	3.6	54 x 30 x 26	0.0543	9777

55007

**DC/DC CONVERTER WITH 2 USB OUTLETS**

- Cigarette lighter plug ● 2 USB outlets (type A & mini USB)
- 3000mA

Input Voltage: DC 12V (with 3A fuse)  
 Output Voltage: DC 5.0V (2000mA for each USB outlet)  
 Output Current: 3000mA (max. load of 2 USB sockets)  
 Output Sockets: USB (type A) & mini USB  
 Dimension: 107 x 43 x 24mm  
 Packing: Individual clamshell blister



50002

**DC/DC CONVERTER WITH USB OUTLET**

- Cigarette lighter plug ● 2000mA
- USB outlet

Input Voltage: DC 12V-24V (with 2A fuse)  
 Output Voltage: DC 5.0V  
 Output Current: 2000mA  
 Output Sockets: USB (type A)  
 Dimension: 93.5 x 44 x 23mm  
 Packing: Individual clamshell blister



50003

**DC/DC CONVERTER**

- Cigarette lighter plug ● 1800mA
- Rotary switch

Input Voltage: DC 12V-24V (with 2A fuse)  
 Output Voltage: DC 3/4.5/6/7.5/9/12V  
 Output Current: 1800mA (max.)  
 Output Sockets: 6XC  
 Dimension: 111.5 x 46 x 25mm  
 Packing: Individual clamshell blister



53011

**DC/DC CONVERTER**

- Cigarette lighter plug ● 1500mA
- Rotary switch

Input Voltage: DC 12V-15V (with 2A fuse)  
 Output Voltage: DC 3/4.5/6/7.5/9/12V  
 Output Current: 1500mA (max.)  
 Output Sockets: 6XC  
 Dimension: 99 x 41 x 39mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	7.8	5	61x36x32	0.0702	19950

**MW 217****UPSWING STEP-UP DC/DC CONVERTER**

- 1500mA ● IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 12/15/18/21/24VDC  
 Output Current: 1500mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 105 x 66 x 35mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	9.5	7.0	53 x 45 x 35	0.0649	7026

**MW 293****UPSWING STEP-UP DC/DC CONVERTER**

- 2500mA ● IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 12/15/18/21/24VDC  
 Output Current: 2500mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 122 x 76 x 60mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	11.5	10.2	66 x 35 x 35	0.081	7037

**MW 235****UPSWING STEP-UP DC/DC CONVERTER**

- 3500mA ● IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 15/16/18/19/20/22/24VDC  
 Output Current: 3500mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 160 x 72 x 29mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	18.4	16	52 x 47 x 38	0.0929	12271

**MW 250****UPSWING STEP-UP DC/DC CONVERTER**

- 5000mA ● Regulated
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 15/16/18/19/20/22/24VDC  
 Output Current: 15/16/18/19/20VDC-6000mA, 22/24VDC-5000mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 140 x 67 x 34.5mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	11.6	10	53 x 29 x 42	0.065	8769



**MW 212 & MW 211**
**DIVERSION  
DC/DC CONVERTER**

- 800mA
- SMPS
- IC Regulated
- Rotary Switch
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC  
 Output Current: 800mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 54 x 43 x 24mm  
 Packing: Individual clamshell blister



MW 212



MW 211 - Slide switched model is also available.

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	18.5	14.2	58 x 37 x 67	0.1463	19500

**MW 220 & MW 221**
**DIVERSION  
DC/DC CONVERTER**

- 800mA
- SMPS
- IC Regulated
- Rotary Switch
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated  
 Output Current: 800mA  
 Output Plug: 6XC detachable plugs  
 Dimension: 145 x 55 x 23mm  
 Packing: Individual clamshell blister



MW 220



MW 221 - Slide switched model is also available.

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	16.5	12	59 x 37 x 67	0.1463	19500

**MW 238**
**DIVERSION  
DC/DC CONVERTER**

- 1200mA
- SMPS
- Regulated
- Slide Switch
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC  
 Output Current: 1200mA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 103 x 46 x 59mm  
 Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	8.5	5.9	59 x 38.5 x 36	0.0811	14040



**MW 207****DC/DC CONVERTER**

- 1200mA
- SMPS
- Cigarette Lighter Plug
- Regulated
- Slide Switch

Input Voltage: 12-24VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC (only at 24VDC input), 14.4VA (max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 65 x 52 x 34mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	13.8	9.6	58 x 56 x 28	0.0909	15700



E 4 CE

**MW 215 & MW 213****PWM DC/DC CONVERTER**

- 1500mA
- Slide & Rotary Switch
- SMPS
- Regulated
- Cigarette Lighter Plug

Input Voltage: 12-24VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated, 18VA(max.)  
 12VDC output only for 24VDC input  
 Output Plug: 6XC detachable plugs  
 Dimension: 135.5 x 57 x 28.5mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	21.7	18.7	51 x 40 x 57	0.1163	24500



MW 213 - Slide switched model is also available.



MW 215



E 4 CE

**MW 219 & MW 218****PWM DC/DC CONVERTER**

- 1500mA
- Slide & Rotary Switch
- SMPS
- Regulated
- Cigarette Lighter Plug

Input Voltage: 12-24VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9VDC Regulated, 18VA(max.)  
 12VDC output only for 24VDC input  
 Output Plug: 6XC detachable plugs  
 Dimension: 80 x 57 x 28.5mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	28	23	71 x 49 x 67	0.239	12431



MW 218 - Slide switched model is also available.



MW 219



E 4 CE

**MW 292****DC/DC CONVERTER**

- 2000mA
- IC Regulated
- Rotary Switch
- Cigarette Lighter Plug

Input Voltage: 12-24VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12/24VA(max.)  
 12V-2000mA only for 24V input  
 Output Plug: 6XC detachable plugs  
 Dimension: 100 x 70 x 32mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	14.8	12.5	59 x 37 x 37	0.081	17600



### MW 188



### DC/DC Converter

- 300mA
- Solid State
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12, 3.6VA(max.)  
 Output Plug: 4 way universal connector  
 Dimension: 104 x 37 x 26mm  
 Packing: Individual blister card



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	11	9	55 x 41 x 30	0.0677	42100

### MW 190



### DC/DC Converter

- 500mA
- Solid State
- With fuse
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 95.2 x 38 x 30mm  
 Packing: Individual blister card



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	13	10.4	59 x 48 x 30	0.085	33500

### MW 192



### DC/DC Converter

- 500mA
- Solid State
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC, 6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 95.2 x 38 x 29.5mm  
 Packing: Individual blister card



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	12.1	9.6	46 x 31 x 56	0.0799	35700

### MW 191



### Solid State DC/DC Converter

- 800mA
- Slide Switch
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC, 9.6VA(max.)  
 Output Plug: 4 way universal connector  
 It fits all different cars with a cigarette lighter socket.  
 Dimension: 142 x 44 x 32mm  
 Packing: Individual blister card



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	13.6	10.6	68 x 48 x 30	0.0979	29100

### MW 193



### 7 in 1 DC/DC Converter

- 800mA
- IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/12VDC, 9.6VA(max.)  
 Output Plug: 6 way universal connector  
 Dimension: 142 x 44 x 32mm  
 Packing: Individual blister card



Pcs per Inner Ctn	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	16.5	12	49 x 38 x 59	0.1098	25956

### MW197A & MW197



### MW 206



### MW 201



### MW 291



### DC/DC Converter



- 800mA
- SMPS
- Regulated
- Rotary Switch
- Cigarette Lighter Plug

Input Voltage: 12V-13.8VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC Regulated, 9.6VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 144 x 44 x 32mm  
 Packing: Individual clamshell blister

*With the newly designed circuit, this product can be used for a very long time continuously.*

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	18.5	15.3	73 x 31 x 62	0.1403	20300

### DC/DC Converter



- 1200mA
- SMPS
- Regulated
- Slide Switch
- Cigarette Lighter Plug

Input Voltage: 12-24VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12VDC (only at 24VDC input), 14.4VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 130 x 52 x 34mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	12.8	8.6	60 x 59 x 28	0.0991	14400

### DC/DC Converter



- 1200mA
- IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12, 14.4VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 80 x 57 x 28.5mm  
 Packing: Individual sealed blister

Different settings for maximum use

Output Current	Output Voltage
300mA	1.5 / 3.0V
500mA	4.5 / 6.0V
800mA	7.5 / 9.0V
1200mA	12.0V

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	21	18.2	59 x 48 x 34	0.096	29687

### DC/DC Converter



- 1500mA
- IC Regulated
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 1.5/3/4.5/6/7.5/9/12, 18VA(max.)  
 Output Plug: 6XC detachable plugs  
 Dimension: 100 x 70 x 32mm  
 Packing: Individual sealed blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	14.8	12.5	59 x 37 x 37	0.081	17600

**MW 1250GS****AC/DC ADAPTOR**

- 5000mA
- Desktop

- With cigarette lighter socket

Input Voltage: 230V ~ 50Hz 105W  
 Output Voltage: 12VDC, 60VA(max.)  
 Output Plug: 5000mA  
 Dimension: 198 x 136 x 101mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18	17	62 x 24 x 19	0.0283	5035

**MW 728**

E 4

**CAR BATTERY SAVER**

- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Maximum Load: 10A

This product is used to protect the car battery from over-drainage by the appliance attached. It cuts off the power if the battery voltage drops below 11.2V and power would only be resumed when battery voltage is over 12.5V after the cut-off. Maximum current allowed through the unit is 10A.

Dimension: 54.85 x 80 x 28.7mm  
 Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	32	7.5	6.2	40 x 30 x 31	0.0372	24512

**MW 2178**

CE E 4

**NEW EASY START**

- Cigarette Lighter Plug

- ForLead Acid Battery

Input Voltage: 12-13.8VDC

With this product, there is no longer a need to work with dangerous and messy cables. All that is needed is to plug one end of the cable to the cigarette lighter socket of a working car, and the other end to the car that needs to be jump-started. The time it takes depends on the status of the battery, and it takes 5 minutes or longer.

There are LEDs on the unit that indicates when the car is ready to be started, depending on the state of the car beforehand. There is a unique switching circuit for ultra-fast boost up of the dead car, and there are built-in electronics to ensure the safety of the cars. It works with all 12V automobile vehicles, and the cable can be wrapped around the unit for easy storage.

Dimension: 120 x 120 x 90mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	16.5	15.5	66 x 28 x 22	0.0406	14000

**MW 3178**

CE E 4

**NEW EASY START II**

- Cigarette Lighter Plug

- ForLead Acid Battery

Input Voltage: 12-13.8VDC  
 LED Indication: Charging LED, Power LED

With this product, there is no longer a need to work with dangerous and messy cables. All that is needed is to plug one end of the cable to the cigarette lighter socket of a working car, and the other end to the car that needs to be jump-started. The time it takes depends on the status of the battery, and it takes 5 minutes or longer.

Dimension: 120 x 120 x 90mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	15.8	14.4	58 x 55 x 20	0.067	8507



**MW 178****Car Battery Charger**

- With Built-in Current Protector
- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Dimension: 137.7 x 58 x 60.5mm  
 Packing: Individual sealed blister

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	22.2	18	73 x 38 x 47	0.1304	8760

**MW 1178****Easy Start**

- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Output Voltage: 12VDC  
 Dimension: 100 x 88 x 60mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	15.5	14.4	52 x 28 x 33	0.048	11880

**MW 328****2 in 1 Car Battery Analyzer**

- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Dimension: 124 x 77 x 34mm  
 Packing: Individual blister packed

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	11	8	52 x 50 x 35	0.091	31300

**MW 628****Car Battery Charger**

- Cigarette Lighter Plug

Input Voltage: 12VDC  
 Dimension: 95 x 38.5 x 29.5mm  
 Packing: Individual blister packed

Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	7.3	5.3	43 x 26 x 56	0.0626	45500

**MW 777CR****RECHARGEABLE SPOTLIGHT**

- For Car Use
- Cigarette Lighter Plug
- For Battery Pack

Input Voltage: 12VDC

It includes the following accessories:

- 1) Rechargeable battery pack
- 2) Charger for the Rechargeable battery pack
- 3) Build-in magnet

Dimension: 181.7 x 51 x 36mm

Standard colour: Red & Yellow

Packing: Individual clamshell blister



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	5.0	4.3	35 x 29 x 22	0.0223	25560

**MW 799GS****RECHARGEABLE SPOTLIGHT**

- For Battery Pack

Input Voltage: 230VAC ~ 50Hz, 60mA

It includes the following accessories:

- 1) Rechargeable battery pack
- 2) Charger for the Rechargeable battery pack
- 3) Build-in magnet

Dimension: 181.7 x 51 x 36mm

Standard colour: Red & Yellow

Packing: Individual colour giftbox



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	5.0	4.3	35 x 29 x 22	0.0223	25560

**MW 6786****AC & DC DUAL INPUT RECHARGEABLE TORCH**

- Blinking Function
- Battery Pack

Input Voltage: 230VAC ~ 50Hz, 12VDC

It includes the following accessories:

- 1) An AC/DC adaptor
- 2) A cigarette Lighter plug
- 3) Build-in rechargeable battery pack
- 4) Charger for the Rechargeable battery pack
- 5) Build-in magnet

Dimension: 213 x 104 x 102mm

Packing: Individual colour giftbox



Pcs per Inner Ctn	Pcs per Exp. Ctn	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	12	11.8	10.6	57 x 37 x 26	0.0548	6240



# Hobby Series

We make effort to develop **Hobby Series** to fulfill your needs on Remote Control products

We offer a set of professional accessories for Remote Control application. The Hobby Charger series is for power up those remote controlled cars or airplanes or any other applications.

Our diversified series of Hobby Chargers is included AC input battery pack chargers with timer, ΔV & Discharge, Dual input (both AC or DC) battery pack chargers, Standard battery pack chargers and Versatile battery charger for charging up to 8pcs batteries. As we have different output power for selection, which can provide the flexibility to fit customer's needs.



**MW 3110HC****AUTOMATIC BATTERY PACK CHARGER**

- Thermal Protection
- For Ni-Cd/ Ni-MH Battery Pack

Input Voltage: AC 230V ~ 50Hz  
 Output Voltage: 8.4VDC(6 cells) - 11.2VDC(8 cells)  
 Output Current: 600mA  
 Standard Packing Included: X8-F01D  
 Dimension: 85 x 62 x 88.2mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3910HC****AUTOMATIC BATTERY PACK CHARGER**

- Thermal Protection
- For Ni-Cd/ Ni-MH Battery Pack
- Totally 4 outputs for selection

Input Voltage: AC 230V ~ 50Hz  
 Output Voltage: 1.4VDC / 5.6VDC / 11.2VDC / 8.4-11.2VDC  
 Output Current: 1.4V/150 mA, 5.6V/150mA, 11.2V/150mA,  
 8.4-11.2V/400mA  
 Standard Packing Included: X8-F01D, 03A, FX2  
 Dimension: 85 x 62 x 88.2mm  
 Packing: Individual colour giftbox

LED indication:

Charging/ completed LED	
1.4V DC	Red/ Red
5.6V DC	Red/ Red
11.2V DC	Red/ Red
8.4-11.2V DC	Red/ Green

**MW 3810HC****DUAL INPUT BATTERY PACK CHARGER**

- $\Delta V$  detection
- Discharge Function
- Dual Input
- For Li-ion Battery Pack

Input Voltage: AC 100-240V ~ 60/50Hz 20W  
 Output Voltage: 3.7VDC/ 7.4VDC/ 11.1VDC (selectable)  
 Output Current: 1200mA  
 Output Connector: Banana socket  
 Dimension: 85 x 62 x 88mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3210HC****DOUBLE OUTPUT STANDRAD BATTERY PACK CHARGER**

- Dual Input
- For Ni-Cd/ Ni-MH Battery Pack

Input Voltage: AC 230V ~ 50Hz  
 Output Voltage: 9.8VDC/ 11.2VDC  
 Output Current: 30mA at 9.8VDC. 200mA at 11.2VDC  
 Output Connector: 9V battery connector/ F01D  
 Dimension: 82 x 56 x 80mm  
 Packing: Individual colour giftbox

**MW 3310HC****AUTOMATIC UNIVERSAL BATTERY PACK CHARGER**

- $\Delta V$  detection
- Discharge Function
- Automatic Output Voltage Detection
- For Ni-Cd/ Ni-MH Battery Pack

Input Voltage: AC 230V ~ 50Hz  
 Output Voltage: 7.0VDC (5 cells)/ 11.2VDC (8-cells)  
 Output Current: 1000mA/ 2000mA  
 Standard Packing Included: 8X-01E/N2, X8-F01D/N2 & Plug E  
 Dimension: 201 x 136 x 101mm  
 Packing: Individual colour giftbox

LED Indication	
Status	Dual Colour LED
Fast charging	Red
Trickle charging	Green
Discharging	Red & Green



8X-01E/N2 X8-F01D/N2 Plug E

**MW 3610HC****AUTOMATIC UNIVERSAL BATTERY PACK CHARGER**

- $\Delta V$  detection
- Discharge Function
- Cigarette Lighter Plug
- For Ni-Cd/ Ni-MH Battery Pack
- Double Output

Input Voltage: AC 230V ~ 50Hz, 13.8 - 24VDC  
 Output Voltage: For 230VAC or 24VDC input: 5.6VDC (4 cells) - 11.2VDC (8 cells)  
 For 24VAC input: 5.6VDC (4 cells) - 8.4VDC(6 cells)  
 Output Current: 1000mA/ 2000mA/ 3000mA  
 Standard Packing Included: 8X-01E/N2, X8-F01D/N2 & Plug E  
 Dimension: 136 x 87 x 67mm  
 Packing: Individual colour giftbox

LED Indication	
Status	Dual Colour LED
Fast charging	Red
Trickle charging	Green
Discharging	Red & Green



8X-01E/N2 X8-F01D/N2 Plug E

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 3168V****OMNI-MANUAL BATTERY PACK CHARGER**

- **ΔV detection**
- **Discharge Function**
- **Polyswitch Protection**
- **Desktop**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz  
 Output Voltage: 2.8V (2 cells) / 5.6V (4 cells) / 7.0V (5 Cells) / 8.4V (6 cells)  
 9.8V (7 cells) / 11.2V (8 cells) / 14.0V (10 cells)

Charging Current: 300mA / 600mA

Accessories Included: X8-F01D/N2, X8-01E/N2, Plug E

In order to perform the **ΔV** detection in the formal way, it is recommended to charge the battery with less than 2400mAh capacity. This is because the charging current must be remained 0.25C-1C (C = Battery Capacity).

Dimension: 76 x 122 x 60mm

Packing: Individual colour giftbox

**MW 6168V****OMNI-MANUAL BATTERY PACK CHARGER**

- **ΔV detection**
- **Discharge Function**
- **Polyswitch Protection**
- **Desktop**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz  
 Output Voltage: 2.8V (2 cells) / 5.6V (4 cells) / 7.0V (5 Cells) / 8.4V (6 cells)  
 9.8V (7 cells) / 11.2V (8 cells) / 14.0V (10 cells)

Charging Current: 500mA / 1000mA

Accessories Included: X8-F01D/N2, X8-01E/N2, Plug E

In order to perform the **ΔV** detection in the formal way, it is recommended to charge the battery with less than 2400mAh capacity. This is because the charging current must be remained 0.25C-1C (C = Battery Capacity).

Dimension: 76 x 122 x 60mm

Packing: Individual colour giftbox

**MW 7168****OMNI-MANUAL DC/DC BATTERY PACK CHARGER**

- **ΔV detection**
- **Discharge Function**
- **Polyswitch Protection**
- **Cigarette Light Plug**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 12VDC  
 Output Voltage: 1.4V (1 Cell) - 14V (10 Cells) (Automatic Detection)  
 Charging Current: 100mA - 4000mA (Manual Select)

The standard package includes the following features:

- 1.) Automatic battery voltage detect (1 cell - 10 cells)
  - 2.) **ΔV**detection, Maximum voltage detection, Timer detection,  $\Delta T/\Delta t$  detection and Maximum Temperature detection
  - 3.) Manual charge current select (100mA - 1000mA) with charge current meter
  - 4.) Temperature sensor to prevent overcharge of battery. This temperature sensor can be stored in the case.
  - 5.) Discharge Function
  - 6.) Cigarette lighter connector, cable 01F-FCP1, 04B-FX2, X2-01E and X2-F01D
- To have optimum performance of this charger, it is the best to select the charging current with 0.3C - 1C (C = Battery Capacity)

Dimension: 180 x 135 x 88mm

Packing:

Individual color giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	20	28.8	27.4	51 x 40 x 38	0.0775	7340

**MW 3166****FAST BATTERY PACK CHARGER**

- **Timer Function**
- **Plug-in**
- **Polyswitch Protection**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230VAC ~ 50Hz, 7W  
 Output Voltage: 5.6V - 8.4V

Charging Current: 300mA, 2.52VA(max.)

Timer: 10hrs

Accessories Included: X2-F01D, X2-01E, Plug E

Dimension: 82 x 56 x 73mm

Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	23	21.5	47 x 22 x 43	0.0445	38427



**MW 3168VD****OMNI****MANUAL BATTERY PACK CHARGER**

- **ΔVdetection**
- **Discharge Function**
- **Polyswitch Protection**
- **Dual Input**
- **Cigarette Lighter Plug**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz / 12-24VDC  
 Output Voltage: For 230VAC or 24VDC input:  
                   2.8V (2 cells) / 5.6V (4 cells) / 7V (5 Cells) / 8.4V (6 cells)  
                   9.8V (7 cells) / 11.2V (8 cells) / 14.0V (10 cells)  
 Charging Current: 300mA / 600mA  
 Standard Packing Included: X8-F01D/N2, X8-F01E, Plug E  
 Dimension: 76 x 122 x 60mm  
 Packing: Individual colour giftbox

For 12VDC input:	
2.8V (2 Cells)	5.6V (4 Cells)
7V (5 Cells)	8.4V (6 Cells)
LED Indication	
Status	Dual Colour LED
Fast Charging	Red
Discharging	Yellow
Ready	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	14	12.5	36 x 36 x 32	0.0415	10976

**MW 6168VD****OMNI****MANUAL BATTERY PACK CHARGER**

- **ΔVdetection**
- **Discharge Function**
- **Polyswitch Protection**
- **Dual Input**
- **Cigarette Lighter Plug**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz / 12-24VDC  
 Output Voltage: For 230VAC or 24VDC input:  
                   2.8V (2 cells) / 5.6V (4 cells) / 7V (5 Cells) / 8.4V (6 cells)  
                   9.8V (7 cells) / 11.2V (8 cells) / 14.0V (10 cells)  
 Charging Current: 500mA / 1000mA  
 Standard Packing Included: X8-F01D/N2, Plug E  
 Dimension: 76 x 122 x 60mm  
 Packing: Individual colour giftbox

For 12VDC input:	
2.8V (2 Cells)	5.6V (4 Cells)
7V (5 Cells)	8.4V (6 Cells)
LED Indication	
Status	Dual Colour LED
Fast Charging	Red
Discharging	Yellow
Ready	Green

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	18.3	16.9	35 x 34 x 30	0.0357	12773

**MW 6169VD****AUTOMATIC BATTERY PACK CHARGER**

- **ΔVdetection**
- **Discharge Function**
- **Cigarette Lighter Plug**
- **Dual Input**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz / 12-24VDC  
 Output Voltage: For 230VAC or 24VDC input:  
                   7.0VDC (5 Cells) - 11.2VDC (8 Cells), Automatic Detection  
                   For 12VDC input:  
                   7.0VDC(5 Cells) - 8.4V(6 Cells), Automatic Detection

LED Indication	
Status	Fast Charge
Power On (No Battery is connected)	Off
Fast Charging	Red
Trickle Charging	Off
Discharging	Off
	Off
	Yellow

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	10	18.2	17.1	39 x 20 x 31	0.0242	8790

**MW 3168T****CONSTANT CURRENT BATTERY PACK CHARGER**

- **Selectable Timer Control & Charging Current**
- **Cigarette Lighter Plug**
- **Polyswitch Protection**
- **Desktop**
- **For Ni-Cd/Ni-MH Battery Pack**

Input Voltage: 230V ~ 50Hz  
 Output Voltage: 1.4VDC (1 Cell) - 14VDC (10 Cells), Automatic Detection  
 Charging Current: 50/100/200/300/400/500/600mA  
 Timer: 0.5/1/2/3/4/6/8hrs  
 Accessories Included: X8-F01D, X8-01E, Plug E  
 Dimension: 76 x 122 x 60mm  
 Packing: Individual Colour Giftbox

**Formula:**  
 1.) Charge time =  $\frac{\text{Battery Capacity}}{\text{Charge Current}} \times 1.4$       2.) Charge current =  $\frac{\text{Battery Capacity}}{5 \text{ to } 10}$

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	30	22.3	20.6	43 x 37 x 39	0.0620	13800



## MW 3168TD



X8-F01D X8-01E Plug E



## MW 6698 Series



## MW 1168



X2-F01D X2-01E Plug E

## MW 2168



X2-F01D X2-01E Plug E

### Omni

#### Constant Current Battery Pack Charger



- Selectable Timer Control & Charging Current
- Polyswitch Protection
- Desktop
- Cigarette Lighter Plug
- For Ni-Cd/Ni-MH Battery Pack

Input Voltage: 230V ~ 50Hz  
 Output Voltage: For 230 VAC or 24VDC input  
 Charging Current: 1.4VDC (1 Cells) - 14.0VDC (10 Cells), Automatic Detection  
 Standard Packing Included: For 12VDC input  
 Timer: 4VDC (1 Cell) - 8.4VDC (10 Cells), Automatic Detection  
 Dimension: 50/100/200/300/400/500/600mA  
 Packing: X8-F01D, X8-01E, Plug E  
 Dimension: 0.5/1/2/3/4/6hrs  
 Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
15	30	22.3	20.6	43 x 37 x 39	0.0620	13800

#### Standard Battery Pack Charger



- Plug-in
  - For Ni-Cd/Ni-MH Battery Pack
- Input Voltage: 230V ~ 50Hz  
 LED Indication: This is our basic line of battery charger for Ni-Cd/Ni-MH battery packs.  
 Dimension: Charging LED  
 Packing: 67 x 50 x 80mm  
 Individual colour giftbox

For Ni-Cd Battery Charger			
Model Numbers	Battery Voltage	Output Voltage	Charging Current
MW 2698	2.4V	2.8V	120mA
MW 3698	3.6V	4.2V	120mA
MW 4698	4.8V	5.6V	120mA
MW 6698	6.0V	7.0V	120mA
MW 7698	7.2V	8.4V	120mA
MW 8698	8.4V	9.8V	120mA
MW 9698	9.6V	11.2V	120mA
MW 12698	12.0V	14.0V	120mA

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	80	22.7	20.8	43 x 39 x 29	0.0486	46913

#### Constant Current Battery Pack Charger



- Polyswitch Protection
  - Plug-in
  - For Ni-Cd/Ni-MH Battery Pack
- Input Voltage: 230V ~ 50Hz  
 Output Voltage: 1.4VDC (1 Cell) - 14VDC (10 Cells)  
 Charging Current: 120mA  
 LED Indication: Charging LED  
 Standard Packing Included: X2-F01D, X2-01E, Plug E  
 Dimension: 72 x 54 x 80mm  
 Packing: Individual colour giftbox

**Formula:**

$$1.) \text{ Charge time} = \frac{\text{Battery Capacity}}{\text{Charge Current}} \times 1.4 \quad 2.) \text{ Charge current} = \frac{\text{Battery Capacity}}{5 \text{ to } 10}$$

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	19.0	18	47 x 21 x 41	0.0405	42222

#### Constant Current Battery Pack Charger



- Selectable Charging Current
- Polyswitch Protection
- Plug-in
- For Ni-Cd/Ni-MH Battery Pack

Input Voltage: 230VAC ~ 50Hz  
 Output Voltage: 1.4VDC (1 Cell) - 14VDC (10 Cells) automatic detection  
 Charging Current: 50/80/120/180/240/300mA  
 LED Indication: Charging LED  
 Accessories Included: X2-F01D, X2-01E, Plug E  
 Dimension: 82 x 52 x 80mm  
 Packing: Individual colour giftbox

**Formula:**

$$1.) \text{ Charge time} = \frac{\text{Battery Capacity}}{\text{Charge Current}} \times 1.4 \quad 2.) \text{ Charge current} = \frac{\text{Battery Capacity}}{5 \text{ to } 10}$$

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	25.7	24.3	52 x 21 x 43	0.0470	36360



# Battery & Accessories

This product range includes both **Battery & its Accessories** which are designed for the most common applications

## Rechargeable batteries

We provide a diversified series of battery in AA / AAA / C / D / 9V size for consumer electronics.

The brands include "Minwa", "eneReady" (low self discharge), and "CamPlus", provide you the best quality of battery power and longer life cycle.

Further, to meet the market needs, we also developed a new series for "Minwa", "eneReady" with full conformity of latest battery standard, IEC 61951-2:2003, by EU.

## Battery Testers

Our Battery testers are designed for use with both primary and rechargeable battery that determine the strength of battery. Our battery tester with LCD panel which is applicable to at least 12 types of batteries.

## Battery Adaptors

We have a series of battery adaptors for converting from AA/AAA to AA/ C & D size batteries.



**MW 333****BATTERY CONDITION CHECKER**

- With LCD Panel
- Bar Graph
- Multi-purpose
- Desktop

For testing:

- 1) CR123A/CR2/CR-V3/2CR5/CR-P2 (Digital Camera Batteries)
- 2) AAA, AA, C, D, & 9V batteries
- 3) Button cells

Dimension: 118 x 88 x 23mm

Packing: Individual clamshell blister

\* AAA alkaline battery for operating the checking is included



AAA alkaline battery for operating the checker

**MW 332(1), MW 332(2), MW 332(3)****BATTERY CONDITION CHECKER**

- With LCD Panel
- For AA, AAA, C, D & 9V batteries
- Bar Graph

The batteries' condition will be shown on the LCD panel.

Dimension: 80 x 38 x 15mm

Packing: Individual clamshell blister

\* AAA alkaline battery for operating the checking is included

**MW 322****INVESTIGATOR BATTERY TESTER**

- For AA & AAA batteries

Put batteries into the slots, then the LED will indicate the batteries conditions.

Dimension: 21.4 x 75.2 x 27mm

Packing: Individual clamshell blister



Status	LED
Battery in good condition	Red
Battery need to charge	Off

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	4.5	3.5	41 x 23 x 39	0.0368	77400



## MW 321 Investigator - Battery Tester



- For AA, AAA, C, D, 9V & button cells

Put batteries into the slots, then the build-in meter will indicate the batteries conditions.

Dimension: 50 x 110 x 54mm

Packing: Individual clamshell blister

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	30	5.8	4	54 x 53 x 16	0.0458	18660

## MW 222 Battery Tester



- For AA, AAA, C, D, 9V & button cells

Meter to indicate the battery condition

Dimension: 160 x 80.5 x 51.5mm

Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	11	10	36 x 30 x 48	0.0518	27500

## MW 223 Battery Tester



- For AA, AAA, C, D & 9V batteries

Meter to indicate the battery condition

Dimension: 102 x 51 x 46mm

Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	50	5.7	5.1	30 x 23 x 27	0.0186	76600

## MW 226 Battery Tester



- For AA, AAA, C, D, 9V & button cells

Unique design, and can be stored easily

Dimension: 62 x 61 x 29mm

Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	100	5.8	5.2	35 x 28 x 20	0.0196	145400

**MW BC 1****BATTERY CASE**

The battery case is tailored for storing 1-4pcs of AAA or AA batteries.



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW 2181C****BATTERY ADAPTOR**

MW 2181C is a new battery adaptor for users using AA battery as C size.



MW2181C

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	3.8	2	38 x 26 x 33	0.0330	86300

**MW 2181D****BATTERY ADAPTOR**

MW 2181C is a new battery adaptor for users using AA size battery as D size.



MW2181D

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8.6	7	49 x 34 x 35	0.0597	47700

**MW 3A2 / MW 218C / MW 218D****BATTERY ADAPTOR**

MW 3A2 is a battery adaptor for users using AAA size battery as AA size.  
 MW 218C is a battery adaptor for users using AA size battery as C size.  
 MW 218D is a battery adaptor for users using AA size battery as D size.



Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
MW 3A2	-	-	-	-	-	-	-
MW 218C	25	100	5.1	4.1	42 x 30 x 31	0.0391	72800
MW 218D	25	100	10.5	8	50 x 35 x 36	0.0630	45200

New!

**IEC 61951-2 : 2003 Complied Rechargeable Battery**

The new series of rechargeable batteries "eneReady" and "MINWA" comply to the latest battery testing standard : IEC 61951-2:2003 for EU countries. They are Ni-MH type battery with actual capacity the same as rated label. Full ranged batteries sized AA / AAA / C / D / 9V are available, provides you the best power solution with high capacity.

**"ENEREADY" SERIES** LSD (low-self discharge)

REM2400AA REM2300AA REM2200AA REM2100AA REM2000AA REM900AAA REM850AAA REM800AAA REM700AAA

Model	Size	Capacity	Dimension (mm)
REM2400AA	AA	2400mAh	50x14x14
REM2300AA	AA	2300mAh	50x14x14
REM2200AA	AA	2200mAh	50x14x14
REM2100AA	AA	2100mAh	50x14x14
REM2000AA	AA	2000mAh	50x14x14
REM900AAA	AAA	900mAh	45x10x10
REM850AAA	AAA	850mAh	45x10x10
REM800AAA	AAA	800mAh	45x10x10
REM700AAA	AAA	700mAh	45x10x10

Model	Size	Capacity	Dimension (mm)
REM4000C	C	4000mAh	50x25x25
REM4000D	D	4000mAh	61x33x33
REM8000D	D	8000mAh	61x33x33
REM9V250	9V E-Block	250mAh	48x27x17
REM9V220	9V E-Block	220mAh	48x27x17
REM9V200	9V E-Block	200mAh	48x27x17



REM4000D REM8000D REM4000C REM9V250 REM9V220 REM9V200

**"MINWA" SERIES**

RM2500AA RM2400AA RM2300AA RM2200AA RM2100AA RM2000AA RM1800AA RM950AAA RM900AAA RM850AAA RM800AAA RM700AAA

Model	Size	Capacity	Dimension (mm)
RM2500AA	AA	2500mAh	50x14x14
RM2400AA	AA	2400mAh	50x14x14
RM2300AA	AA	2300mAh	50x14x14
RM2200AA	AA	2200mAh	50x14x14
RM2100AA	AA	2100mAh	50x14x14
RM2000AA	AA	2000mAh	50x14x14
RM1800AA	AA	1800mAh	50x14x14
RM950AAA	AAA	950mAh	45x10x10
RM900AAA	AAA	900mAh	45x10x10
RM850AAA	AAA	850mAh	45x10x10
RM800AAA	AAA	800mAh	45x10x10
RM700AAA	AAA	700mAh	45x10x10

Model	Size	Capacity	Dimension (mm)
RM4000C	C	4000mAh	50x25x25
RM4000D	D	4000mAh	61x33x33
RM8000D	D	8000mAh	61x33x33
RM9V250	9V E-Block	250mAh	48x27x17
RM9V220	9V E-Block	220mAh	48x27x17
RM9V200	9V E-Block	200mAh	48x27x17



RM4000D RM8000D RM4000C RM9V250 RM9V220 RM9V200



RM950AAA-4



REM2400AA-4



REM8000D-2

Model	Pcs per Blister (sealed blister)	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Dimension (cm)	CBM	Pcs per 20' Container
REM2400AA-4	4	25	100	34x25x28	0.0238	119700
REM2300AA-4	4	25	100	34x25x28	0.0238	119700
REM2200AA-4	4	25	100	34x25x28	0.0238	119700
REM2100AA-4	4	25	100	34x25x28	0.0238	119700
REM2000AA-4	4	25	100	34x25x28	0.0238	119700
REM900AAA-4	4	25	100	29x21x22	0.0134	212600
REM850AAA-4	4	25	100	29x21x22	0.0134	212600
REM800AAA-4	4	25	100	29x21x22	0.0134	212600
REM700AAA-4	4	25	100	29x21x22	0.0134	212600
REM4000C-2	2	25	100	45x34x29	0.063	45200
REM4000D-2	2	50	100	50x36x30	0.044	63636
REM8000D-2	2	50	100	50x36x30	0.054	51851
REM9V250-1	1	50	100	30x21x26	0.0163	171779
REM9V220-1	1	50	100	30x21x26	0.0163	171779
REM9V200-1	1	50	100	30x21x26	0.0163	171779
RM2500AA-4	4	25	100	34x25x28	0.0238	119700
RM2400AA-4	4	25	100	34x25x28	0.0238	119700
RM2300AA-4	4	25	100	34x25x28	0.0238	119700
RM2200AA-4	4	25	100	34x25x28	0.0238	119700
RM2100AA-4	4	25	100	34x25x28	0.0238	119700
RM2000AA-4	4	25	100	34x25x28	0.0238	119700
RM1800AA-4	4	25	100	34x25x28	0.0238	119700
RM950AAA-4	4	25	100	29x21x22	0.0134	212600
RM900AAA-4	4	25	100	29x21x22	0.0134	212600
RM850AAA-4	4	25	100	29x21x22	0.0134	212600
RM800AAA-4	4	25	100	29x21x22	0.0134	212600
RM700AAA-4	4	25	100	29x21x22	0.0134	212600
RM4000C-2	2	25	100	45x34x29	0.044	63636
RM8000D-2	2	50	100	50x36x30	0.054	51851
RM4000D-2	2	50	100	50x36x30	0.054	51851
RM9V250-1	1	50	100	30x21x26	0.0163	171779
RM9V220-1	1	50	100	30x21x26	0.0163	171779
RM9V200-1	1	50	100	30x21x26	0.0163	171779

**RECHARGEABLE Ni-MH BATTERY**

Model	Size	Capacity	Dimension (mm)
M2000AA	AA	2000mAh	50x14x14
M2100AA	AA	2100mAh	50x14x14
M2200AA	AA	2200mAh	50x14x14
M2300AA	AA	2300mAh	50x14x14
M2400AA	AA	2400mAh	50x14x14
M2500AA	AA	2500mAh	50x14x14
M2600AA	AA	2600mAh	50x14x14
M2700AA	AA	2700mAh	50x14x14
M2800AA	AA	2800mAh	50x14x14
EM2200AA	AA	2200mAh	50x14x14



Model	Size	Capacity	Dimension (mm)
M240AAA	AAA	240mAh	45x10x10
M500AAA	AAA	500mAh	45x10x10
M700AAA	AAA	700mAh	45x10x10
M850AAA	AAA	850mAh	45x10x10
M900AAA	AAA	900mAh	45x10x10
M1000AAA	AAA	1000mAh	45x10x10
EM900AAA	AAA	900mAh	45x10x10
M500AA	AA	500mAh	50x14x14
M700AA	AA	700mAh	50x14x14
M1200AA	AA	1200mAh	50x14x14
M1500AA	AA	1500mAh	50x14x14
M1600AA	AA	1600mAh	50x14x14
M1800AA	AA	1800mAh	50x14x14

Model	Size	Capacity	Dimension (mm)
M1800C	C	1800mAh	50x25x25
M2000D	D	2000mAh	61x33x33
M9V100	9V E-Block	100mAh	48x27x17
M9V160	9V E-Block	160mAh	45x27x17
M9V180	9V E-Block	180mAh	45x27x17
M9V210	9V E-Block	210mAh	45x27x17





EneReady

Model	Pcs per Inner Ctn.	Pcs per Exp Ctn.	Gloss Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
M240AAA-4	25	100	4.8	4.2	29x19x22	0.0121	231404
M500AAA-4	25	100	4.8	4.2	29x19x22	0.0121	231404
M700AAA-4	25	100	6	4.3	29x19x22	0.0121	231404
M850AAA-4	25	100	5.6	5	29x21x22	0.0134	212600
M900AAA-4	25	100	5.6	5	29x21x22	0.0134	212600
M1000AAA-4	25	100	6.1	5.4	29x21x22	0.0134	212600
EM900AAA-4	25	100	5.8	5	29x21x22	0.0134	212600
M500AA-4	25	100	6	5	34x25x28	0.0238	119700
M700AA-4	25	100	6.5	5.5	34x25x28	0.0238	119700
M1200AA-4	25	100	8.5	7	34x25x28	0.0238	119700
M1500AA-4	25	100	11.3	10	34x25x28	0.0238	119700
M1600AA-4	25	100	11.3	10	34x25x28	0.0238	119700
M1800AA-4	25	100	11.3	10	34x25x28	0.0238	119700
M2000AA-4	25	100	11.3	10	34x25x28	0.0238	119700
M2100AA-4	25	100	13.7	11.7	34x25x28	0.0238	119700
M2200AA-4	25	100	13.7	11.7	34x25x28	0.0238	119700
M2300AA-4	25	100	14	12.5	34x25x28	0.0238	119700
M2400AA-4	25	100	14	12.5	34x25x28	0.0238	119700
M2500AA-4	25	100	14	12.5	34x25x28	0.0238	119700
M2600AA-4	25	100	14.4	13	34x25x28	0.0238	119700
M2700AA-4	25	100	14.4	13	34x25x28	0.0238	119700
M2800AA-4	25	100	14.4	13	34x25x28	0.0238	119700
EM2200AA-4	25	100	14.4	13	34x25x28	0.0238	119700
M1800C-2	25	100	13.1	11	45x34x29	0.044	63636
M2000D-2	50	100	17	15	28x27x30	0.0227	125500
M9V100-1	50	100	5.6	4.6	30x21x26	0.0163	171779
M9V160-1	50	100	5.6	4.6	30x21x26	0.0163	171779
M9V180-1	50	100	5.6	4.6	30x21x26	0.0163	171779
M9V210-1	50	100	5.6	4.6	30x21x26	0.0163	171779

**Ni-Cd BATTERY POWER PACK**

Our standard series includes the following Ni-Cd battery power packs.  
Please let us know if you require any other specification.

Standard Output Plug: Tamiya-plug

**Information**

Model	Capacity	# of Cells	Battery Size	Nominal Voltage	Voltage need of appliance	Dimension(mm)
NP500AA4	500mAh	4	AA	4.8V	4.8V - 6V	57x51x15
NP700AA8	700mAh	8	AA	9.6V	9.6V - 12V	100x57x15
NP1300SC6	1300mAh	6	SC	7.2V	7.2V - 9V	133x47x25
NP1300SC7	1300mAh	7	SC	8.4V	8.4V - 10.5V	156x47x25
NP1300SC8	1300mAh	8	SC	9.6V	9.6V - 12V	175x47x24



Model	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
NP500AA4	50	100	11.8	10.6	28x27x30	0.0227	125500
NP700AA8	50	100	22.6	21	48x27x29	0.0376	70700
NP1300SC6	30	60	21.6	19.8	49x33x29	0.0469	36420
NP1300SC7	30	60	25.7	23.7	49x38x29	0.054	31680
NP1300SC8	30	60	29	26.8	49x42x29	0.0597	28620



# DC Plug

We have a wide range of **DC plug** for various applications

We offer a range of standard output coaxial plugs & jack plugs. They are either straight or angled. We can also tailored-made output plugs to fit your special application. Our range include: Notebook Computer Plugs, PDA Plugs, Mobile Phone Plugs, Low Voltage Connectors, Din Connectors, Detachable Output Plug System and Battery Connectors, etc.



## OUTPUT CONNECTOR

### BATTERY CONNECTOR

Code	Name	Diagram	Dimension(mm)
F01A	Lead Acid Battery Connector(Red)		23x10
01C	5.5x10 Ni-Cd/Ni-MH Battery Plug		22x10
01D	Tamiya Ni-Cd/Ni-MH Battery Plug		27x13
F01DN	Tamiya Ni-Cd/Ni-MH Battery Socket		27x13.5x13
01F	15A Battery Connector		52x43
01H	50A Battery Connector		95x73
F01J	Battery Socket		19x6
01L	Battery Plug		23x9
01N	Special Battery Plug		9x7.5
F01Q	Battery Socket		46x27x15
F01S	Battery Connector		15x6x3
01U	Battery Plug		25x15x8
F01W	4 Poles Battery Socket		9.8x14.5x20
F01AA	Battery Socket		8.8x20.8x5
F01AE	Battery Plug		23x14.75x28.5
F01AF	Battery Plug		17.65x12x48
F01AQ	Battery Connector		25x10x6
F01AT	Battery Connector		71x14
F01AI	Battery Connector		18x70

Code	Name	Diagram	Dimension(mm)
F01AG	Output Socket		19.85x65.5
F01X	Battery Socket		26x9x6.3
F01B	Lead Acid Battery Connector (Blue)		23x10
F01C	5.5x10 Ni-Cd/Ni-MH Battery Socket		22x10
F01D	Tamiya Ni-Cd/Ni-MH Battery Socket		27x13
01E	Crocodile Battery Connector		60x15
01G	30A Battery Connector		64x57
01R	Battery Connector		84x63
F01I	Battery Connector		35x18
F01K	Battery Socket		15x4
01M	Battery Connector		45x29
F01N	Special Battery Socket		7.4x7.2x4
F01T	Battery Connector		42x24x12
F01V	Battery Connector		25x15x8
01Y	Battery Connector		80x52x18
02D	Battery Connector		-
F01AR	Battery Connector		25x15x10
F01AU	Battery Connector		8.9x5x21.4
F04A1	Battery Connector		18x70

### BATTERY CONNECTOR

Code	Name	Diagram	Dimension(mm)
FB	3.5mm Socket (PCB Mount)		18.4x10x14.4
F1E	5.5x2.1mm Socket (PCB Mount)		14.4x9.5x14.4
FE-1	5.5x2.1mm Socket (PCB Mount)		14.3x10.8x9
FH	3.5x1.35 Socket (PCB Mount)		11x5.2x10.4

Code	Name	Diagram	Dimension(mm)
FB-1	3.5mm Socket (Cable)		38x11.3
FE	5.5x2.1mm Socket (PCB Mount)		-
FE-2	5.5x2.1mm Socket (Cable)		42x13.5
E8FE2	One 5.5x2.1mm Plug to Two 5.5x2.1mm Sockets		60x45

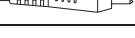
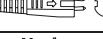
### CAR CONNECTOR

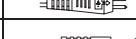
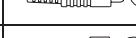
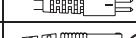
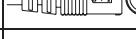
Code	Name	Diagram	Dimension(mm)
CP1	Cigarette Lighter Plug		80x27
05A	Cigarette Lighter Plug		-
05C	Cigarette Lighter Plug		68x25
05F	Cigarette Lighter Plug		82x23x20

Code	Name	Diagram	Dimension(mm)
FCP1	Cigarette Lighter Socket		74x29
05B	Cigarette Lighter Socket		-
05D	Cigarette Lighter Plug		81x28x20
CP2	Cigarette Lighter Plug		-

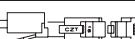
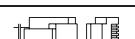
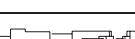
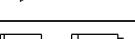
## OUTPUT CONNECTOR

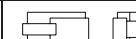
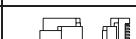
### DETACHABLE OUTPUT PLUG SYSTEM

Code	Name	Diagram	Dimension(mm)
X	Reversible Polarity Plug		40x11x7
X1	Non Reversible Polarity Connector		32x17
X2	Non Reversible Polarity Plug		40x11
FX0	Reversible Polarity Socket		32x15x10
X4	Reversible Polarity Plug		40x11x7
X6	Reversible Polarity Plug		40x11x7
X8	Non Reversible Polarity Plug		41x12x11
X9	Non Reversible Polarity Socket		14x12x12
FX9	Non Reversible Polarity Plug		29.2x7.8x6.8
X11	Reversible Polarity Connector		26x12.2x7
SC0	Reversible Polarity Socket		31x11
SC2	Reversible Polarity Socket (For Coaxial Cable)		32x9
X12	Non Reversible Polarity Plug		-
-	-	-	-

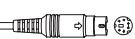
Code	Name	Diagram	Dimension(mm)
FX	Reversible Polarity Socket		32x15x10
FX1	Non Reversible Polarity Connector		34x11
FX2	Non Reversible Polarity Socket		34x14
X3	Non Reversible Polarity Connector		21x12
X5	Reversible Polarity Plug		40x11x7
X7	Non Reversible Polarity Connector		42x10
FX8	Non Reversible Polarity Socket		35x15x14
X9A	Non Reversible Polarity Socket		13x10x19
X10	Reversible Polarity Plug		35.5x8.5x9.1
SC	Reversible Polarity Socket		27x10
SC1	Reversible Polarity Socket		27x9
SC3	Reversible Polarity Socket (For Coaxial Cable)		31.5x9.2
FX12	Non Reversible Polarity Socket		-
FX12-1	Non Reversible Polarity Socket		28x17x6.2

### TELEPHONE CONNECTOR

Code	Name	Diagram	Dimension(mm)
04R	2 Poles Telephone Connector		15x7.6x11
04L	6 Poles Telephone Connector		15x9.6
04S	8 Poles Telephone Connector		23x12.5x14
04AG	Telephone Connector		15x10

Code	Name	Diagram	Dimension(mm)
04I	4 Poles Telephone Connector		13x10
04J	8 Poles Telephone Connector		-
F04W	4 Poles Telephone Socket		18.3x12.5x13
F04H	RCA Socket		11x40

### DIN CONNECTOR

Code	Name	Diagram	Dimension(mm)
02A	6 Poles Baby Din Connector		50x18
02C	4 Poles Baby Din Connector		49x13

Code	Name	Diagram	Dimension(mm)
02B	5 Poles Din Plug		60x15
-	-	-	-

**OUTPUT CONNECTOR****SPECIAL CONNECTOR**

Code	Name	Diagram	Dimension(mm)
03A	3.5x6.8 Plug		43x10
03B	Bulkhead Plug		35x13
03D	75 Ohm F Style Connector		-
F03G	Special Socket		13x6.4x33
F03F	8 Poles Socket		67x17
F03C	Light Bulb Socket		33x13
N04AK	Sony Digital Camera Plug		44x12x8

Code	Name	Diagram	Dimension(mm)
F03B	Bulkhead Socket		12x12
03G	Special Plug		19x6.8x4
03J	Special Plug		34x11
03K	Special Plug		32.7x16.5x29.5
04Y	Banana Plug		38x8.8
F04X	Sony Digital Camera Plug		29x13x8
F04H	Special Plug		11x40

**LOW VOLTAGE CONNECTOR**

Code	Name	Diagram	Dimension(mm)
04A	Banana Plug		50x8
F04A1	Multiple Socket		99x73
04C	Low Voltage Connector		-
04E	Banana Plug		47x12
04G	6.3mm Male Plug		80x13
F04K	Low Voltage Connector		-
04N	Low Voltage Plug		30.5x9.2x8
04Q	5 Poles Connector		58x22x17
F04U	Low Voltage Connector		39.5x20.2x9.4

Code	Name	Diagram	Dimension(mm)
F04A	Banana Socket		30x13
04B	Low Voltage Connector		27x11
04D	Low Voltage Copper Rod		35x6
04F	Toy's Car Connector		48x16
04H	RCA Plug		50x13
04M	Male Plug		87.5x13
04P	Low Voltage Connector		41x14x7
F04T	4 Poles Connector		29x15x8
04V	Low Voltage Connector		17.7x7.2x1.5

**PDA PLUG**

Code	Name	Diagram	Dimension(mm)
N09A	Sony Clie S/N (N710C/G, N760C/G...)		31x35x9.5
N09B	Sony Clie T/NR (T665C/H, TG50/H...)		41x30x9.5
N09D	Compaq (iPAQ 38XX/ 39XX Series H3970, H5455...)		36x26x10

Code	Name	Diagram	Dimension(mm)
N09E	Palm V		37x30x11
N09F	Palm & Tungsten T, Zire 71...		36x32x12
-	-	-	-

**MOBILE PHONE PLUG**

Code	Name	Diagram	Dimension(mm)
NAC	Nokia Phone Plug (For 8210, 8310...)		32.5x12.5
NAH	Kyocera		34x12.5
N08A	Siemens Phone Plug (For M35, S35...)		41.6x17.1x10.6
N08B	Motorola Phone Plug (For V8088, V3688...)		36.8x23x9.7
N08C	Ericsson Phone Plug (For T18sc, T10sc...)		36.8x13.2x11.4
N08D	Ericsson Phone Plug (For T66, T28sc...)		26.8x27.9x10.2
N04AM	Motorola V3 Razr		56.8x24x13.6
N08P	Sony Ericsson Phone Plug (For K750i)		37x22x10

Code	Name	Diagram	Dimension(mm)
N08G	Samsung Phone Plug (For N628, A288...)		45.1x23x11.3
N08H	Motorola Phone Plug (For V70, V60...)		36.5x11.4x12.5
N08I	Alcatel Phone Plug (For OT511, OT512...)		33.5x12.6x16.9
N08J	Panasonic Phone Plug (For GD92, GD93...)		38x27.7x9.6
N08K	Sagem Phone Plug (For MW3020, MW3042...)		36.5x23x9.7
N08M	SonyEricsson Phone Plug (For T68i, T610...)		36.8x12.5x10.4
N08N	LG		43.5x23.5x10.5
N08Q	Nokia Phone Plug		36.5x12.7

**OUTPUT PLUG****LAPTOP OUTPUT CONNECTOR****New!**

Code	Brand(s)	Diagram	Dimension(mm)
NA	-		2.5
NAA	Dell/Hitachi/Panasonic/Samsung/ Sony/ Fujitsu/Amilo		6.5 X 1.0
NAD	Sony VAIOTZ series/ Samsung/ Fujitsu/ Dell		6.5 X 1.4
NAE	Toshiba		6.5 X 3.0
NAI	Dell		7.4 X 5.1
NAK	HP netbook		7.4 X 5.1
NAO	IBM		5.7 X 7.85
NB	-		3.5
ND	-		5.0 X 2.1
NE	HP/Compaq/NEC/Toshiba/ Lenovo/Mircron		5.5 X 2.1
NF04AJ	Dell/Samsung/Sony/ Fujitsu/Amilo		-
NG	Gigatech/Hitachi/IBM		5.5 X 2.5

Code	Brand(s)	Diagram	Dimension(mm)
NI	-		4 X 1.4
MJ	series/Acer/Asus/ HP/Compaq		4.75 X 1.75
NN	Acer		5.5 X 1.5
NP	-		5.5 X 2.8
NQ	Toshiba/NEC		6.3 X 3.0
NS	-		2.35 X 0.75
NU	Samsung		5.0 X 3.4
N04AK	-		-
UAB	Compaq/Gateway/HP/ Sharp/Winbook		5.5 X 1.75
UAF	Apple		2.5
UAG	Apple		3.5
UH	Sharp/Dell		3.5 X 1.35

Code	Brand(s)	Diagram	Dimension(mm)
LUA	-		2.5
LUAA	Dell/Hitachi/Panasonic/Samsung/ Sony/ Fujitsu/ Amilo		6.5 X 1.0
LUAB	Compaq/Gateway/HP/ Sharp/Winbook		5.5 X 1.75
LUAD	Sony VAIO TZ series/ Samsung/ Fujitsu/ Dell		6.5 X 1.4
LUAE	Toshiba		6.5 X 3.0
LUAF	Apple		2.5
LUAG	Apple		3.5
LUAI	-		7.4 X 5.3
LUAK	HP (netbook)		7.4 X 5.1
LUAM	-		7.4 X 5.1
LUAO	IBM		7.9 X 5.6
LUAP	IBM		-
LUAQ	Acer		5.5 X 1.9
LUB	-		3.5
LUC	-		5.3 X 1.7 X 26.2
LUCC	Acer Aspire One 522		5.5 X 2.0
LUD	-		5.0 X 2.1
LUE	HP/ Compaq/ NEC/ Toshiba/ Lenovo/ Mircron		5.5X 2.1

Code	Brand(s)	Diagram	Dimension(mm)
LUEE	ASUS (netbook)		2.5 x 0.75
LUF	Asus EEE PC		5.0 x 2.5
LUF04AJ	Dell/Samsung/Sony/ Fujitsu Amilo		-
LUG	Gigatech/Hitachi/IBM		5.5 x 2.5
LUI	-		4.0 x 1.7
LUJ	series/Acer/Asus/ HP/Compaq		4.75 x 1.75
LUK	-		7.4 x 5.1
LUL	LG X series		5.5 x 2.5
LUM	Samsung		5.5 x 3.4
LUN	Acer		5.5 x 1.5
LUNG	BenQ Joybook Lite		5.5 x 2.5
LUNT	HP/Compaq		5.5 x 2.0
LUNU	Samsung		5.0 x 3.4
LUNV	LG/Delta/Acer/Aus/HP/ NEC/Compaq		4.8 x 1.7
LUNX	-		4.0 x 1.7
LUP	-		5.5 x 2.8
LUQ	Toshiba/NEC/IBM		6.3 x 3.0
LUS	-		2.35 x 0.75
LUT	HP		4.75 x 1.75

**CONNECTOR COMBO****Connector Combo Naming Instruction:**

A - B

A = Plug Code of one end

B = Plug Code of another end

Example:

X2 - CP1

**Connector Combo Packing:**

**Packing 1 :**  
110 x 186 mm



**Packing 2 :**  
90 x 170 mm



**Packing 3 :**  
60 x 140 mm

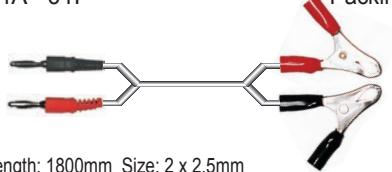
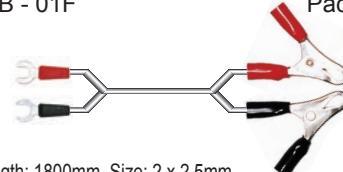
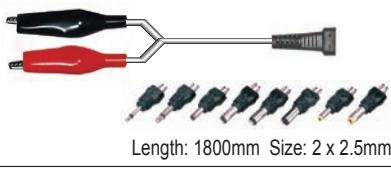
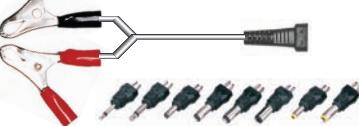
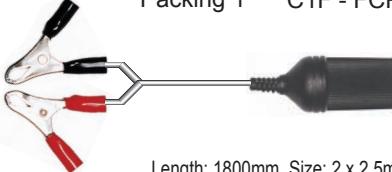
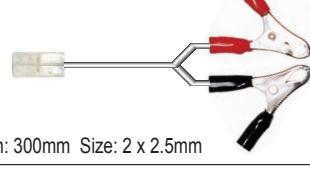


	Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Dimension (cm)	CBM	Pcs per 20' Container
Packing 1	50	100	50x44x33	0.0726	39200
Packing 2	50	100	48x46x29	0.0640	44500
Packing 3	100	200	48x43x21	0.0433	131600

AP1 	Packing 2  <b>NEW</b> Length: 100mm Size: 2 x 2.5mm	X2 - CP1 	Packing 2  Length: 100mm Size: 2 x 2.5mm	X2 - FCP1 	Packing 2  Length: 100mm Size: 2 x 2.5mm	X2 - F01AB 	Packing 3  Length: 100mm Size: 2 x 2.5mm
X2 - 01C 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - F01C 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - 01D 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - 01E 	Packing 3  Length: 300mm Size: 2 x 2.5mm
X2 - F01D 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - 01E 	Packing 3  Length: 300mm Size: 2 x 2.5mm	X2 - F01J 	Packing 3  Length: 300mm Size: 2 x 2.5mm	X2 - F01K 	Packing 3  Length: 100mm Size: 2 x 2.5mm
X2 - F01K 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - 02A 	Packing 3  Length: 100mm Size: 2 x 2.5mm	X2 - 03A 	Packing 3  Length: 100mm Size: 2 x 2.5mm		

\* Black &amp; White and Red &amp; Black colour available

**CONNECTOR COMBO**

X2 - F03C  Length: 100mm Size: 2 x 2.5mm	Packing 3	X2 - F03F  Length: 100mm Size: 2 x 2.5mm	Packing 3	X2 - 04F  Length: 100mm Size: 2 x 2.5mm	Packing 3
FX1 - FX2  Length: 1800mm Size: 2 x 1.8mm	Packing 2	04A - FX2  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04A - CP1  Length: 1800mm Size: 2 x 2.5mm	Packing 2
04A - FCP1  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04A - 8XC2  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04A - 01F  Length: 1800mm Size: 2 x 2.5mm	Packing 2
04B - FX2  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04B - CP1  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04B - FCP1  Length: 1800mm Size: 2 x 2.5mm	Packing 2
04B - 8XC2  Length: 1800mm Size: 2 x 2.5mm	Packing 2	04B - 01F  Length: 1800mm Size: 2 x 2.5mm	Packing 2	CP1 - 8XC2  Length: 1800mm Size: 2 x 2.5mm	Packing 1
CP1 - 01F  Length: 1800mm Size: 2 x 2.5mm	Packing 1	CP1 - FCP1  Length: 1800mm Size: 2 x 2.5mm	Packing 1	01E - 8XC2  Length: 1800mm Size: 2 x 2.5mm	Packing 2
Packing 1 01F - 8XC2 Length: 1800mm Size: 2 x 2.5mm 	Packing 1	Packing 1 C1F - FCP1 Length: 1800mm Size: 2 x 2.5mm 	Packing 1	01D - 01F  Length: 300mm Size: 2 x 2.5mm	Packing 2
01D - 01D  Length: 100mm Size: 2 x 2.5mm	Packing 3	01D - F01C  Length: 100mm Size: 2 x 2.5mm	Packing 3	01D - 01E  Length: 300mm Size: 2 x 2.5mm	Packing 3

\* Black &amp; White and Red &amp; Black colour available

**MW 229****POLARITY CHECKER**

This polarity checker is able to determine the output polarity of power supply or charger. It can check both AC and DC output voltage polarity.

Input: 3-15VAC/DC  
 Dimension: 50 x 38 x 20mm  
 Packing: Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	25	23.4	39 x 31 x 67	0.0081	70370

**MW X-15**

Plug Set of Minwa Detachable Plug System (Straight)  
 It consists of the following output detachable plugs:

A, B, C, D, E, F, G, H, I, J, M, N, P, Q, R, S  
 Dimension: 67 x 65 x 50mm  
 Packing: Individual colour giftbox

A	2.5mm	E	5.5x2.1mm	I	4.0x1.7mm	P	5.5x2.8mm
B	3.5mm	F	5.0x2.5mm	J	4.75x1.75mm	Q	6.3x3.0mm
C	3.0x1.0mm	G	5.5x2.5mm	M	5.0x1.5mm	R	7.0x1.0mm
D	5.0x2.1mm	H	3.5x1.35mm	N	5.5x1.5mm	S	2.35x0.78mm

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
100	200	24.2	22.2	56 x 31 x 39	0.0677	84200

**Minwa X Plug Series**

The Following detachable X plugs can be sold alone.  
 Packing: Individual slide blister

Dimension:

MWXA	2.5mm	MWXF	5.0x2.5mm	MWXN	5.5x1.5mm
MWXB	3.5mm	MWXG	5.5x2.5mm	MWXP	5.5x2.8mm
MWCX	3.0x1.0mm	MWXH	3.5x1.35mm	MWXQ	6.3x3.0mm
MWXD	5.0x2.1mm	MWXI	4.0x1.7mm	MWXR	7.0x1.0mm
MWXD1	5.0x2.1mm	MWXJ	4.75x1.75mm	MWXS	2.35x0.75mm
MWXE	5.5x2.1mm	MWXM	5.0x1.5mm	MWXU	5.0x3.4x1.0mm

**MW 8XC2****POPULAR COMBO OF X PLUG SET**

This is one of the popular output plug sets in the market.  
 It consists of the followings:

Dimension:

A	2.5mm	D	5.0x2.1mm	H	3.5x1.35mm	N	5.5x1.5mm
B	3.5mm	G	5.5x2.5mm	I	4.0x1.7mm	S	2.35x0.78mm



\* We are welcome for any specific combinations upon your request.  
 Please feel free to contact our sales representatives.

Packing: Individual slide blister

**Minwa Plug Series**

The Following detachable plugs can be sold alone.

Packing: Individual plastic bag

Dimension: Refer to Minwa plug - Pg. 180 - 185





# Travel Voltage Accessories

Our full range of **Travel Voltage Accessories** is your Companion when you travel abroad

We offer a wide range of plug converters which are fit for using in different countries. Our Traveler series comes with different changeable input plugs for using worldwide. We also have a list of step-up / step-down AC/AC converters for those who need to use their appliances with different mains voltage. The DC/AC power inverter series is available to convert DC power to AC power when you are using electronic appliances in vehicles.



**MW M3GT****TRAVEL PLUG**

- From Multi-Plug
- To Multi-Plug
- With 4 changeable input plugs

Dimension: 68 x 51 x 36mm  
Packing Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	11.1	9	56x49x34	0.0933	15000

**MW MS3GT****SWITCHING ADAPTOR WITH PLUG CONVERTER**

- Combo with MW M3GT & MW SU10

Dimension: 68 x 51 x 60mm  
Packing Individual clamshell blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	14.3	11.30	80x40x38	0.1216	11500

**MW SU10****SWITCHING ADAPTOR**

- 1000mA (max)
- With USB outlet
- Plug-in

Input voltage: 100-240VAC ~ 60/50Hz  
Output voltage: 5VDC  
Charging current: 1000mA(max.)  
Dimension: 51.8 x 56.6 x 32.2mm  
Packing Individual clamshell blister



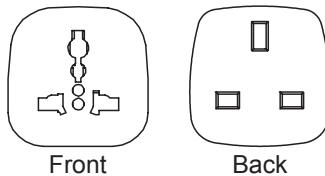
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	50	5	4	55x33x28	0.0508	27550



**MW K6M****PLUG CONVERTER**

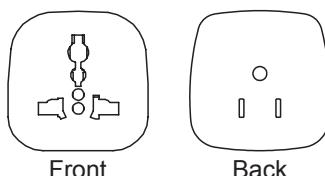
- From UK Plug
- To U / UK / AF / SAA Plug
- Built-in current fuse

Dimension: 50.3 x 49.8 x 55.5mm  
 Packing Individual slide blister

**MW F6M****PLUG CONVERTER**

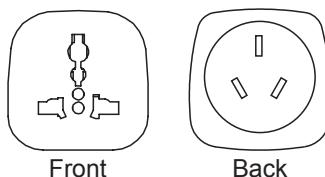
- From AF Plug
- To U / UK / AF / SAA Plug

Dimension: 50.3 x 49.8 x 53.3mm  
 Packing Individual slide blister

**MW SAA6M****PLUG CONVERTER**

- From SAA Plug
- To U / UK / AF / SAA Plug

Dimension: 55 x 55 x 56mm  
 Packing Individual slide blister



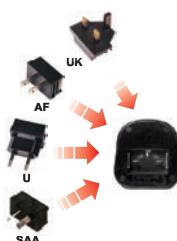
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	-	-	-	-	-	-

**MW M2T****TRAVEL PLUG**

- From U / UK / AF / SAA Plug
- To Multi-Plug
- With 4 Changeable input Plugs

This converter plug is fit for people who travel abroad. It can change British (UK), American (AF), Australian (SAA) and European (U) plugs to Multi- plug. With this plug, people can use their appliances in many countries.

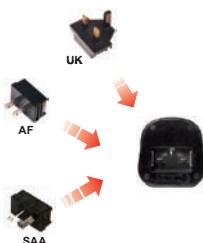
Dimension: 68 x 65.3 x 33mm  
Packing Individual clamshell blister

**MW FU2T****TRAVEL PLUG**

- From UK / AF / SAA Plug
- To U Plug
- With 3 Changeable input Plugs

This converter plug is fit for people who travel abroad. It can change British (UK), American (AF) and Australian(SAA)plugs to European(U) plug. With this plug, people can use their appliances in many countries.

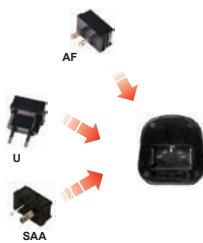
Dimension: 66 x 65.3 x 33mm  
Packing Individual clamshell blister

**MW FK2T****TRAVEL PLUG**

- From AF / SAA / U Plug
- To UK Plug
- With 3 Changeable input Plugs

This converter plug is fit for people who travel abroad. It can change European (U), American (AF) and Australian(SAA) to British (UK) plug. With this plug, people can use their appliances in many countries.

Dimension: 66 x 65.3 x 33mm  
Packing Individual clamshell blister



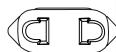
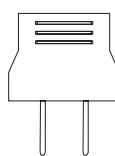
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	40	8.5	6.4	46 x 40 x 34	0.0626	18200

**MW F2FR****PLUG CONVERTER**

- From AF Plug
- To Multi-Plug

Dimension: 36 x 13.7 x 45mm  
Packing Individual slide blister

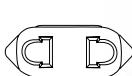
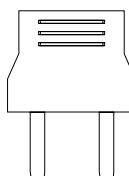
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	7.9	5.3	45 x 44 x 34	0.0673	25380

**MW R2FR****PLUG CONVERTER**

- From ROUND Plug
- To Multi-Plug

Dimension: 36 x 13.7 x 47mm  
Packing Individual slide blister

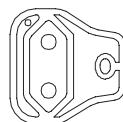
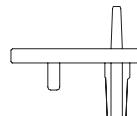
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	7.9	5.3	45 x 44 x 34	0.0673	25380

**MW K6U****PLUG CONVERTER**

- From UK Plug
- To U Plug

Dimension: 43 x 50mm  
Packing Individual slide blister

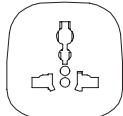
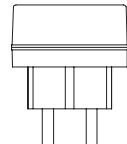
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	1.7	0.6	28 x 28 x 25	0.0193	59080

**MW V2M****PLUG CONVERTER**

- From VDE Plug
- To Multi-Plug

Dimension: 50.5 x 49.5 x 64.5mm  
Packing Individual slide blister

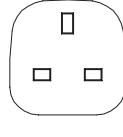
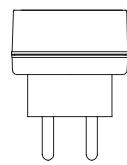
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	8.1	6.8	73 x 32 x 21	0.049	58163

**MW V5K****PLUG CONVERTER**

- From VDE Plug
- To UK Plug

Dimension: 50.5 x 50 x 65.5mm  
Packing Individual clamshell blister

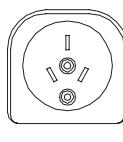
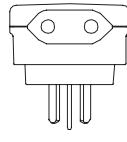
Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
30	60	5.5	3.66	46 x 35 x 25	0.0403	42420

**MW SAA2U****PLUG CONVERTER**

- From SAA Plug
- To U Plug

Dimension: 50 x 53 x 56mm  
Packing Individual slide blister

This is a plug converter and can change Australian (SAA) plug to European (U) plug.  
This is very convenient and flexible to import European (U) plugs' products to Australia.



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	7.8	5.4	43 x 34 x 48	0.0702	40600

### MW F2U

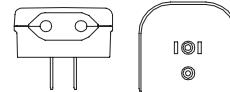


### Plug Converter

● From Flat Plug

● To U Plug

Dimension: 50 x 53 x 45mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	6.5	4.5	74 X 32 X 28	0.0663	43000

### MW K3U

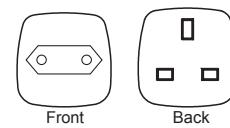


### Plug Converter

● From UK Plug

● To U Plug

Dimension: 48.5 x 48 x 66mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	5.8	42 x 36 x 41	0.0620	46000

### MW K2F

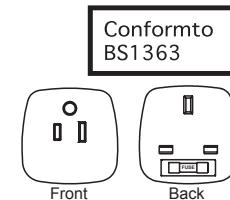


### Plug Converter

● From UK Plug

● To Three Pins Eartherd Flat Plug

Dimension: 48.24 x 48.5 x 51mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	6	40 x 31 x 41	0.0508	56100

### MW K2V

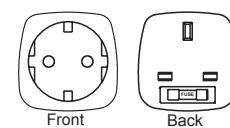


### Plug Converter

● From UK Plug

● To VDE Plug

Dimension: 48.2 x 48.5 x 65.5mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	9	7	42 x 35 x 41	0.0603	47300

### MW U2K

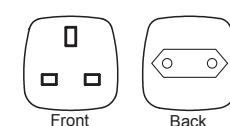


### Plug Converter

● From U Plug

● To UK Plug

Dimension: 48.5 x 48 x 66mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	7	4.9	40 x 46 x 43	0.0619	46000

### MW SAA2K

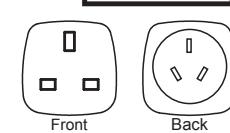


### Plug Converter

● From SAA Plug

● To UK Plug

Dimension: 48 x 48.5 x 56.8mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	7.5	5.5	40 x 31 x 41	0.0508	56100

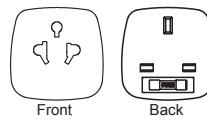
### MW K2M



### Plug Converter

- From UK Plug
- To Multi-Plug

Dimension: 48 x 48.5 x 51mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

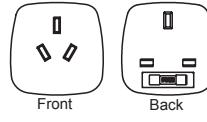
### MW K2SAA



### Plug Converter

- From UK Plug
- To Three Pins Earthed SAA Plug

Dimension: 48 x 48.5 x 51mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

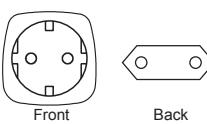
### MW U2V



### Plug Converter

- From U Plug
- To VDE Plug

Dimension: 48.5 x 48 x 75mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

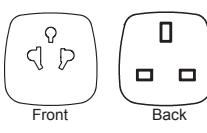
### MW K3M



### Plug Converter

- From UK Plug
- To Multi-Plug

Dimension: 51 x 49 x 61mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

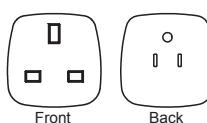
### MW F2K



### Plug Converter

- From Flat Plug
- To UK Plug

Dimension: 48.24 x 48.5 x 48.5mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

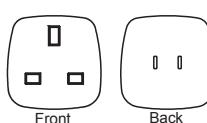
### MW F3K



### Plug Converter

- From Flat Plug
- To UK Plug

Dimension: 48 x 48.5 x 44mm  
Packing Individual slide blister



Front Back

Conformto  
BS1363

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	6	4.3	41 x 27 x 41	0.0454	62800

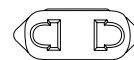
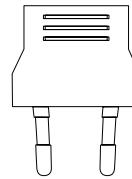
### MW U2FR



### Plug Converter

- From U Plug
- To All 2-pin Plug

Dimension: 35.3 x 14.5 x 47mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
50	100	3.6	2.0	30 X 26 X 22	0.0172	165697

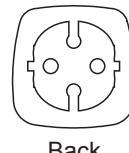
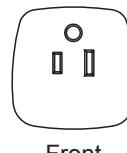
### MW V2F



### Plug Converter

- From VDE Plug
- To Three Pins Earthed Flat Plug

Dimension: 48.5 x 49 x 66mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	4.3	28 x 28 x 38	0.0298	95637

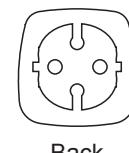
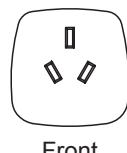
### MW V2SAA



### Plug Converter

- From VDE Plug
- To Three Pins Earthed Australian Flat Plug

Dimension: 49 x 50 x 65mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	40	8	6	28 x 28 x 39	0.0298	95637

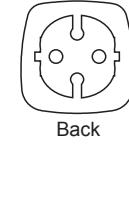
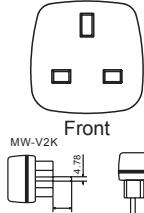
### MW V2K



### Plug Converter

- From VDE Plug
- To UK Plug

Dimension: 48 x 48.5 x 65mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	6	40 x 31 x 41	0.0508	56100

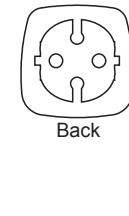
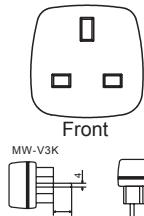
### MW V3K



### Plug Converter

- From VDE Plug
- To UK Plug

Dimension: 48 x 48.5 x 65mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	6	40 x 31 x 41	0.0508	56100

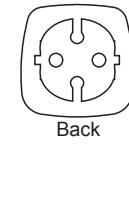
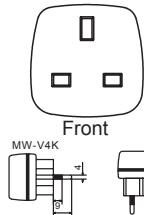
### MW V4K



### Plug Converter

- From VDE Plug
- To UK Plug

Dimension: 48 x 48.5 x 65mm  
Packing Individual slide blister



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
25	100	8	6	40 x 31 x 41	0.0508	56100

**MW 2P030****AC/AC VOLTAGE CONVERTER**

- **30W**
- **Plug-in**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 30W  
 Dimension: 84 x 56 x 82mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	15	13.9	44 x 20 x 29	0.0255	44720

**MW 2P045****AC/AC VOLTAGE CONVERTER**

- **45W**
- **Plug-in**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 45W  
 Dimension: 88 x 62 x 88mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	12.5	19.5	48 x 44 x 33	0.0697	16356

**MW 2P075****AC/AC VOLTAGE CONVERTER**

- **75W**
- **Desktop**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 75W  
 Dimension: 77 x 54 x 61mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	18.8	17.5	40 x 34 x 26	0.0354	16100

**MW 2P100****100W AC/AC VOLTAGE CONVERTER****● Desktop**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 100W  
 Dimension: 115 x 84 x 68.7mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	27	25.6	42 x 38 x 28	0.0447	12760

**MW 2P200****200W AC/AC VOLTAGE CONVERTER****● Desktop**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 200W  
 Dimension: 198 x 136 x 101 mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	15.2	14.3	62 x 26 x 18	0.0290	4913

**MW 2P300****300W AC/AC VOLTAGE CONVERTER****● Desktop**

Input Voltage 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 300W  
 Dimension: 198 x 136 x 101 mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18.5	17.5	62 x 26 x 17	0.0274	5200

**MW 2P1000****1000W AC/AC VOLTAGE CONVERTER****● Desktop**

Input Voltage 230VAC 50Hz  
 Output Voltage: 2 x 110VAC  
 Rated Load: 800W  
 Maximum Load: 1000W  
 Dimension: 235.5 x 156.5 x 122mm  
 Packing: Individual colour giftbox

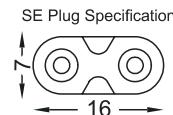


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	2	18.2	17.4	37 x 26 x 44	0.0423	1346

**MW 2P030SE****AC/AC VOLTAGE CONVERTER**

- Plug-in
- 30W

Input Voltage: 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 30W  
 Dimension: 67 x 50 x 79.7mm  
 Packing: Individual colour giftbox

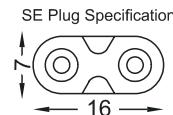


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
24	48	20	19	39 x 21 x 40	0.0328	41664

**MW 2P045SE****AC/AC VOLTAGE CONVERTER**

- Plug-in
- 45W

Input Voltage: 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 45W  
 Dimension: 75 x 58 x 86.5mm  
 Packing: Individual colour giftbox

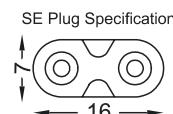


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
16	32	17.4	16.3	41 x 21 x 32	0.0275	33152

**MW 2P075SE****AC/AC VOLTAGE CONVERTER**

- Desktop
- 75W

Input Voltage: 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 75W  
 Dimension: 100 x 72 x 62mm  
 Packing: Individual colour giftbox

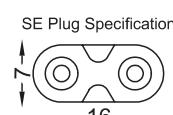


Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
12	24	24.2	22.8	48 x 36 x 27	0.0466	14664

**MW 2P100SE****AC/AC VOLTAGE CONVERTER**

- Desktop
- 100W

Input Voltage: 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 100W  
 Dimension: 110 x 84 x 70mm  
 Packing: Individual colour giftbox



Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
8	16	22	20.5	37 x 34 x 29	0.0365	12480

### MW 1630



### AC/AC Voltage Converter



- Step Down ● 30/1600W
- Plug-in

Input Voltage: 230VAC  
 Output Voltage: 110VAC  
 Rated Load: 30/1600W  
 Dimension: 102 x 60 x 91mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	60	27	26	49 x 23 x 40	0.045	34780

### MW 1P045FK



### AC/AC Voltage Converter



- Step Up ● 45W
- With UK Converter Socket
- Plug-in

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 45W  
 Dimension: 104 x 65 x 73mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	27.2	26.2	49 x 22 x 39	0.0420	40714

### MW 1P045FV



### AC/AC Voltage Converter



- Step Up ● 45W
- With VDE Converter Socket
- Plug-in

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 45W  
 Dimension: 104 x 65 x 73mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	12.4	10.4	46 x 29 x 35	0.0467	24411

### MW 1P100FK



### AC/AC Voltage Converter



- Step Up ● 100W
- With UK Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 100W  
 Dimension: 130 x 84 x 67.2mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	27	25.6	42 x 40 x 29	0.0487	11704

### MW 1P100FV



### AC/AC Voltage Converter



- Step Up ● 100W
- With VDE Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 100W  
 Dimension: 130 x 84 x 67.2mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	27.2	25.5	42 x 39 x 28	0.0459	12418

### MW 1P200FK AC/AC Converter



- 200W
- Step Up
- With UK Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 200W  
 Dimension: 198 x 136 x 101mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	15	14	63 x 27 x 19	0.0323	4410

### MW 1P200FV AC/AC Converter



- 200W
- Step Up
- With VDE Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 200W  
 Dimension: 198 x 136 x 101mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	15.1	13.9	63 x 26 x 19	0.0311	4581

### MW 1P300FK AC/AC Converter



- 300W
- Step Up
- With UK Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 200W  
 Dimension: 198 x 136 x 101mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18.6	17.6	63 x 27 x 19	0.0323	4410

### MW 1P300FV AC/AC Converter



- 300W
- Step Up
- With VDE Converter Socket
- Desktop

Input Voltage: 110VAC  
 Output Voltage: 230VAC  
 Rated Load: 300W  
 Dimension: 198 x 136 x 101mm  
 Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	15.4	17.5	62 x 25 x 19	0.0295	4830

## Voltage Converter

### MW 3P045



### MW 3P070



### MW 3P100



### MW 3P150



### MW 3P300



### MW 3P500



## AC/AC Voltage Converter

### ● 45W

### ● Plug-in

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 45W  
Dimension: 84 x 56 x 82mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	15.5	14.2	45 X 20 X 30	0.027	42222

## AC/AC Voltage Converter

### ● 70W

### ● Plug-in

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 70W  
Dimension: 88 x 62 x 88mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
20	40	20.3	19	47 x 21 x 33	0.0326	34960

## AC/AC Voltage Converter

### ● 100W

### ● Desktop

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 70W  
Dimension: 77 x 54 x 61mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	18.3	17.0	36 x 28 x 27	0.0272	20956

## AC/AC Voltage Converter

### ● 150W

### ● Desktop

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 150W  
Dimension: 115 x 84 x 68.7mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
10	20	28.5	27.5	42 x 37 x 28	0.0435	13103

## AC/AC Voltage Converter

### ● 300W

### ● Desktop

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 300W  
Dimension: 198 x 136 x 101mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	15.0	14.0	62 x 26 x 18	0.029	4319

## AC/AC Voltage Converter

### ● 500W

### ● Desktop

Input Voltage: 230VAC  
Output Voltage: 110VAC  
Rated Load: 500W  
Dimension: 198 x 136 x 101mm  
Packing Individual colour giftbox

Pcs per Inner Ctn.	Pcs per Exp. Ctn.	Gross Weight (kg)	Net Weight (kg)	Dimension (cm)	CBM	Pcs per 20' Container
-	5	18.5	17.5	62 x 26 x 18	0.0129	11046

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53011	156	MW 1221GS/5AA2	114	MW 1297-3GS/15AA2	117	MW 2201GS	149	MW 501UK	62	MW 8878GS	101	MW S1928GS	57		
55007	156	MW 1222-1GS	106	MW 1297-4GS	109	MW 221	158	MW 501GS	63	MW 88GS	71	MW S27	73		
CM1000AAA	137	MW 1222-1GS/7AA4	114	MW 1297-4GS/18AA2	117	MW 222	173	MW 5798N	95	MW 895GS	69	MW S28	74		
CM1000AAA-4	138	MW 1222-2GS	106	MW 1297-5GS	109	MW 223	173	MW 5898/12AA4	118	MW 8988	94	MW S693GS	61		
CM1200AA	137	MW 1222-2GS/12AA4	114	MW 1297-5GS/20AA2	117	MW 224	173	MW 5898/7AA4	118	MW 898GS	111	MW S70GS	62		
CM1200AA-4	138	MW 1222-3GS	106	MW 1297GS	109	MW 2270TGS	92	MW 5898GS	103	MW 898(A)	90	MW S716GS	63		
CM1500AA	137	MW 1222-3GS/15AA4	114	MW 1297GS/5AA2	117	MW 2270TGS/18AA4	92	MW 5168V	168	MW 8U2	122	MW S8113GS	60		
CM1500AA-4	138	MW 1222-4GS	106	MW 1298-1GS	109	MW 2271	149	MW 6168VD	169	MW 8X2	186	MW S8210GS	64		
CM1600AA	137	MW 1222-4GS/18AA4	114	MW 1298-1GS/7AA4	117	MW 2272	147	MW 6169VTD	169	MW 9110GS	64	MW S8211GS	59		
CM1600AA-4	138	MW 1222-5GS	106	MW 1298-2GS	109	MW 2273	149	MW 6178(A)	83	MW 9112GS	65	MW S827GS	59		
CM1800AA	137	MW 1222-5GS/20AA4	114	MW 1298-2GS/12AA4	117	MW 2276	148	MW 6178(A)/22AA4	83	MW 9115GS	65	MW S893GS	59		
CM1800AA-4	138	MW 1222GS	106	MW 1298-3GS	109	MW 2277	148	MW 6279	83	MW 9120GS	65	MW S895GS	59		
CM2000AA	137	MW 1222GS/5AA4	114	MW 1298-3GS/15AA4	117	MW 2281	148	MW 628	163	MW 9130GS	66	MW S9113GS	60		
CM2000AA-4	138	MW 1238F	86	MW 1298-4GS	109	MW 229	186	MW 6288GS	97	MW 9168GS	94	MW S9117GS	60		
CM2100AA	137	MW 1236F/18AA4	86	MW 1298-4GS/18AA4	117	MW 230	155	MW 6378	91	MW 9210GS	69	MW S9125GS	60		
CM2100AA-4	138	MW 1236GT	85	MW 1298-5GS	109	MW 2301GS	150	MW 6388	91	MW 9258GS	91	MW S9210GS	64		
CM2200AA	137	MW 1236GT/18AA4	85	MW 1298-5GS/20AA4	117	MW 231	155	MW 6398/12AA	118	MW 938GS	69	MW S9211GS	59		
CM2200AA-4	138	MW 1237F	86	MW 1298GS	109	MW 232	155	MW 6398/7AA4	118	MW 938GS	102	MW S927GS	59		
CM2300AA	137	MW 1237F/20AA4	86	MW 1298GS/5AA4	117	MW 233	155	MW 6398GS	96	MW 939GS	102	MW S935CE	61		
CM2300AA-4	138	MW 1237GT	85	MW 1299-1GS	109	MW 235	157	MW 650GS	63	MW 961AR/DR	78	MW S935GS	61		
CM2400AA	137	MW 1237GT/20AA4	85	MW 1299-1GS/7AA4	117	MW 2371	150	MW 650UK	63	MW 961CE	75	MW SAA2K	192		
CM2400AA-4	138	MW 1238F	86	MW 1299-2GS	109	MW 2373	150	MW 651GS	64	MW 96GS	70	MW SAA2U	191		
CM2500AA	137	MW 1238F/24AA4	86	MW 1299-2GS/12AA4	117	MW 238	158	MW 6678(A)	82	MW 9701	133	MW SAA6M	189		
CM2500AA-4	138	MW 1238GT	85	MW 1299-3GS	109	MW 2381	127	MW 6678(A)/25AA4	82	MW 9703	133	MW SE271	142		
CM2600AA	137	MW 1238GT/24AA4	85	MW 1299-3GS/15AA4	117	MW 250	157	MW 6698 Series	170	MW 9788GS	103	MW SO1	98		
CM2600AA-4	138	MW 1239F	86	MW 1299-4GS	109	MW 26	73	MW 6778(A)	82	MW 9801GS	134	MW SU10	48		
CM2700AA	137	MW 1239F/22AA4	86	MW 1299-4GS/18AA4	117	MW 2898GS	103	MW 6778(A)/25AA4	82	MW 9802GS	134	MW SU10	188		
CM2700AA-4	138	MW 1239GT	85	MW 1299-5GS	109	MW 2898GS/5AA4*P1	118	MW 6778(B)	82	MW 9803GS	132	MW U10230	154		
CM2800AA	137	MW 1239GT/22AA4	85	MW 1299-5GS/20AA4	117	MW 29	73	MW 6778(B)/25AA4	82	MW 9806GS	132	MW U10232	154		
CM2800AA-4	138	MW 1250GS	162	MW 1299GS	109	MW 291	161	MW 6786	164	MW 9871	134	MW U111	105		
CM2900AA	137	MW 1268(A)	93	MW 1299GS/5AA4	117	MW 292	159	MW 681AR/DR	77	MW 9872	134	MW U112	105		
CM2900AA-4	138	MW 1268(A)/Y18AA4	93	MW 12C30	113	MW 293	157	MW 681CE	75	MW 9873	133	MW U1269GS	87		
CM700AA	137	MW 1268(B)/20AA4	93	MW 12CB30CE	113	MW 298	111	MW 683GS	71	MW 9876	133	MW U220	122		
CM700AA-4	138	MW 1268(B)/22AA4	93	MW 12CPA	112	MW 2988	94	MW 6878	82	MW 9877	132	MW U2F	194		
CM850AA	137	MW 126C03GS	113	MW 1311(A)	99	MW 2988	128	MW 691AR/DR	77	MW 9878	132	MW U2K	192		
CM850AA-4	138	MW 126C05GS	113	MW 1630	198	MW 2988/14LF6	94	MW 691CE	75	MW 9901GS	129	MW U2V	193		
CM900AA	137	MW 126C08GS	113	MW 178	163	MW 2988/18AA2	94	MW 695GS	71	MW 9971	130	MW U327	147		
CM900AA-4	138	MW 126C12GS	113	MW 1798GS	103	MW 2988/18AA2	128	MW 699	97	MW 9977	130	MW U4H	98		
Connector	180	MW 126C18GS	113	MW 17GS	70	MW 2988/7AA2	128	MW 6988(A)	152	MW 9979	129	MW V2F	194		
Connector	181	MW 126C50GS	113	MW 17UK	70	MW 2988/7AA2	128	MW 6988(A)	152	MW 9979	129	MW V2K	194		
Connector	182	MW 126C03CE	113	MW 18	160	MW 2P03D	195	MW 6CPA	112	MW 9988(A)	89	MW V2M	191		
Connector	182	MW 126C05CE	113	MW 1883GS	67	MW 2P030SE	197	MW 700GS	64	MW 9988(A)	128	MW V2SA	194		
Connector combo	184	MW 126C08CE	113	MW 1895GS	67	MW 2P045	195	MW 701AR/DR	77	MW 9988(A)/22AA2	89	MW V3K	194		
Connector combo	185	MW 126C12CE	113	MW 1898GS	103	MW 2P045SE	197	MW 701CE	75	MW 9988(A)/7AA2	89	MW V4K	194		
EM2200AA	137	MW 126C18CE	113	MW 18AR/DR	77	MW 2P075	195	MW 70GS	71	MW 9988/22AA2	128	MW V5K	191		
EM2200AA	177	MW 126CB50CE	113	MW 18GS	70	MW 2P075SE	197	MW 7168	168	MW 9988/7AA2	128	MW X-15	186		
EM2200AA-4	138	MW 126CPA	112	MW 190	160	MW 2P100	196	MW 718GS	72	MW 998GS	72	NP1300SC6	178		
EM2200AA	178	MW 1270(A)	89	MW 191	160	MW 2P1000	196	MW 7198	95	MW 9996GS	131	NP1300SC6	178		
EM900AA	137	MW 1270(A)/22AA4	89	MW 192	160	MW 2P1000E	197	MW 7198	149	MW 9997	131	NP1300SC7	178		
EM900AA	177	MW 1270(B)	89	MW 192GS	67	MW 2P200	196	MW 7278-1GS	107	MW 9998	131	NP1300SC7	178		
EM900AA-4	138	MW 1270(B)/22AA4	89	MW 193	160	MW 2P300	196	MW 7278-1GS/7AA4	115	MW 902	123	NP1300SC8	178		
Laptop connector	183	MW 1271(A)	88	MW 197A	161	MW 300GS	61	MW 7278-1GS/12AA4	115	MW 8871	126	NP500AA4	178		
M1000AAA	177	MW 1271(A)/20AA4	88	MW 198	111	MW 300UK	62	MW 7278-3GS	107	MW 8872	126	NP500AA4	178		
M1000AAA-4	178	MW 1271(A)/22AA4	88	MW 1988	94	MW 301CR	100	MW 7278-3GS/15AA4	115	MW 8873	126	NP700AA8	178		
M1200AA	177	MW 1278(A)	88	MW 1988	128	MW 302CR	100	MW 7278-4GS	107	MW 8874	126	NP700AA8	178		
M1200AA-4	178	MW 1278(A)/22AA4	88	MW 1988/14LF6	94	MW 3110HC	166	MW 7278-4GS/18AA4	115	MW 8875	126	PD DC connector	146		
M1500AA	177	MW 1278(A)/24AA4	88	MW 1988/18AA2	94	MW 3168TD	169	MW 7389GS	110	MW 8876	126	RCRV3-LI	137		
M1500AA-4	178	MW 1278(A)/24AA4	88	MW 1988/7AA2	128	MW 3178CR	169	MW 7398GS	110	MW 8877	126	RCRV3-MH	137		
M1600AA	177	MW 1278(A)/24AA4	88	MW 1988/7AA2	94	MW 3187(A)	169	MW 7398GS	110	MW 8878	126	REM000AA-2	176		
M1600AA-4	178	MW 1278(A)/24AA4	88	MW 1988/7AA2	128	MW 3187TD	169	MW 7398GS	110	MW 8879	126	REM000AA-4	176		
M1800AA	177	MW 1278(A)/18AA4	93	MW 1P045F	198	MW 318V6	168	MW 7402HT	162	MW 888	126	REM000AA-4	176		
M1800AA-4	178	MW 1278(A)/18AA4	93	MW 1P045FV	198	MW 318V6D	169	MW 7398GS	110	MW 888	126	REM000AA-4	176		
M1800C	177	MW 1278(B)/20AA4	93	MW 1P100F	198	MW 3178	162	MW 7398GS/7AA8*P1	118	MW 888	126	REM2100AA	175		
M1800C-2	178	MW 1278(B)/22AA4	93	MW 1P100FV	198	MW 3178CR	100	MW 7373GS	69	MW 888	126	REM200AA-4	176		
M2000AA	177	MW 1280(A)	89	MW 2001GS	106	MW 3273	84	MW 7376	64	MW 888	126	REM4000C-2	176		
M2000AA-4	178	MW 1281-1GS	106	MW 2002GS	92	MW 3273/26AA4	84	MW 7376GS	64	MW 888	126	REM4000C-2	176		
M2200AA	177	MW 1281-1GS/7AA4	114	MW 2003-1GS	108	MW 3276	84	MW 7376GS	69	MW 888	126	REM4000C-2	176		
M2200AA-4	178	MW 1281-2GS	106	MW 2003-1GS	108	MW 3277(A)	84	MW 7376GS	69	MW 888	126	REM4000C-2	176		
M2300AA	177														



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