

PRODUCT CATALOGUE

ISO14001 • ISO9001 • SA8000 • WEEE • RoHS • REACH • FSC

2025



Minwa Electronics Co., Ltd.
Minwa Green Energy Electronics Co., Ltd.



The Industrial Park in Huizhou

MOVING FORWARD

In 2004, Minwa constructed a new industrial park in Huizhou, Guangdong with a view to further revolutionizing our development and establishing a better work-flow. The certification of SA8000, ISO9001: 2008, ISO17025 and the execution of GPMS, the new factory, which symbolizes our achievement and strong capacity to serve our customers best.

FACILITIES AND ACCOMMODATION

The new plant is fully vertically integrated. The R&D, new product development, product tests, in-house tooling, injection molding, metal stamping, cable fabrication, and coil winding departments, accommodates up to 100 production lines enabling a high flexibility in production and products competitiveness. There are more than 3,000 staff and an excellent development team specializes in different disciplines. We provide in-house training to our engineers in order to familiarize with the latest technological developments and requirements of worldwide safety standards. Our well-equipped engineering team is ready to serve our OEM/ODM customers with proficiency.



BATTERY MANUFACTURING, COPPER WIRE MANUFACTURING & PRINTING COMPANY

Pursuance of excellence in our products, we started to produce our own rechargeable Ni-Cd & Ni-MH batteries in 2008. The entire investment of the department is 1 million US dollars. The professional management team & production team persist to provide high quality batteries with low price.

LED LIGHTING

In 2010, we moved a big step to manufacture LED lighting. The passionate we are on environmental conservation, drives us to develop high energy-efficient and eco-friendly LED bulbs. Our development team makes effort on designing the new form of LED bulbs which are high quality, versatility in color and long life. Together with our copper wire manufacturing and printing company, which concentrate on equipment automation, production technique and staff training, we can take the advantage.



BETTER ENVIRONMENT FOR WORKERS

Minwa pays great attention to provide workers better working and living environment. The 7-storey worker's dormitories with a total floor area of 30,000 sqm site provides a comfortable accommodation, daily necessities, canteen, recreational and leisure facilities for up to 8,000 workers. The new plant certificated SA8000, which proves our working conditions and environment met the international standards. Minwa deposit the electronic waste properly according to WEEE and RoHS Directives.

SOCIAL RESPONSIBILITY

Minwa knows education is the best way to improve standard of living. Being a responsible social business group, we provide on-the-job training to our workers and subsidies to the establishment of schools for the Huizhou. 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 new industrial park is the milestone of excellence in Minwa's products and services.



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 also a community to the person who live there.

IMPROVING QUALITY OF LIFE

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





• Sewage water irrigation



• Supermarket



• Fresh fruit



• Web surfing center



• Solar panels at the roof

The landscape-engineering is ongoing 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.

We apply the sewage treatment system to irrigate the land. We collect the domestic and industrial used water by sewage pipes. Through the system, the water is filtered and recycled for irrigation. The make use of solar power is to reduce the use of electricity and gas but at the same time increase the living condition of our people. We set up hundreds of solar panel at the roof of every dormitory, converting solar power to heat in order to provide all-weathered hot water for the entire building. We save the environment to bless our generations



• "Back home safe" program



• Table tennis hall



• "Smart card" system



• Canteen

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.

We understand that fresh and nutritional food is good to health. Therefore we purchase fresh vegetables and fruits from the farmers nearby. 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, websurfing center and more are provided for up to 8,000 workers. We also launched the "back home safe" program to ensure those kids get back from school safely.

The new plant certificated to SA8000 & ISO 14001, which proves our working conditions and environment are met the international standards. We take pride in what we have achieved, and we shall keep improving ourselves to meet all-round success.



• Basketball match



• Fish pond nearby



• Auto patrol



• Well trained security guards



• Cycling in the park

About Us

Minwa Electronics Co., Ltd. established in 1977. Minwa has been robustly growing from a local electronics company to a leading manufacturing company of its kinds serving worldwide customers with experience, innovation and outstanding service for years.

To cater our valued customers' needs in the fast-changing market, we diversify our products ranging from OEM products, power supplies, battery chargers, electronic accessories and technological solutions. Minwa certified to ISO9001 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. Most of our products carry international approvals, such as cULus, cSAus, CE, GS, ETL, C-tick, Q#, PSE, CB scheme, e-mark, Argentina S mark, EK mark and so forth. 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. The new series complies with 2nd enforcement stage of ErP, (for EU countries), which much more rigorous than the CEC and MEPS ones. This explains our new series also complies with CEC (US market) and MEPS (Australian market).

In addition, Minwa implemented the system of ISO 14001 and acquired the SA 8000 certification, which represented our strong capacity to provide quality and environmental friendly electronic products to customers as well as a decent working environment to workers.

Pursuance of excellence in both products and services has led us forward over the past 40 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. In order to comply with the latest environmental standard, our company has already fulfilled the requirements of FSC and obtained the GRS certificate.



ISO9001:2015 Certificate



TÜV ISO 17025 Certificate



ISO 14001 Certificate



SA8000 Certificate



Words from CEO

I would like to express my gratitude to all of you.

Since the establishment of Minwa Electronics Co, Ltd in 1977, we receive numerous of love and support from our customers and suppliers, and the devoted services from our staff.

Ups and downs were along the way of these years. Experienced the economic

take-off from 70'S - 80'S, we established the foundation of the company, moved the production facilities from Hong Kong to Shanghai in 1980. This was our first factory in China. We opened our second manufacturing plant in 1982 in Shilong, Dongguan. Few years later, in 1985, there were 3 more plants opened in Tianxin, Shahe and Sunjiang. A significant movement of Minwa took place in 1989, we moved the factory to Buji, Shenzhen, further expanded our business ground wider and wide. This was a well-planned factory, with many facilities and spaces for the company growth.

The SARS and the worldwide financial crisis stroked hard in 2003 and 2008 respectively, we took the challenge and even managed to initiate a well-developed industrial park in Huizhou. On the other hand, we worked closely to suppliers and customers in order to keep the survival of all of us.

In 2008, we moved to the new plant in Huizhou in order to have enough space for the business and production expansion. We started the LED business in 2010. Following the development of car battery chargers, game consoles accessories and IOT/ Smart Home products, etc with great success. I thank again our staffs who strive to do the very best of their ability.

The European and American governments imply more and more strict regulations on electronic products in recent years. Such as establish new safety standards and frequent market surveillances. At the same time wages in China are constantly increasing years after years, which result in production cost fluctuation. We foresee these difficulties as opportunities. To strengthen products' reliability, we invest more resources to ensure that everything from raw materials to finished products is safe. The new EMC laboratory which is up to international standard is now in progress and will be expecting to put into service in 2017. The construction of two more new buildings in the factory is for the preparation of our bigger factory automation plan, which is able to solve the shortage of workers and wages problems. We will not be satisfied by this, as we want to be the best within our specialist area.

The investment of our group in Hong Kong in hotels, shopping malls and buildings are put into services from this year. 2017 is not only the 40th anniversary of Minwa Electronics Co., Ltd, but also the milestone of our real estate development.

We will continue taking up challenges. We look forward to your continuous support and guidance in the future.



USB Power AC

Notes:

GAN PD USB Charger ——— P.7 - 9

PD USB Charger ——— P.10

USB Charger ——— P.10 - 12

MW BG45

45W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C1 45W :
5.0 - 15.0V / 3.0A, 20.0V / 2.25A
Output USB-C2/C3 35W :
5.0 - 9.0V / 3.0A, 12.0V / 2.91A
15.0V / 2.33A, 20.0V / 1.75A
USB-C1/C2/C3 Compatible : PD3.0, PPS, QC4.0
Output USB-A1 18W :
5.0V / 3.0A, 9.0V / 2.0A, 12.0V / 1.5A (QC3.0)
Dimension: 62 x 52 x 31 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW BG65

65W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C1 65W :
5.0 - 15.0V / 3.0A, 20.0V / 3.25A
Output USB-C2/C3 35W :
5.0 - 9.0V / 3.0A, 12.0V / 2.91A
15.0V / 2.33A, 20.0V / 1.75A
USB-C1/C2/C3 Compatible : PD3.0, PPS, QC4.0
Output USB-A1 18W :
5.0V / 3.0A, 9.0V / 2.0A, 12.0V / 1.5A (QC3.0)
Dimension: 75 x 65 x 31 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW BG100

100W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C1 100W :
5.0 - 15.0V / 3.0A, 20.0V / 5.0A
Output USB-C2/C3 35W :
5.0 - 9.0V / 3.0A, 12.0V / 2.91A
15.0V / 2.33A, 20.0V / 1.75A
USB-C1/C2/C3 Compatible : PD3.0, PPS, QC4.0
Output USB-A1 18W :
5.0V / 3.0A, 9.0V / 2.0A, 12.0V / 1.5A (QC3.0)
Dimension: 85 x 75 x 31 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW MG30

30W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C 30W :
5.0 - 9.0V / 3.0A, 12.0V / 2.5A
15.0V / 2.0A, 20.0V / 1.5A
USB-C Compatible : PD3.0, PPS, QC4.0
Dimension: 40 x 37 x 41.3 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW MG45

45W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C 45W :
5.0 - 15.0V / 3.0A, 20.0V / 2.25A
USB-C Compatible : PD3.0, PPS, QC4.0
Dimension: 48.1 x 52 x 32 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW MG65

65W GaN PD AC/DC USB Charger

ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C 65W :
5.0 - 15.0V / 3.0A, 20.0V / 3.25A
USB-C Compatible : PD3.0, PPS, QC4.0
Dimension: 62.8 x 62.5 x 30 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW PG30A2

30W GaN PD AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C 30W :
5.0 - 9.0V / 3.0A, 12.0V / 2.5A
15.0V / 2.0A, 20.0V / 1.5A
USB-C Compatible : PD3.0, PPS, QC4.0
Output USB-A 27W :
5.0V / 3.0A, 9.0V / 3.0A,
12.0V / 2.25A, 20.0V / 1.35A (QC3.0)
Dimension: 53 x 52 x 30mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW PG45A2

45W GaN PD AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C 45W :
5.0 - 15.0V / 3.0A, 20.0V / 2.25A
USB-C Compatible : PD3.0, PPS, QC4.0
Output USB-A 27W :
5.0V / 3.0A, 9.0V / 3.0A,
12.0V / 2.25A, 20.0V / 1.35A (QC3.0)
Dimension: 53 x 52 x 30 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW PG65A4

65W GaN PD AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output USB-C1/C2 65W :
5.0 - 15.0V / 3.0A, 20.0V / 3.25A
USB-C1/C2 Compatible : PD3.0, PPS, QC4.0
Output USB-A1/A2 18W :
5.0V / 3.0A, 9.0V / 2.0A, 12.0V / 1.5A
Dimension: 65 x 65 x 30 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW PD20ASU

Compact 20W PD QC AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output:
9.0V / 2.22; 5.0V / 3.0A (PD)
3.6-6.5V / 3.0A; 6.5-9.0V / 2.0A; 9.0-12.0V / 1.5A (QC)
1 x USB-C
Dimension: 29.6 x 37 x 34 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available

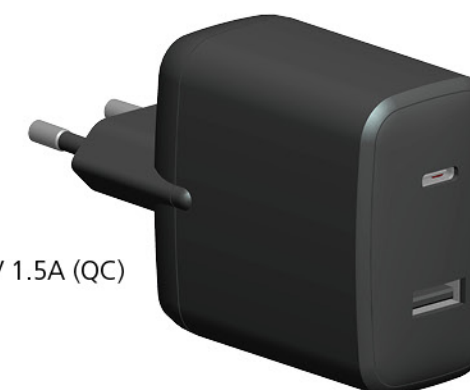


MW PD30AU

30W PD QC AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output Channel 1 (USB-C):
9.0V / 2.22; 5.0V / 3.0A (PD)
3.6-6.5V / 3.0A; 6.5-9.0V / 2.0A; 9.0-12.0V / 1.5A (QC)
Output Channel 2 (USB-A): 5.0V / 2.4A
1 x USB-C
1 x USB-A
Dimension: 57 x 35.5 x 55 mm



Made for
iPhone | iPad | iPod



Japan version, US version,
UK version & SAA version available



MW U05AU

5W AC/DC USB Charger

Erp 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

Input voltage: 100-240V AC
Output: 5.0V / 1.0A
1 x USB-A
Dimension: 40 x 26.5 x 45 mm



Made for
iPhone | iPad | iPod

MW U05AUK



UK plug version



Japan version, US version,
UK version & SAA version available



MW CA15W

15W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level Ⅴ

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 3.4A (Shared by 3)

1 x USB-C

2 x USB-A

LED indication

Dimension: 54 x 52 x 27 mm



Japan version, US version,
UK version & SAA version available



MW CA40W

40W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level Ⅴ

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 8.0A (Shared by 5)

1 x USB-C

4 x USB-A

LED indication

Dimension: 72 x 60 x 30 mm



Japan version, US version,
UK version & SAA version available



MW USB12AU

12W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level Ⅴ

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 2.4A

1 x USB-A

Dimension: 35.7 x 34 x 32 mm



Japan version, US version,
UK version & SAA version available



MW USB12AU-2

12W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level Ⅴ

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 2.4A (Shared by 2)

2 x USB-A

Dimension: 45 x 30 x 45 mm



Japan version, US version,
UK version & SAA version available



MW USB24AU

24W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level Ⅴ

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 4.8A (Shared by 2)

2 x USB-A

Dimension: 70.3 x 50 x 35.3 mm



Japan version, US version,
UK version & SAA version available



USB Power DC

Notes:

PD DC/DC USB Charger — P.14 - 15
DC/DC USB Charger — P.16

MW PD20D

20W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC

Output: 5.0V/3.0A; 9.0V/2.22A

Dimension: 30 x 28 x 67 mm



Made for
iPhone | iPad | iPod



Qualcomm
Quick Charge
compatible



iBz-PD29DC

29W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC

Output (PD):

5.0V/3.0A; 9.0V/2.22A; 14.5V/2A

Output (QC):

3.6-6.5V/3.0A; 6.5-9.0V/2.0A;

9.0-12.0V/1.5A

LED indication: Blue LED

Dimension: 69 x 38.2 x 28.6 mm



Made for
iPhone | iPad | iPod



Qualcomm
Quick Charge
compatible



MW PD30D

30W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC

Output (Channel 1 – USB-C):

5.0V/3.0A; 9.0V/2.22A

Output (Channel 2 – USB-A):

5.0V/2.4A

Dimension: 32 x 28 x 69.5 mm



Made for
iPhone | iPad | iPod



Qualcomm
Quick Charge
compatible



MW PD60D

60W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC
Output (Channel 1 – USB-C):
5.0, 9.0, 12.0V/3.0A; 20.0V/1.8A
Output (Channel 2&3 – USB-A):
5.0V/4.8A (Shared by 2)
Dimension: 37 x 37 x 58 mm



Made for
iPhone | iPad | iPod



MW PD40D1

40W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC
Output (PD – USB-C):
5.0V/3.0A; 9.0V/2.22A; 14.5V/1.25A
Output (QC – USB-C):
3.6-6.5V/3.0A; 6.5-9.0V/2.0A; 9.0-12V/1.5A
Output (Channel 2&3 – USB-A):
5.0V/4.4A (Shared by 2)
LED indication: Blue LED
Dimension: 75 x 42 x 28.6 mm



Made for
iPhone | iPad | iPod



MW PD40D2

40W Power Delivery USB-C DC/DC Charger

Input: 12-24V DC
Output (PD – USB-C):
5.0V/3.0A; 9.0V/2.22A; 14.5V/1.25A
Output (QC – USB-C):
3.6-6.5V/3.0A; 6.5-9.0V/2.0A; 9.0-12V/1.5A
Output (Channel 2&3 – USB-A):
5.0V/2.0A (Shared by 2)
LED indication: Blue LED
Dimension: 75 x 42 x 28.6 mm



Made for
iPhone | iPad | iPod



MW USB12D

12W USB DC/DC Charger

Input: 12-24V DC
Output: 5.0V/2.4A (Shared by 2)
Dimension: 24 x 24 x 48.5 mm



MW USB24D

24W USB DC/DC Charger

Input: 12-24V DC
Output (Channel 1): 5.0V/2.4A
Output (Channel 2): 5.0V/2.4A
Dimension: 30 x 28 x 67 mm



MW DU1

3000mA DC/DC Converter w/ USB outlet

Input: 12-13.8V DC
Output: 3.0, 4.5, 5.0, 6.0, 7.5, 9.0, 12.0V/3.0A
Output (USB): 5.0V/1.0A
Output plug: 6XC
LED indication: Power LED
Dimension: 76.2 x 80 x 33mm



MFi & Cable

Made for
iPhone | iPad | iPod

Made for
iPhone | Apple Watch

One-stop Solution

As an official licensee of MFi program, all electronic accessories we produce for iPod, iPhone, iPad are officially approved by Apple Inc. with the license "Made for iPod/iPhone/iPad".

Customers simply choose the items from our MFi series, that particular items going to sell are entitled legally. Customers are allowed to use the MFi logo not only on the packaging but also on different promotions such as online, leaflets, catalogues, etc. without paying extra money but increase the market value. With the authorization of using this well-known logo, end users are easy to recognize and differentiate the licensed items from those copy cats.

Many consumer electronic magazines are also recommended end users to buy Apple accessories with this particular MFi logo as a kind of quality assurance.

OEM/ ODM with MFi License

Other than buying directly from our MFi series, we entitle to proceed the MFi certification of the items in customers' own brand.

Our experienced and strong engineering and design team is ready to develop new items together with customers. Throughout the years, we successfully completed many ODM projects with MFi license.

Contact our sales persons for details
or email to: sales@minwa.com.hk

Lightning to USB-C Cable P.18

USB-C to USB-C Cable P.18

MW iBz-200PD

Lightning to USB-C Cable

Input voltage: 20V DC
Output voltage: 20V DC
Cable Length: 1m

Made for
iPhone | iPad | iPod



MW CB23-B300

USB-C to USB-C Aluminum Braided Cable

USB Data & Charge

Input voltage: 5.0V DC
Output voltage: 5.0V DC
Cable Length: 1m



USB TypeC



Automobile Power

Notes:

- Jump Starter** **P.20**
- Automotive Battery Chargers** **P.21 - 31**
- Marine Battery Chargers** **P.32 - 33**
- Outputs Switching Hub** **P.34**
- Battery Status Indicator** **P.35**
- Lead Acid Battery Charger** **P.35 - 36**
- DC/AC Inverters** **P.36**

MW JS2000 **New**

2000A Portable Jump Starter

Input DC: 12.0V / 1.5A (20W PD); 20.3V / 3.0A (61W PD)

Battery voltage : 14.8V

Capacity : 3750mAh

Recharging time : 12.0V / 1.5A Est. 6hrs

20.3V / 3.0A Est. 2hrs

Output current: 2000A Peak

Output voltage: 12.0V-16.8V

Torch function: 300 lumens LED (Ultra bright white)

Insulation: IP44

LED indication

Dimension: 253 x 173 x 186.3mm

Protection:

- ✓ Over voltage protection
- ✓ Over current protection
- ✓ Short circuit protection
- ✓ Reverse battery protection
- ✓ Over and Under temperture protection



Car Battery
Voltage Display



Torch Function



LED Indication



Operation	LED1	LED2	LED3	N/A
Temp.: 0-45°C	Green, on	--	--	
Temp.: 45-60°C or -20-0°C	Blue, on	--	--	
Over or Under Temp.: >60°C or <-20°C	Red, flash	--	--	
Booster mode	--	--	Green, on	
Override mode	--	--	Blue, on	
Error (wrong polarity connection, short output, out of voltage range)	--	Red, on	--	
Booster battery voltage (VB) under charging indication	LED4	LED5	LED6	LED7
VB<25%	Red (flash)	Red (off)	Orange (off)	Green (off)
25%≤VB<50%	Red (on)	Red (flash)	Orange (off)	Green (off)
50%≤VB<75%	Red (on)	Red (on)	Orange (flash)	Green (off)
75%≤VB<100%	Red (on)	Red (on)	Orange (on)	Green (flash)
= 100%	All on			
Booster battery voltage (VB) under capacity indication	LED4	LED5	LED6	LED7
VB<25%	Red (flash)	Red (off)	Orange (off)	Green (off)
25%≤VB<50%	Red (on)	Red (off)	Orange (off)	Green (off)
50%≤VB<75%	Red (on)	Red (on)	Orange (off)	Green (off)
75%≤VB<100%	Red (on)	Red (on)	Orange (on)	Green (off)
= 100%	All on			

MW LB260 PRO New

26A 12V / 16V / 24V 10 steps Intelligent Battery Charger
13.6V Power Supply with CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input Voltage: 220-240V ~ 50Hz 2.5A
Charge Voltage:
Normal – 14.4 / 28.8V DC
Cold/AGM – 14.7 / 29.4V DC
16V AGM Racing – 19.6V DC
16V LITHIUM Racing – 19.0V DC
13.6V Power Supply – 13.6V DC
Charge Current:
26.0A for 12V Battery
19.5A for 16V Battery 13.0A for 24V Battery
5.0A for 13.6V Power Supply
Housing Protection: IP65
Dimension: L321 x W144.5 x D83.5mm

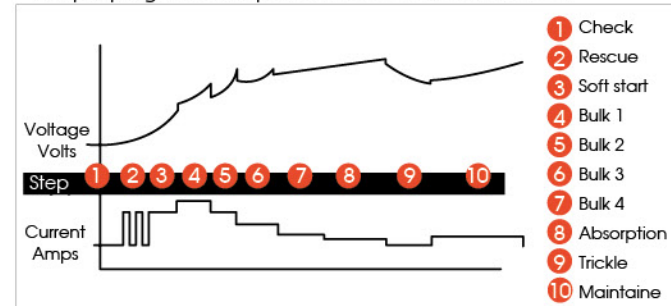
Protection:
✓ Short circuit protection
✓ High Battery Voltage Protection
✓ Over Temperature Protection
✓ Reversed Polarity Protection
✓ Safety timer protection



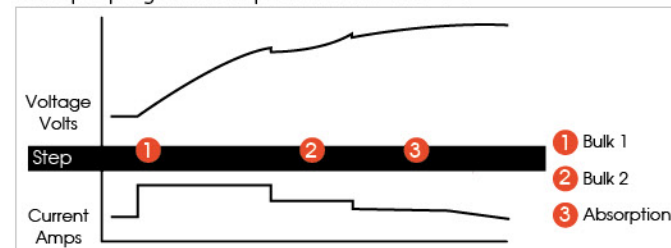
*Compatible with BT30 PRO
Details on Page 35

Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours at Pb battery modes. 5. Battery voltage>28V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery Flashing with different no. of bars, 5 bars means fully charged. Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
	Mode selected: 12V Lead acid battery (regular capacity)	On
	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
LITHIUM 12.8V	Mode selected: Lithium iron phosphate battery	On
RECOVER 12V	Mode selected: Recover 12V Lead acid battery	On
	Mode selected: AGM+ battery	On
SMPS 13.6V	Mode selected: Power supply	On
	Mode selected: extra high charging current30A and charge the battery 5mins	On
	Mode selected: 16V LITHIUM Racing	On
AGM 16V	Mode selected: 16V AGM Racing	On
	Mode selected: 12V Silent Night Mode (For 12V battery only)	Flashing
Ble	Bluetooth APP control function	On

Principle programme representation 12V/ 16V/ 24V Pb



Principle programme representation LiFePO4



MW LB150 PRO New

15A 12V / 24V 10 steps Intelligent Battery Charger
13.6V Power Supply with CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input Voltage: 220-240V ~ 50Hz 2.0A
Charge Voltage:
Normal – 14.4 / 28.8V DC
Cold/AGM – 14.7 / 29.4V DC
13.6V Power Supply – 13.6V DC
Charge Current:
15.0A for 12V Battery
7.5A for 24V Battery
5.0A for 13.6V Power Supply
Housing Protection: IP65
Dimension: 279.3 x 119 x 76.6mm

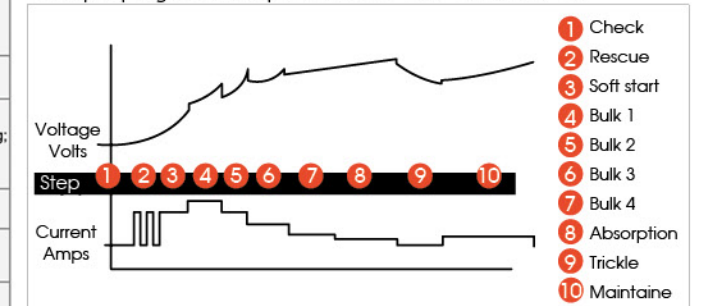
Protection:
✓ Short circuit protection
✓ High Battery Voltage Protection
✓ Over Temperature Protection
✓ Reversed Polarity Protection
✓ Safety timer protection



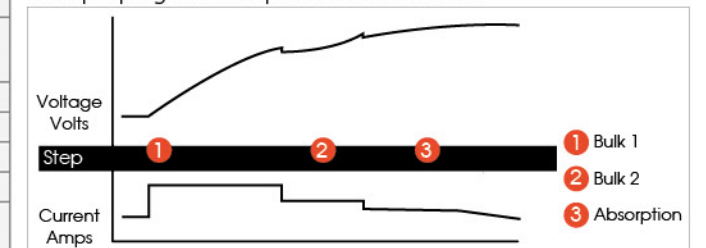
*Compatible with BT30 PRO
Details on Page 35

Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours at Pb battery modes. 5. Battery voltage>28V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery Flashing with different no. of bars, 5 bars means fully charged. Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
	Mode selected: 12V Lead acid battery (regular capacity)	On
	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
	Mode selected: extra high charging current 20A and charge the battery 5 mins	On
LITHIUM 12.8V	Mode selected: Lithium iron phosphate battery	On
RECOVER 12V	Mode selected: Recover 12V Lead acid battery	On
	Mode selected: AGM+ battery	On
SMPS 13.6V	Mode selected: Power supply	On
Ble	Bluetooth APP control function	On

Principle programme representation 12V/ 16V/ 24V Pb



Principle programme representation LiFePO4



MW LB100 PRO New

10A 12V / 24V 10 steps Intelligent Battery Charger

13.6V Power Supply with CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input Voltage: 220-240V ~ 50Hz 1.5A

Charge Voltage:

Normal – 14.4 / 28.8V DC

Cold/AGM – 14.7 / 29.4V DC

13.6V Power Supply – 13.6V DC

Charge Current:

10.0A for 12V Battery

5.0A for 24V Battery

5.0A for 13.6V Power Supply

Housing Protection: IP65

Dimension: 245.7 x 102.2 x 58.8 mm

Protection:

- ✓ Short circuit protection
- ✓ High Battery Voltage Protection
- ✓ Over Temperature Protection
- ✓ Reversed Polarity Protection
- ✓ Safety timer protection

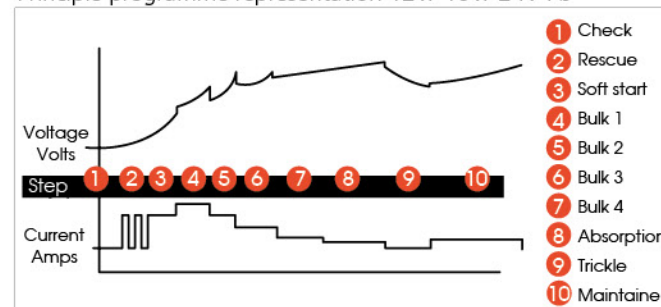


*Compatible with BT30
Details on Page 34

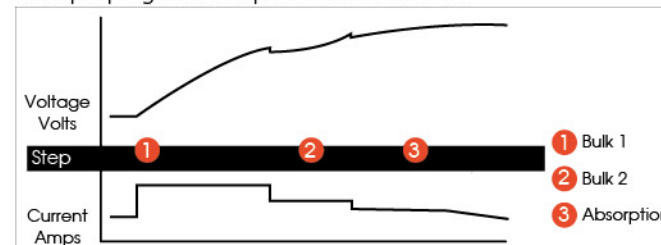


Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours at Pb battery modes. 5. Battery voltage>28V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery Flashing with different no. of bars, 5 bars means fully charged. Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
	Mode selected: 12V Lead acid battery (regular capacity)	On
	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
LITHIUM 12.8V	Mode selected: Lithium iron phosphate battery	On
RECOVER 12V	Mode selected: Recover 12V Lead acid battery	On
	Mode selected: AGM+ battery	On
SMPS 13.6V	Mode selected: Power supply	On
	Mode selected: 12V Small	On
	Mode selected: 12V Small Cold/AGM	On
Ble	Bluetooth APP control function	On

Principle programme representation 12V/ 16V/ 24V Pb



Principle programme representation LiFePO4



MW LB60 New

6.0A 6V / 12V 10 steps Intelligent Battery Charger

13.6V Power Supply with CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input Voltage: 220-240V ~ 50Hz 1.0A

Charge Voltage:

Normal – 7.3 / 14.5V DC

Cold/AGM – 7.4 / 14.7V DC

13.6V Power Supply – 13.6V DC

Charge Current:

Small – 0.9A

Normal – 6.0A

6.0A for 13.6V Power Supply

Housing Protection: IP65

Dimension: 245.7 x 102.2 x 58.8 mm

Protection:

- ✓ Short circuit protection
- ✓ High Battery Voltage Protection
- ✓ Over Temperature Protection
- ✓ Reversed Polarity Protection
- ✓ Safety timer protection

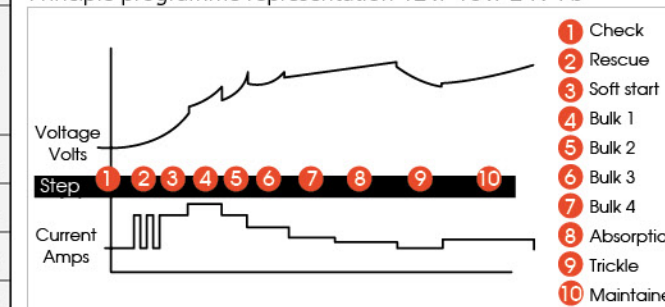


*Compatible with BT30
Details on Page 34

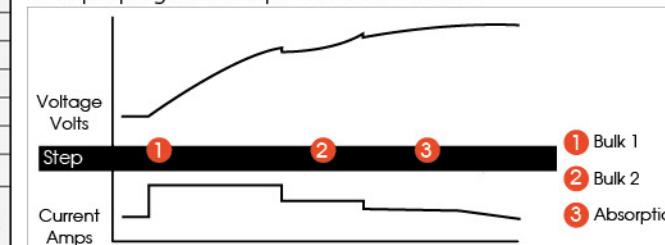


Item	Indication	LED
Power On Reset	All LED flash 2times for self-check.	Flashing: ON=0.5S,OFF=0.5S
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Color: Pure Green
Error(dual color)	Flashing: 1. Timer>2hours at step2 and step3 Recovery+Soft start charge. (red on) If 12V recover (+) mode <12V after 4hours (red on). 2. Timer>15hours at Lithium Bulk charge. (yellow flash) 3. Total Timer>40hours at Pb battery modes. (yellow flash) 4. Battery voltage>14V, Vbat=1.0-3.7V (yellow on) 5. Reversed Polarity. (red flash)	Color: Red and Yellow Flashing: ON=0.5S,OFF=0.5S
25%	Flashing: Vbat<6.4/12.8V Steady: Vbat>6.4/12.8V after 3sec. OFF: after full charged	Color: Red Flashing: ON=0.5S,OFF=0.5S
50%	Flashing: 6.4/12.8V<Vbat<6.8/13.6V Steady: Vbat>6.8/13.6V after 3sec. OFF: after full charged	Color: Orange Flashing: ON=0.5S,OFF=0.5S
75%	Flashing: 6.8/13.6V<Vbat<6.95/13.9V Steady: Vbat>6.95/13.9V after 3sec. OFF: after full charged	Color: Yellow Flashing: ON=0.5S,OFF=0.5S
100%	Flashing: 6.95/13.9V<Vbat<full charged Steady: Full charged after 3sec.	Color: Pure Green Flashing: ON=0.5S,OFF=0.5S
6V Normal	Mode selected	Color: Red
6V Cold/AGM	Mode selected	Color: Red
12V Normal	Mode selected	Color: Red
12V Cold/AGM	Mode selected	Color: Red
12V Small	Mode selected	Color: Red
12V Small Cold	Mode selected	Color: Red
Lithium	Mode selected	Color: Red
13.6V Power supply	Mode selected	Color: Red
12V Recover(+)	Steady: Mode selected(3sec.) Flashing: Start charging after Step1 (Diagnosis) started. Steady: after go to 12V Cold charge, timer over 4hours, ERROR and full charged.	Color: Pure Green Flashing: ON=0.5S,OFF=0.5S

Principle programme representation 12V/ 16V/ 24V Pb



Principle programme representation LiFePO4



MW LA25 New

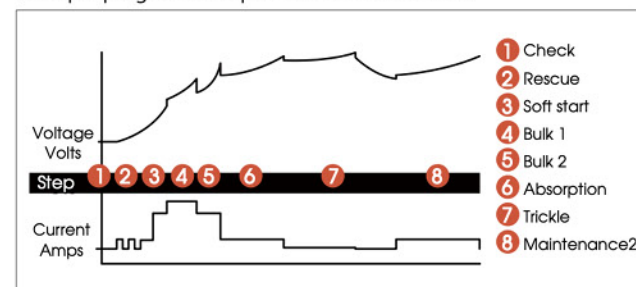
2.5A 6V / 12V 8 steps Intelligent Battery Charger
With CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input Voltage: 220-240V ~ 50Hz 0.5A
Charge Voltage: 6.0 / 12.0 / 12.8V DC
Charge Current: 2.5A Max
Housing Protection: IP20
Dimension: L116.2 x W68.4 x D71.3mm

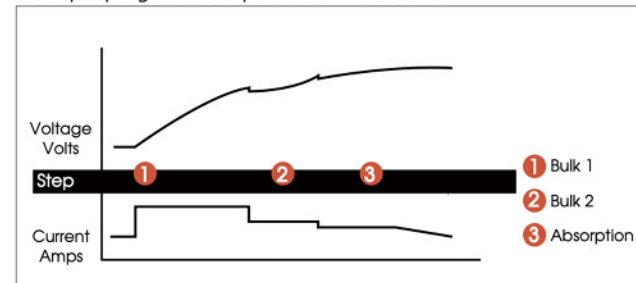
- Protection:
- ✓ Short circuit protection
 - ✓ High Battery Voltage Protection
 - ✓ Over Temperature Protection
 - ✓ Reversed Polarity Protection
 - ✓ Safety timer protection



Principle programme representation 6V/ 12V Pb



Principle programme representation LiFePO4



Item	Indication	LED
Power On Reset	All LED flash twice for self-check.	Flashing: ON=0.5S,OFF=0.5S
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Color: blue
Error (dual color)	Flashing: 1. Timer>2hours at step2 and step3 Recovery+Soft start charge. (red on) 2. Total Timer>40hours at Pb battery modes. (yellow flash) 3. Battery voltage>14V, Vbat=1.0-2.0V (yellow on) 4. Reversed Polarity. (red flash)	Color: Red and Yellow Flashing: ON=0.5S,OFF=0.5S
25%	Flashing: Vbat<6.4/12.8V Steady: Vbat>6.4/12.8V after 3sec. OFF: after full charged	Color: Red Flashing: ON=0.5S,OFF=0.5S
50%	Flashing: 6.4/12.8V<Vbat<6.8/13.6V Steady: Vbat>6.8/13.6V after 3sec. OFF: after full charged	Color: Orange Flashing: ON=0.5S,OFF=0.5S
75%	Flashing: 6.8/13.6V<Vbat<6.95/13.9V Steady: Vbat>6.95/13.9V after 3sec. OFF: after full charged	Color: Yellow Flashing: ON=0.5S,OFF=0.5S
100%	Flashing: 6.95/13.9V<Vbat<full charged Steady: Full charged after 3sec.	Color: Pure Green Flashing: ON=0.5S,OFF=0.5S
6V	Mode selected	Color: Red
12V	Mode selected	Color: Red



*Compatible with BT30
Details on Page 34



MW LF-CC075LCD

13.6V Power Supply with CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, AGM & GEL

Input: 220-240V AC, 50Hz, 1.3A
Output current: 7.5A
Charging voltage:
Lead acid (normal): 14.5/29.0V DC
Cold/AGM: 14.7/29.4V DC
LiFePO4: 12.8V/4 cells
Charging current:
12V lead acid: 7.5A
24V lead acid: 3.75A
LiFePO4: 5A
13.6V Power Supply: 5.0A
Insulation: IP 65 (water & dust)
Dimension: 251.3 x 108.4 x 61.4mm

- Protection:
- ✓ Short circuit protection
 - ✓ Overload protection
 - ✓ Wrong polarity protection
 - ✓ Reverse battery protection
 - ✓ Safety timer protection



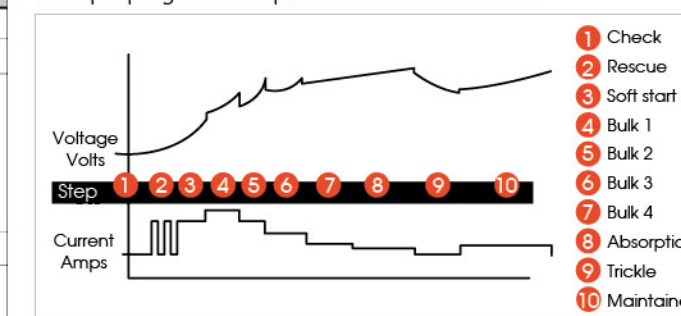
LCD display



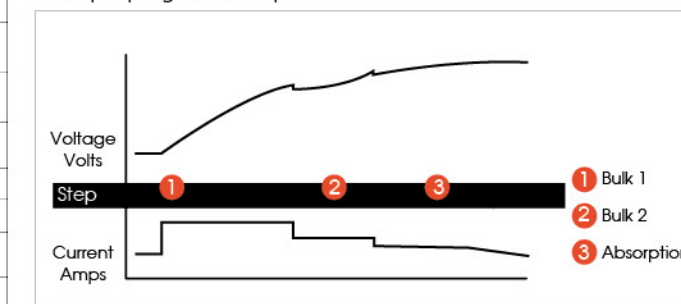
LCD indication:

Item	Indication	LCD Indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>2hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>40hours at Pb battery modes. 5. Battery voltage>14V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery Flashing with different no. of bars, 5 bars means fully charged. Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
	Mode selected: 12V Lead acid battery (regular capacity)	On
	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
LITHIUM 12.8V	Mode selected: Lithium iron phosphate battery	On
RECOVER 12V	Mode selected: Recover 12V Lead acid battery	On
ADVANCED AGM 12V	Mode selected: Advanced AGM battery	On
SMPS 13.6V	Mode selected: Power supply	On

Principle programme representation 12V/ 24V Pb



Principle programme representation LiFePO4



MW LF-CC040LCD

4.0A 6V/ 12V 8 Steps Intelligent Battery Charger
With CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, Gel, MF & AGM

Input: 220-240V AC, 50Hz, 0.6A
Output current: 4.0A
Charging voltage:
Lead acid (normal): 7.3/14.5V DC
Cold/AGM: 7.4/14.7V DC
LiFePO4; 12.8V/4 cells
Charging current:
6V lead acid: 4.0A (normal)
12V lead acid: 0.9 (small), 4.0A (normal)
LiFePO4: 3.0A (normal)
Insulation:
IP 65 (water & dust)
Dimension: 211.3 x 84.4 x 49mm

Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection
✓ Reverse battery protection
✓ Safety timer protection



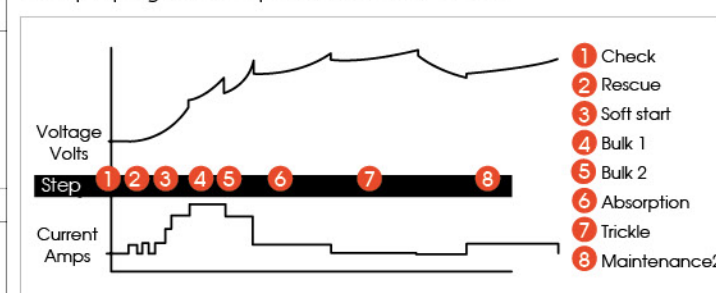
LCD display



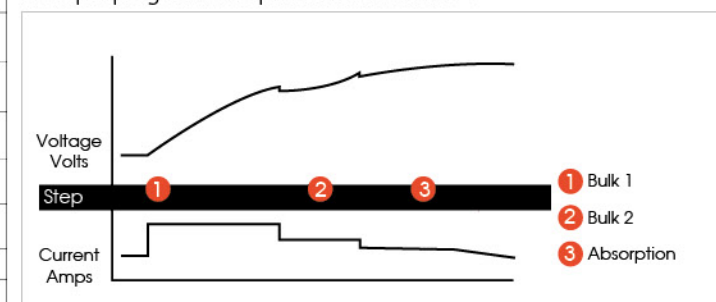
LCD indication:

Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>2hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>40hours at Pb battery modes. 5. Battery voltage>14V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery Flashing with different no. of bars, 5 bars means fully charged. Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
6V	Mode selected: 6V Lead acid battery	On
6V and	Mode selected: cold mode 6V Lead acid battery	On
	Mode selected: 12V Lead acid battery (small capacity)	On
	Mode selected: cold mode 12V Lead acid battery (small capacity)	On
	Mode selected: 12V Lead acid battery (regular capacity)	On
	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
LITHIUM 12.8V	Mode selected: Lithium iron phosphate battery	On
RECOVER 12V	Mode selected: Recover 12V Lead acid battery	On

Principle programme representation 6V/ 12V Pb



Principle programme representation LiFePO4



MW LF-CC038A

3.8A 6V/ 12V 8 Steps Intelligent Battery Charger
With CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, VRLA, AGM & GEL

Input: 220-240V AC, 50Hz, 0.6A
Output current: 3.8A
Charging voltage:
Lead acid (normal): 7.3V/ 14.4V DC
Cold/AGM: 7.4/14.7V DC
LiFePO4; 12.8V/4 cells
Charging current:
6V lead acid: 3.8A (normal)
12V lead acid: 3.8A (normal)
LiFePO4: 0.9A (small), 3.0A (normal)
Insulation: IP 65 (water & dust)
Dimension: 203.5 x 74 x 48mm

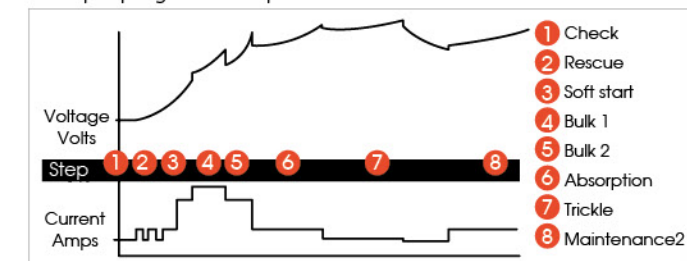
Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection
✓ Reverse battery protection
✓ Safety timer protection



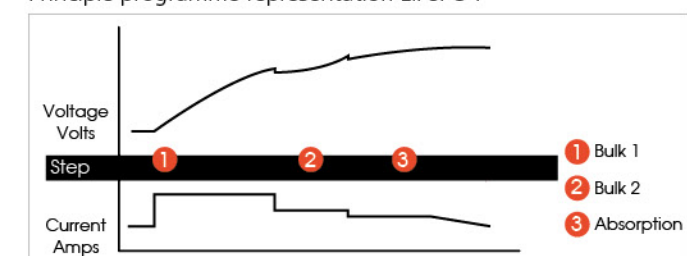
LED indication:

Item	Indication	LED
LED	INDICATION	LED COLOR
Power On Reset	All LED flash 2 times for self-check.	Red Flashing
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Green
Error(dual color)	Flashing: 1.Timer for lead acid (red) 2. Timer for Lithium (yellow flash) 3. Total timer (yellow flash) 4. Battery voltage (yellow) 5. Reversed polarity (red flash)	Red & yellow flashing
25%	Flashing Steady OFF: full charged	Red flashing
50%	Flashing Steady OFF: full charged	Orange flashing
75%	Flashing Steady OFF: full charged	Yellow flashing
100%	Flashing Steady: full charged	Green
6V Normal	Mode selected	Red
6V Cold/AGM	Mode selected	Red
12V Normal	Mode selected	Red
12V Cold/AGM	Mode selected	Red
12V Small	Mode selected	Red
12V Small Cold	Mode selected	Red
Lithium	Mode selected	Red
12V Recover(+)	Steady: Mode selected(3sec.) Flashing: Step 1 Steady	Green flashing, Green

Principle programme representation 6V/ 12V Pb



Principle programme representation LiFePO4



MW LF-CC015A

1.5A 6V/ 12V 8 Steps Intelligent Battery Charger
With CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, VRLA, AGM & GEL

Input: 220-240V AC, 50Hz, 350mA
Output current: 1.5A
Charging voltage:
Lead acid (normal): 7.3V/ 14.4V DC
Cold/AGM: 7.4/14.7V DC
LiFePO4; 12.8V/4 cells
Charging current:
6V lead acid: 1.5A
12V lead acid: 1.5A
LiFePO4: 1.5A
Insulation: IP 65 (water & dust)
Dimension: 174 x 65 x 46.5mm

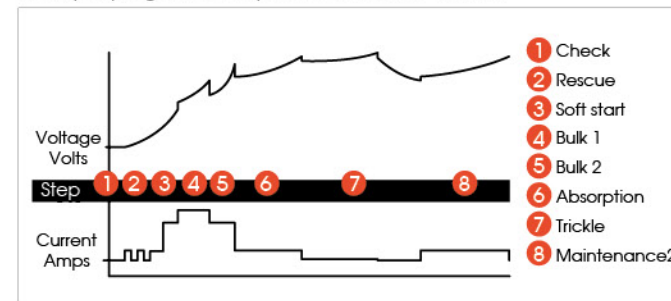
- Protection:
- ✓ Short circuit protection
 - ✓ Overload protection
 - ✓ Wrong polarity protection
 - ✓ Reverse battery protection
 - ✓ Safety timer protection



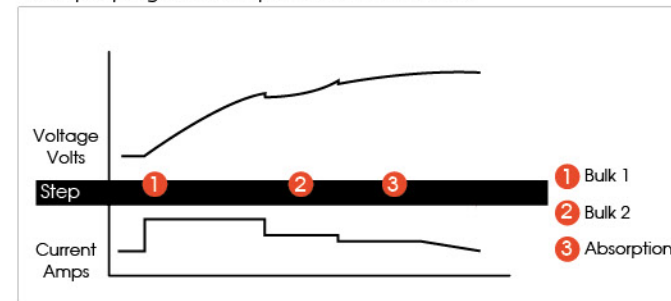
LED indication:

Item	Indication	LED
LED	INDICATION	LED COLOR
Power On Reset	All LED flash 2 times for self-check.	Red Flashing
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Green
Error(dual color)	Flashing: 1.Timer for lead acid (red) 2. Timer for Lithium (yellow flash) 3. Total timer (yellow flash) 4. Battery voltage (yellow) 5. Reversed polarity (red flash)	Red & yellow flashing
25%	Flashing Steady OFF: full charged	Red flashing
50%	Flashing Steady OFF: full charged	Orange flashing
75%	Flashing Steady OFF: full charged	Yellow flashing
100%	Flashing Steady: full charged	Green
6V Normal	Mode selected	Red
6V Cold/AGM	Mode selected	Red
12V Normal	Mode selected	Red
12V Cold/AGM	Mode selected	Red
Lithium	Mode selected	Red

Principle programme representation 6V/ 12V Pb



Principle programme representation LiFePO4



MW LF-CC008A

0.8A 6V/ 12V 7 Steps Intelligent Battery Charger
With CC/CV Control for LiFePO4 & Lead Acid Battery of Wet, MF, VRLA, AGM & GEL

Input: 220-240V AC, 50Hz, 300mA
Output current: 0.8A
Charging voltage:
Lead acid: 7.3V/ 14.4V DC
LiFePO4; 12.8V/4 cells
Charging current:
6V lead acid: 0.8A
12V lead acid: 0.8A
LiFePO4: 0.8A
Insulation: IP 65 (water & dust)
Dimension: 107 x 63 x 34mm

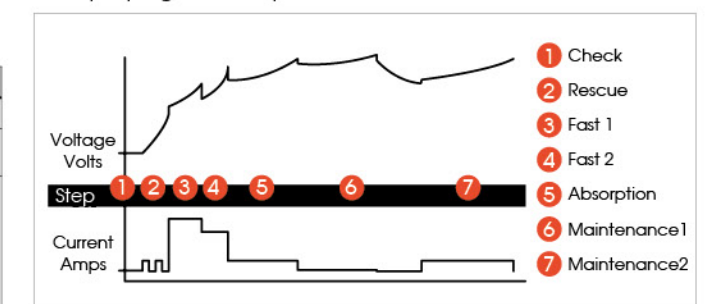
- Protection:
- ✓ Short circuit protection
 - ✓ Overload protection
 - ✓ Wrong polarity protection
 - ✓ Reverse battery protection
 - ✓ Safety timer protection



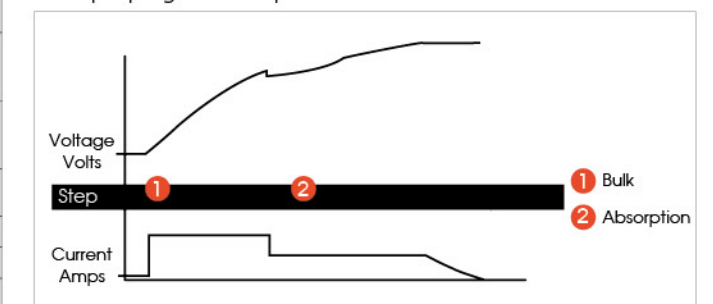
LED indication:

LED	INDICATION	LED COLOR
Power On Reset	All LED flash 2 times for self-check.	Red Flashing
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Green
Error(dual color)	Flashing: 1.Timer for lead acid (red) 2. Timer for Lithium (yellow flash) 3. Total timer (yellow flash) 4. Battery voltage (yellow) 5. Reversed polarity (red flash)	Red & yellow flashing
25%	Flashing Steady OFF: full charged	Red flashing
50%	Flashing Steady OFF: full charged	Orange flashing
75%	Flashing Steady OFF: full charged	Yellow flashing
100%	Flashing Steady: full charged	Green flashing
6V	Mode selected	Red
12V	Mode selected	Red
Lithium	Mode selected	Red

Principle programme representation 6V/ 12V Pb



Principle programme representation LiFePO4



MW LF-CC04A

4A 6V & 12V 7 Steps Intelligent Battery Charger
With CC/CV Control for Lead Acid Battery of Wet, MF, VRLA, AGM & GEL

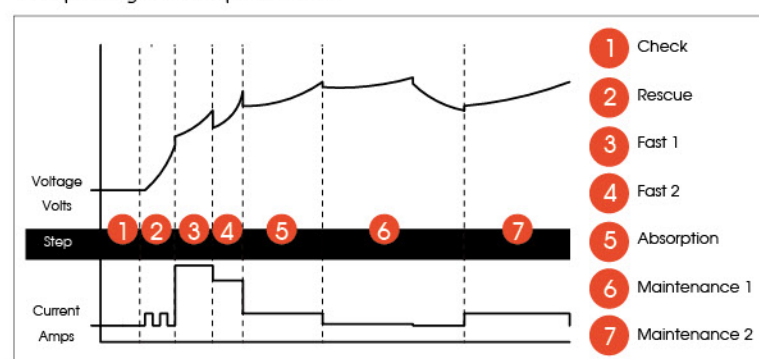
Input: 220-240V AC, 50Hz, 600mA
Output current: 4.0A
Charging voltage: 7.3V/ 14.4V/ 14.7'
Charging current:
6V battery: 0.8A
12V battery: 0.8A & 4.0A
Protection: IP 65 (dust & water)
Dimension: 194 x 68 x 47mm

Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection

LED indication:

	LED position	INDICATION	LED COLOR
1	Standby	Standby LED Light	Red
2	6V	6V battery indication	Red
3	12V/ 0.8A	12V/ 0.8A battery indication	Red
4	12V/ 4.0A	12V/ 4.0A battery indication	Red
5	12V/ 4.0A cool	12V/ 4.0A cool battery	Red
6	Charging	charging	Red
7	Full	Charge full indication	Green
8	Error	wrong polarity indication	Red
9	Bad battery or unsuited battery	Battery voltage <3.7V or Battery voltage>15V	Battery Indicate 4 Red LED Flash

Principle Programme representation



MW LF-CC01A

1A 6V & 12V 6 Steps Intelligent Battery Charger
With CC/CV Control for Lead Acid Battery of Wet, MF, VRLA, AGM & GEL

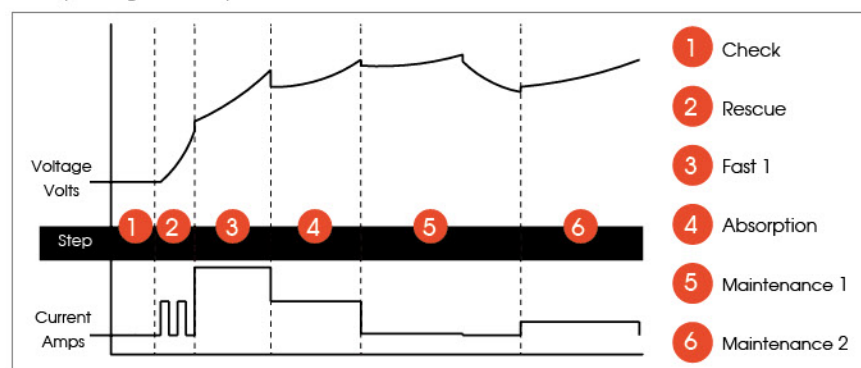
Input: 220-240V AC, 50Hz, 400mA
Output current:1.0A
Charging voltage: 7.3V/ 14.4V
Charging current:
6V battery: 1.0A
12V battery: 1.0A
Protection: IP 65 (dust & water)
Dimension: 69 x 43 x 46mm

Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection

LED indication:

	LED	INDICATION	LED COLOR
1	Standby	Stand- By LED Light	Red
2	6V	6V battery indication	Green
3	12V	12V battery indication	Green
4	Charge	Charging	Red
5	Charge full	Charge full indication	Green
6	Error	wrong polarity indication	Red

Principle Programme representation



MW MLF-CC140U

4.0A 12V 8 Steps Intelligent Marine Charger With CC/CV Control for Lead-Acid Battery of Wet, MF, VRLA, AGM and GEL

Input: 220-240V AC, 50/60Hz, 0.6A
Output current: 2.5A/ 4.0A
Charging voltage: 2.0V-14.8V
Charging current:
12V (Normal): 2.0-10.5V @2.5A
12-14.8V @4.0A

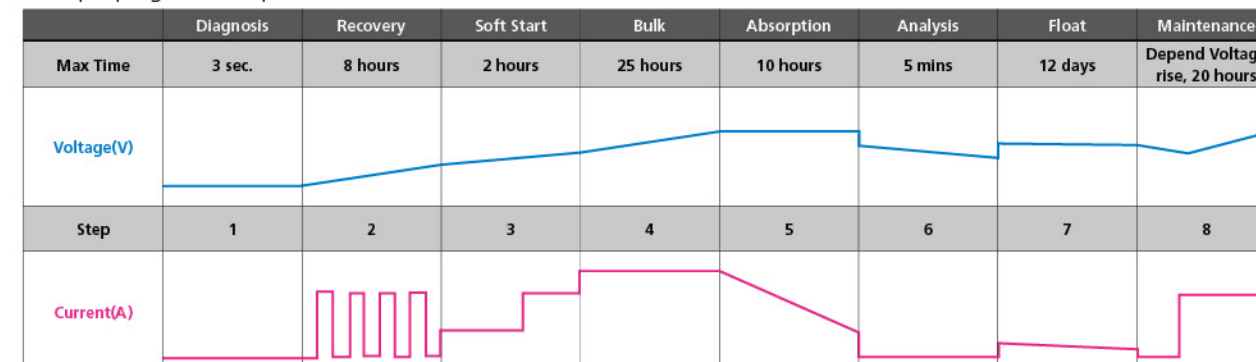
Battery Recovery mode:
2.0-10.5V/ 2.5A Pulse Charging
Insulation:
IP68 (Dust and Water-Resistant)
Outdoor Use

Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection
✓ Reverse battery protection
✓ Safety timer protection

LED indication:

Item	Indication	LED color
Power On Reset	All LED flash 1time for self check.	RED Flash
Power ON	No battery connected	Switch lighting: RED & Green
Charging	Step1-6	RED steady
Full Charged and Maintenance	Step7-8	Green steady
Error	Flashing: 1. reverse battery connection 2. Charging been interrupted in STEP 2 or 3, 6. 3. 0.5V<Battery voltage<2.0V 4. battery voltage>16V	Orange Flash

Principle programme representation 12V Pb



MW MLF-CC280U

4A + 4A Dual Channel 12V 8-Step Intelligent Fully Automatic Switch Mode Marine Charger With CC/CV Control for Lead-Acid Battery of Wet, MF, VRLA, AGM and GEL

Input: 220-240V AC, 50/60Hz, 1.2A
Output current: Channel (1) 2.5A/4.0A
Channel (2) 2.5A/4.0A
Charging voltage: Channel (1) 2.0V-14.8V
Channel (2) 2.0V-14.8V
Charging current:
12V (Normal): 2.0-10.5V @2.5A
12-14.8V @4.0A
Battery Recovery mode:
2.0-10.5V/ 2.5A Pulse Charging
Insulation:
IP68 (Dust and Water-Resistant)
Outdoor Use

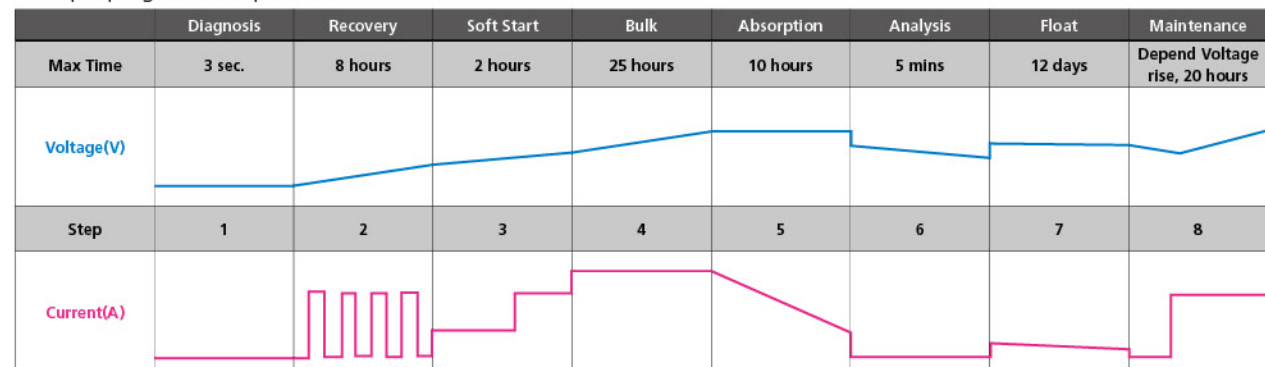
Protection:
✓ Short circuit protection
✓ Overload protection
✓ Wrong polarity protection
✓ Reverse battery protection
✓ Safety timer protection



LED indication:

Item	Indication	LED color
Power On Reset	All LED flash 1time for self check.	RED Flash
Power ON	No battery connected	Switch lighting: RED & Green
Charging	Step1-6	RED steady
Full Charged and Maintenance	Step7-8	Green steady
Error	Flashing: 1. reverse battery connection 2. Charging been interrupted in STEP 2 or 3, 6. 3. 0.5V<Battery voltage<2.0V 4. battery voltage>16V	Orange Flash

Principle programme representation 12V Pb



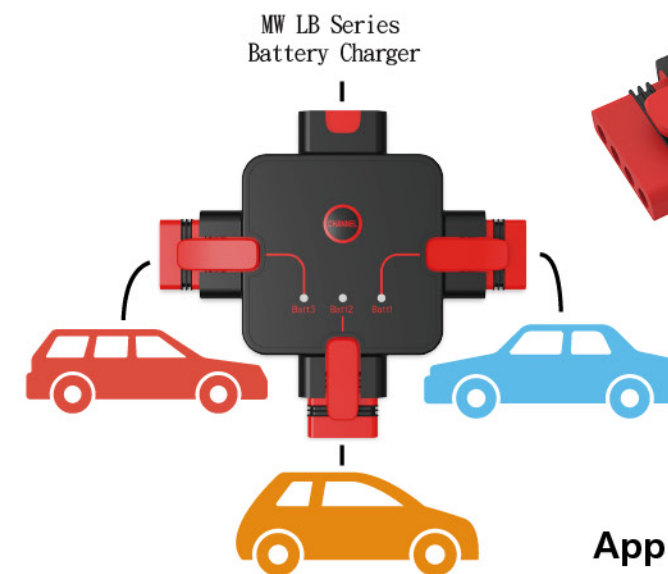
BT30 is a battery charger accessory that allow users to charge 3 batteries sequentially. It also features Bluetooth connection which allow users to effectively monitor the battery charging status (Current, Voltage, Charging Step), and customize the charging schedule and mode

MW BT30 New

3 Outputs Switching Hub

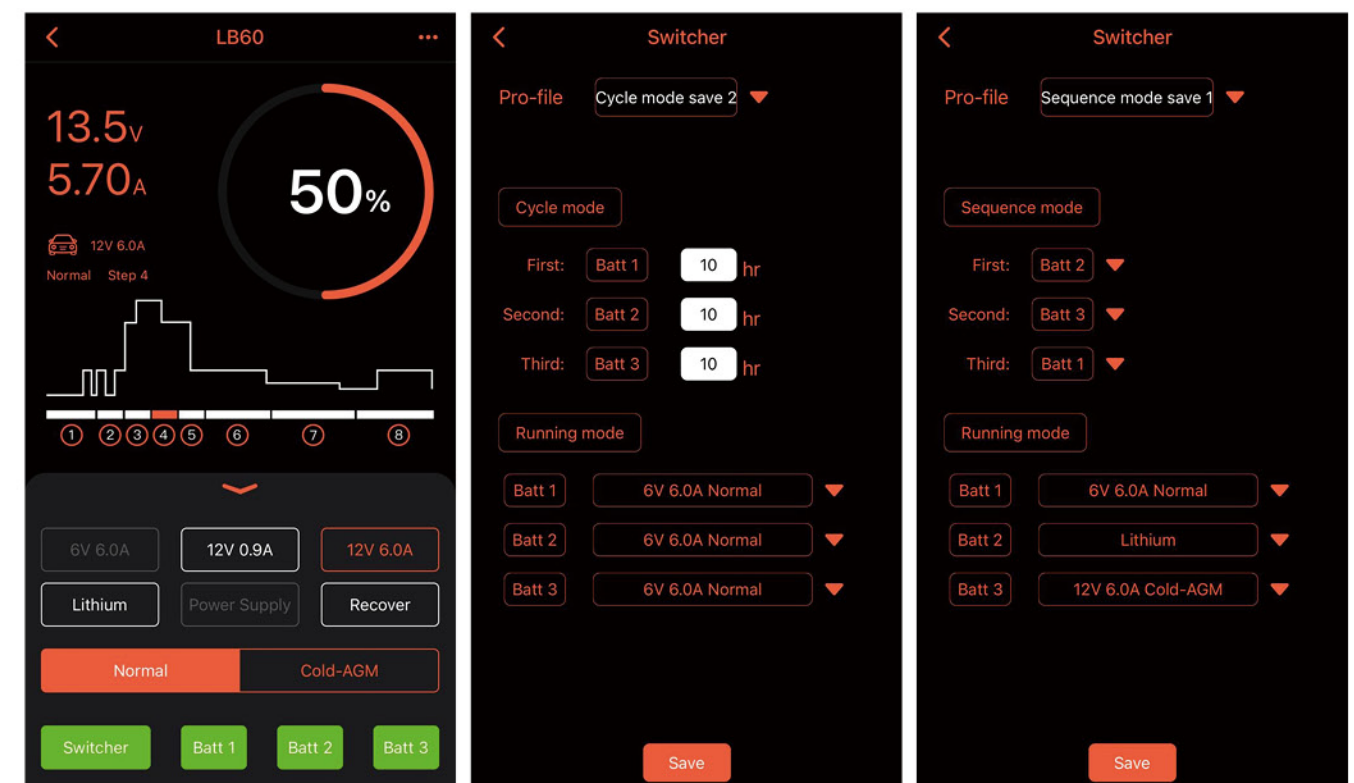
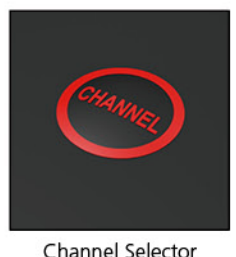


Input Voltage: 6.0V / 12.0V / 24.0V DC (max. 29.4V)
Output Current: 10A (max)
Housing Protection: IP65
Dimension: 115 x 102 x 19.2mm



App Feature

Charge 3 Different Cars Consecutively
Custom Charging Programme
(Schedule, Timer, Sequence)
Mode Switch Button to Change Active Charging Channel



MW BT30 PRO **New**

3 Outputs Switching Hub

Input Voltage: 6.0V / 12.0V / 24.0V CD (max. 29.4V)

Output Current: 26A (max)

Housing Protection: IP65

Dimension: 132 x 97 x 24mm

*Please see P. 34 for LED indication and APP feature



MW 2WR-LC-BT **New**

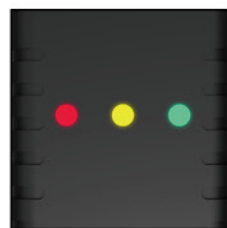
Connector for Battery Charger w/ Battery Status Indicator

Input Voltage: 3.5V - 16.0V DC

Length: 0.4m



**MW LB Series
Battery Charger**



LED Indication

Items	Indication	Status
For 12V battery	Green LED on, Yellow LED off, Red LED off	Charge not necessary ($\geq 12.65V$, $\pm 2\%$)
	Green LED off, Yellow LED on, Red LED off	Charge recommended (12.25-12.64V, $\pm 2\%$)
	Green LED off, Yellow LED off, Red LED flashes	Charge necessary (7.8-12.24V, $\pm 2\%$)
For 6V battery	Green LED off, Yellow LED off, Red LED on	Charge necessary (7.6-7.7V, $\pm 2\%$)
	Green LED on, Yellow LED off, Red LED off	Charge not necessary (6.35-7.5V, $\pm 2\%$)
	Green LED off, Yellow LED on, Red LED off	Charge recommended (6.05V-6.34V, $\pm 2\%$)
	Green LED off, Yellow LED off, Red LED flashes	Charge necessary (3.9-6.04V, $\pm 2\%$)
	Green LED off, Yellow LED off, Red LED on	Charge necessary ($< 3.9V$, $\pm 2\%$)

MW LL-CC010A

Universal Li-ion/Polymer Battery Charger

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

Output Voltage: Li-ion: 3.7V/8.4V/11.1V/14.8V DC

Output Current: Li-ion: 3.7V @1A/1 cell

Li-ion: 7.4V @1A/2 cells

Li-ion: 11.1V @1A/3 cells

Li-ion: 14.8V @1A/4 cells

LED indication: Charging – Green LED flashes

Full – Green LED on

Discharge – Red and

Green LED

flashes alternatively

Error – Red LED flashes

Dimension: 138 x 246 x 39.2mm



MW iDA150V

150W DC to AC inverter w/USB Outlet

Input voltage: 12.0V - 13.8V DC

Output (AC): 230V AC, 50Hz, 150W (max)

Output (USB): 5.0V / 2.4A

✓ Low voltage protection

✓ Over voltage protection

✓ Over power protection

✓ Over temperature protection

LED indication

Dimension: Ø70 x 166mm



Schuko socket

Car Accessories

Notes:

- Socket Multiplier w/ PD USB Output ————— **P.38**
- Socket Multiplier ————— **P.39**
- Socket Multiplier w/ USB Output ————— **P.40**
- DC/DC Converter ————— **P.41**

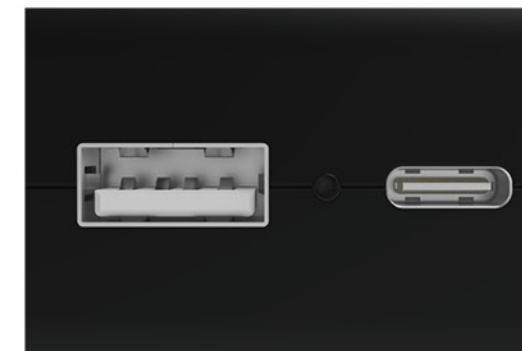
MW PD10230 **New**

30W PD 3 Way Socket Multiplier w/USB Port

Input Voltage: 12V DC
 Output Voltage: 12V DC
 Output Current: 10A
 USB Port 1 Output:
 5.0V / 9.0V, 3.0A; 12.0V, 2.5A (PD)
 3.3V – 12.0V, 2.5A (PPS)
 USB Port 2 Output:
 5.0V, 3.0A; 9.0V, 2.0A; 12.0V, 1.5A (QC)
 LED indication
 Replacable Fuse Included
 Dimension: 130 x 95.5 x 38.1 mm



Car Battery Voltage Display



USB-A & USB-C PD Output



On/Off Button for Each Channel



MW 10230

3 Way Socket Multiplier

Input Voltage: 12V DC
Output Voltage: 12V DC
Output Current: 10A
LED indication
10A Detachable fuse
Dimension: 90 x 69 x 35mm



MW 10232

4 Way Socket Multiplier

Input Voltage: 12V DC
Output Voltage: 12V DC
Output Current: 10A
LED indication
10A Detachable fuse
Dimension: 133 x 73 x 40mm



MW 10233

2 Way Socket Multiplier

Input Voltage: 12V DC
Output Voltage: 12V DC
Output Current: 10A
LED indication
10A Detachable fuse
Dimension: 65 x 55 x 34mm



MW U10230

3 Way Socket Multiplier w/USB Port

Input Voltage: 12V DC
Output Voltage: 12V DC
Output Current: 10A
USB Output: 5V/ 1A
LED indication
10A Detachable fuse
Dimension: 90 x 69 x 35mm



MW U10232

4 Way Socket Multiplier w/USB Port

Input Voltage: 12V DC
Output Voltage: 12V DC
Output Current: 10A
USB Output: 5V/ 1A
LED indication
10A Detachable fuse
Dimension: 133 x 73 x 40mm



MW CP1

Cigarette Lighter Plug Cable

Input Voltage: 10.8 – 28.8V DC
Output Voltage: 10.8 – 28.8V DC
LED Indication
* DC Output Plug Optional
Dimension: 80 x 27mm



CE

MW 206

1200mA DC/DC Converter

Input Voltage: 12 – 24V DC
Output Voltage: 1.5V / 3.0V / 4.5V / 6.0V / 7.5V / 9.0V / 12V
Output Current: 1.2A (max)
Dimension: 130 x 52 x 34mm



CE

MW 292

2000mA DC/DC Converter

Input Voltage: 12 – 24V DC
Output Voltage: 1.5V / 3.0V / 4.5V / 6.0V / 7.5V / 9.0V / 12V
Output Current: 2.0A (max)
Dimension: 100 x 70 x 32mm



CE

Notebook Power Supply

Notes:

120W Notebook Power	P.43
90W Notebook AC Power	P.43
70W Notebook AC Power	P.44
45W Notebook AC Power	P.44

MW M120W

120W Notebook Power Supply

ErP 3rd stage compliance
CEC efficiency: Level Ⅴ
MEPS: VI

Input voltage: 100-240V AC 50/60Hz
Output voltage: 15.0V / 16.0V / 19.5V DC
Output current: 6.0A
LED indication
* F120W Single Voltage Version Also Available
Dimension: 145.8 x 60 x 36.2 mm



Detachable cable for EU version, US version,
UK version & SAA version available



MW M90W

90W Notebook Power Supply

ErP 3rd stage compliance
CEC efficiency: Level Ⅴ
MEPS: VI

Input voltage: 100-240V AC 50/60Hz
Output voltage: 15.0V / 16.0V / 19.5V DC
Output current: 4.62A
LED indication
* F90W Single Voltage Version Also Available
Dimension: 123.2 x 55 x 33.9 mm



Detachable cable for EU version, US version,
UK version & SAA version available



MW M70W

70W Notebook Power Supply

ErP 3rd stage compliance
CEC efficiency: Level Ⅴ
MEPS: VI

Input voltage: 100-240V AC 50/60Hz
Output voltage: 15.0V / 16.0V / 19.5V DC
Output current: 3.59A
LED indication
* F70W Single Voltage Version Also Available
Dimension: 113.4 x 48 x 32 mm



Detachable cable for EU version, US version,
UK version & SAA version available



MW M45W

45W Notebook Power Supply

ErP 3rd stage compliance
CEC efficiency: Level Ⅴ
MEPS: VI

Input voltage: 100-240V AC 50/60Hz
Output voltage: 9.5V / 12.0V / 14.0V / 16.0V; 2.8A
18.5V / 19.0V; 2.36A
20.0V; 2.25A
LED indication
* F45W Single Voltage Version Also Available
Dimension: 89.2 x 51 x 33.5 mm



Detachable cable for EU version, US version,
UK version & SAA version available



AC-AC Step Down Converter

Notes:

AC/AC Adaptor

P.46

MW 2P045

45W Single-Voltage AC/AC Adaptor

Input: 230V/50Hz
Output: 110V – 45W
Dimension: 86 x 62 x 88 mm



CE

MW 2P075

75W Single-Voltage AC/AC Adaptor

Input: 230V/50Hz
Output: 110V – 75W
Dimension: 77 x 54 x 60 mm



CE

MW 2P100

100W Single-Voltage AC/AC Adaptor

Input: 230V/50Hz
Output: 110V – 100W
Dimension: 115 x 84 x 68.7 mm



CE

MW 2P300

300W Single-Voltage AC/AC Adaptor

Input: 230V/50Hz
Output: 110V – 300W
Dimension: 198 x 136 x 96 mm



CE

Battery Tester

Notes:

Battery Tester P.48

MW 226N New

Quick-Check Battery Tester

Input: 5.5V max / 15V max (DC)
 Battery Type: AA / AAA / C / D, 9V Block
 (Alkaline, NiCd, NiMH)
 Dimension: 61.4 x 62 x 17.7 mm
 *Does Not Require Battery to Operate



Status	Alkaline	NiCd/NiMH	9V Block
Full	>1.4V	>1.3 V	>8.80V
Medium	1.2-1.4V	1.2-1.3V	5.50-8.0V
Weak / Empty	0.9-1.19V	0.9-1.19V	<5.5V

MW 333

Battery Tester

Power Supply: 1.5V Alkaline Battery
 Test Voltage: 1.2V / 1.5V / 3.0V / 6.0V / 9.0V
 Test Battery: AAA / AA / C / D / 9V Block
 CR123 / CR2 / CR-V3 / 2CR5 / CR-P2
 Dimension: 118 x 88 x 22.5 mm



Battery Charger & Power Bank

Notes:

USB-C Battery Charger **P.50 - 52**
 Universal Battery Charger **P.53 - 55**
 Power Bank **P.55**

MW UC80 PRO **New**

Smart Battery Charger

Input USB-C: 5.0V / 3.0A, 9.0V / 2.22A, 12.0V / 1.66A

Rechargeable battery type: Ni-MH, Li-ion

Battery size: NiMH: AAA/AA/C/D

Li-ion: 10340 - 32650

Output: 1.2V / 1000mA Max per channel (Ni-MH)

3.7V / 500mA Max per channel (Li-ion)

9V / 70mA Max per channel (9V block)

Protection: Short Circuit and Wrong Polarity

End of charge: -dV for NiMH, Cut-off Voltage for Li-ion

Trickle Charge

Safety Timer

LCD indication

Dimension: 158.2 x 166 x 42.7mm

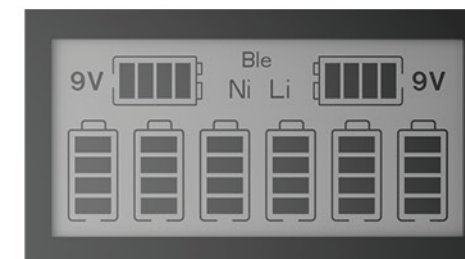
Bluetooth
compatible

Available on the
App Store

ANDROID APP ON
Google play



LCD Display



Input USB-C

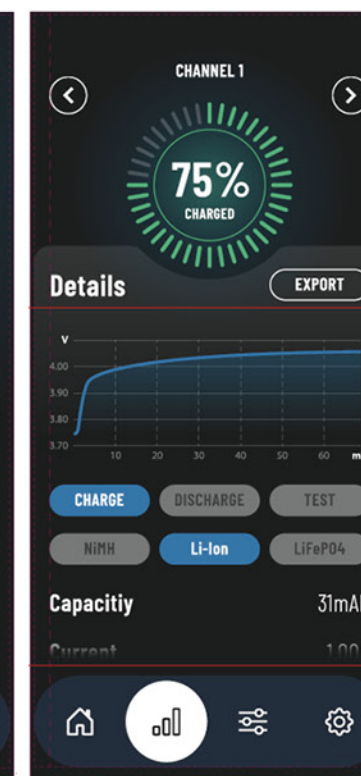
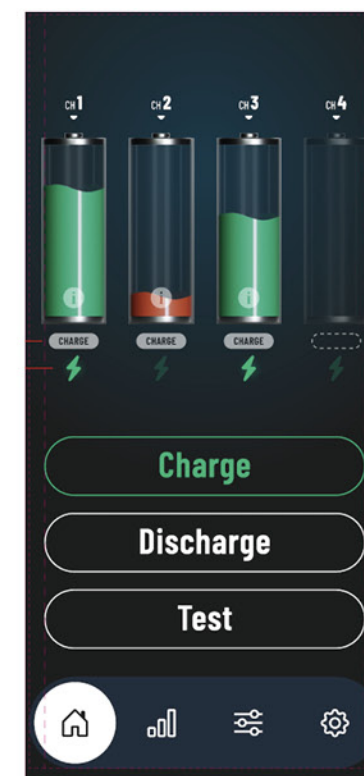
App Feature

Custom Charging Programme for each Channel

(set capacity, voltage, current,
delta v, trickle charge current,
discharge, timer)

Schedule Charging Time

Charging Data Export



Item	Condition	Indication
Reset	Power on	Flash 3 times
Standby	No battery	N/A
1.2V NiMH	Charger detects it automatically	Ni-MH
3.7V Li-ion	Charger detects it automatically	Lithium
Battery Test	Bad battery/wrong polarity	Flash the battery symbol per channel
Capacity Test	Voltage>1.3V-1.5V	Fast flash for Fast charge
The test takes around 5s.	Voltage> 9.1V-10.5V	Fast flash for Fast charge
Program will start after capacity test	1.23V<Voltage<1.3V	Slow flash for Pre-charge mode
	8.6V<Voltage<9.1V (9V)	Slow flash for Pre-charge mode
	3.7V Li-ion Voltage 3.0-4.2V	Fast flash for Fast charge
Pre-charge mode	AAA/AA/C/D 1.23VsVbat<1.30V <1.0V/CELL (From refresh mode) 9V-Block: Vbat<9.1V	Fast flash
Fast charge mode	AAA/AA/C/D Voltage>1.3V-1.5V 9V-Block Voltage>9.1V-10.5V	Slow flash
Ready Mode/ Trickle charge mode	AAA/AA/C/D Voltage>1.5V 9V-Block Voltage>-10.5V Vmax=1.65V/cell -deltaV<10mV/cell Timer=10hours, All charge circuit cut off when ten hours over, trickle still keep 0 delta V = 0mV/240 min	9V

MW AA40 PRO New

Professional Battery Charger w/BT

Input USB-C: 5.0V / 3.0A, 9.0V / 2.22A, 12.0V / 1.66A
Rechargeable battery type: Ni-MH, Li-ion, LiFeO4
Battery size: NiMH: AAA/AA/C/D
Li-ion / LiFePO4: 10340 - 32650
Output voltage: 1.2V (NiMH); 3.6V / 3.7V (Li-ion / LiFePO4)
Output current: 500 / 1000 / 1500 / 2000mA
*Current adjustable with App from 100mA to 2000mA, 10mA per step
Protection: Short Circuit, Wrong Polarity and Over Temperature
Trickle Charge
Safety Timer
Discharge function
LCD indication
Bluetooth App Connection
Dimension: 160 x 110 x 36mm



LCD Display



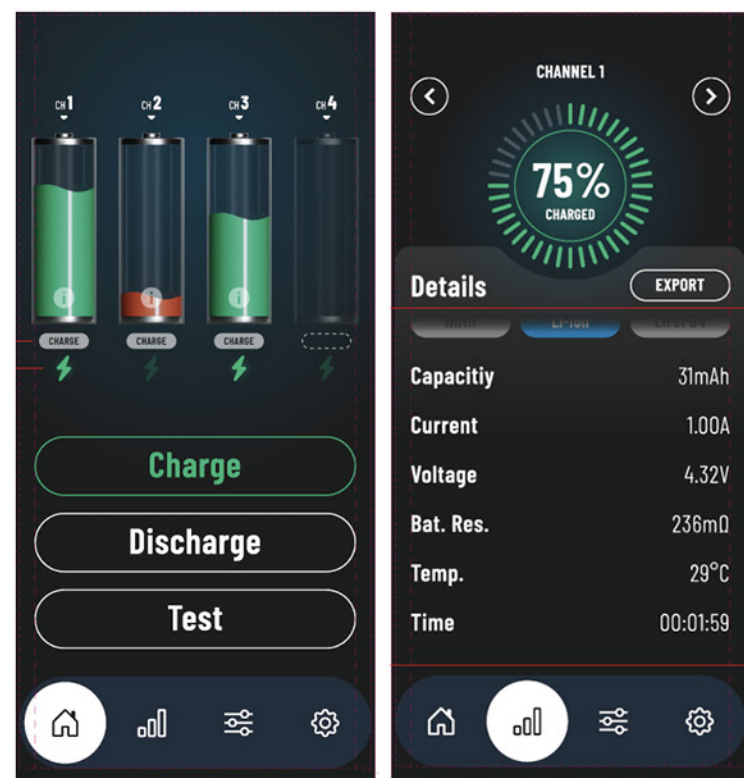
Input USB-C

App Feature

Custom Charging Programme

(set capacity, voltage, current, delta v, trickle charge current, discharge, timer)

Schedule Charging Time
Charging Data Export



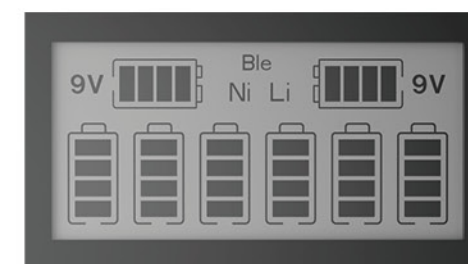
Item	Condition	Indication
Reset	Power on	Flash 3 times
Standby	No battery	N/A
1.2V NiMH	Charger detects it automatically	Ni-MH
3.7V Li-ion	Charger detects it automatically	Lithium
Battery Test	Bad battery/wrong polarity	Flash the battery symbol per channel
Capacity Test	Voltage>1.3V-1.5V	Fast flash for Fast charge
The test takes around 5s.	Voltage>9.1V-10.5V	Fast flash for Fast charge
Program will start after capacity test	1.23V<Voltage<1.3V	Slow flash for Pre-charge mode
	8.6V<Voltage<9.1V (9V)	Slow flash for Pre-charge mode
	3.7V Li-ion Voltage 3.0-4.2V	Fast flash for Fast charge
Pre-charge mode	AAA/AA/C/D 1.23V≤Vbat<1.30V <1.0V/CELL (From refresh mode) 9V-Block: Vbat<9.1V	Fast flash
Fast charge mode	AAA/AA/C/D Voltage>1.3V-1.5V 9V-Block Voltage>9.1V-10.5V	Slow flash
Ready Mode/ Trickle charge mode	AAA/AA/C/D Voltage>1.5V 9V-Block Voltage>10.5V Vmax=1.65V/cell -deltaV<10mV/cell Timer=10hours, All charge circuit cut off when ten hours over, trickle still keep	9V
	0 delta V = 0mV/240 min	

MW UC80 New

Smart Battery Charger

Input USB-C: 5.0V / 3.0A, 9.0V / 2.22A, 12.0V / 1.66A
Rechargeable battery type: Ni-MH, Li-ion
Battery size: NiMH: AAA/AA/C/D
Li-ion: 10340 - 32650
Output: 1.2V / 1000mA Max per channel (Ni-MH)
3.7V / 500mA Max per channel (Li-ion)
9V / 70mA Max per channel (9V block)
Protection: Short Circuit and Wrong Polarity
End of charge: -dV for NiMH, Cut-off Voltage for Li-ion
Trickle Charge
Safety Timer
LCD indication
*Please see P.50 for LCD indication details
Dimension: 158.2 x 166 x 42.7mm

LCD Display



Input USB-C

MW UA05-4C New

Multi-Channel Battery Charger

Input USB-C: 5.0V / 2.4A
Rechargeable battery type: Ni-MH, Li-ion
Battery size: NiMH: AAAA / AAA / AA / C / D
Li-ion: 10340 - 32650
Output voltage: 1.2V (NiMH); 3.6V / 3.7V (Li-ion)
Output current: 500mA
Protection: Short Circuit, Wrong Polarity and Over Voltage
Trickle Charge (Ni-MH)
LED indication
Dimension: 122.6 x 118.6 x 40.3mm



Input USB-C

MW AA01V-4U

Compact Battery Charger

Input: 100-240V AC 50/60Hz
Rechargeable battery type: Ni-MH (AA / AAA)
Output: Channel 1 / 2 (Slot 1-2 / Slot 3-4)
2.4V / 150mA (AA/AAA)
Protection: Short Circuit and Wrong Polarity
LED indication
Dimension: 105 x 44 x 82.3mm



MW AA02V-4U

Multi-Channel Battery Charger

Input: 100-240V AC 50/60Hz
Output: 1.2V / 200mA (AA), 50mA (AAA)
9V / 13mA (9V block)
Protection: Short Circuit and Wrong Polarity
Discharge function
LED indication
Dimension: 108 x 68 x 30.8mm



MW AA02V-6U

Multi-Channel Battery Charger

Input: 100-240V AC 50/60Hz
Output: 1.2V / 270mA (AAA / AA / C / D)
9V / 13mA (9V block)
Protection: Short Circuit and Wrong Polarity
Safety Timer
Discharge function
LED indication
Dimension: 143 x 180 x 54.5mm



MW AA10V-8U

Battery Charger XL

Input Voltage: 100-240V AC 50/60Hz
Rechargeable battery type: Ni-MH (AA / AAA / 9V)
Output: Normal (AA: 1000mA / AAA: 500mA / 9V block: 70mA)
Trickle charge (AA: 100mA / AAA: 50mA / 9V Block: N/A)
Discharge current (AA/AAA: 200mA / 9V Block: N/A)
Protection: Short Circuit and Wrong Polarity
End of charge:
Channel 1 - 8: -dV; 0dV; Over voltage; 17 Hours Timer
Channel 9 - 10: Voltage cut off
Discharge function
LED Indication
Dimension: 138 x 246 x 39.2mm



MW LFAA07L-4U

Battery Charger Plus

Input: 100-240V AC 50/60Hz
Rechargeable battery type: Ni-MH, Li-ion (AA)
Output: 1.4V / 700mA for AA Ni-MH/Ni-Cd
3.7V / 700mA for AA Li-ion
Protection: Short Circuit and Polarity
End of charge: dV
Trickle Charge
Safety Timer
LCD Indication
Dimension: 122 x 78 x 83.2mm



MW AA05V-4U

Battery Charger

Input: 100-240V AC 50/60Hz
Rechargeable battery type: Ni-MH (AA / AAA / 9V)
Output: 4 x 1.2V / 500mA or 9V / 13mA (9V block)
Protection: Channel 1 - 4: Short Circuit and Polarity
End of charge: dV
Trickle Charge
LED Indication
Dimension: L108 x W68 x D69.1mm



MW 8802

Battery Charger L

Input: 100-240V AC 50/60Hz 390mA

Rechargeable battery type: Ni-MH (AA / AAA / C / D / 9V)

Output: 1.2V/ 1000mA (AAA / AA / C / D, max 4 cells)

1.2V/ 600mA (AAA / AA, max 6 cells)

2V/ 30mA (9V block)

Dimension: 158.9 x 180 x 55.8mm



MW BUAA4

Compact Powerbank

Input: 5.0V DC

Output voltage: 5.0V/ 800mA

Output: 800mA

Battery type: Alkaline (Blue LED),
Rechargeable (Green LED)

Dimension: 79 x 34 x 34mm



Alkaline



Rechargeable



4 stages of capacity are shown by the LEDs



4pcs AA-size Alkaline/rechargeable batteries

Gaming Accessories

Notes:

Xbox Controller Charging Dock — P.57

PlayStation 5 Controller Charging Dock — P.58

MW XBOXCDA

Xbox Series X | S Controller Charging Dock

Channel: 2 charging channels

Input: 5.0V DC (USB-C socket)

Output: 5.0V / 500mA per channel (max)

Rechargeable battery type: 2PCS Ni-MH 1200mAh battery

LED indication: Stand-by: LED off

Charging: Orange LED on

Full: Green LED on

Dimension: 244.6 x 127.8 x 147.7 mm

1M Type-C Cable Included



LED indication
when charging



*LED indication for reference only



MW PS5CDA

PlayStation 5 Controller Charging Dock

Channel: 2 charging channels

Input: 5.0V DC (USB-C socket)

Output: 5.0V / 500mA per channel (max)

LED indication: Stand-by: LED off

Charging: Orange LED on

Full: Green LED on

Dimension: 244.6 x 127.8 x 147.7 mm

1M Type-C Cable Included



LED indication
when charging



*LED indication for reference only



Multiple Output Power

Notes:

Universal Power Supply — **P.60**
3.6W – 60W AC/DC Switching Adaptor — **P.60 - 64**

MW PS235

80W Universal Power Supply w/ CC/CV Output

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: V

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

Output voltage (1): 0.0- 16.0V DC

Output current (1): 0.0- 5.0A (max)

Output voltage (2): 0- 27.0V DC

Output current (2): 0.0- 3.0A (max)

Output voltage (3): 0.0- 36.0V DC

Output current (3): 0.0- 2.2A (max)

Accuracy of the Voltage: +/- (1% + 2 counts)

Accuracy of the Current: +/- (1%+2 counts)

Resolution of voltage: 0.1V

Resolution of Current: 0.01A

LED indication:

Function LEDs Green

Packed with:

MW CC-BC3

Dimension: 281.5 x 132 x 62mm



CE

USB Power AC

USB Power DC

MFi

Automobile Power

Car Accessories

Notebook Power Supply

AC-AC Step Down Converter

Battery Tester

Battery Charger & Power Bank

Gaming Accessories

Multiple Output Power

MW ME30PU

36W AC/DC Switching Apaptor W/ LCD Display

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage: 5-24V DC

Output Current: 5-12V/3A; 13V/2.7A; 14V/2.5A; 15V/2.4A;

16V/2.2A; 17V/2.1A; 18V/2.0A; 19V/1.88A; 20V/1.8A;

21V/1.7A; 22V/1.63A; 23V/1.56A; 24V/1.5A

LCD Display: **88V**

Dimension: 110.6 x 30.4 x 32.2mm

✓ Over voltage protection

✓ Over current protection

✓ Short circuit protection

✓ Memory function

*Detachable AC Cord Version Available



CE

MW MC30PU

40W AC/DC Switching Apaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage: 5.0/6.0/7.5/9.0/12.0/13.5/15.0V DC

Output Current: 5.0/6.0/7.5/9.0/12.0V@3A; 13.5/15.0V@2.67A

LED Indication: Indicate the selected voltage

Dimension: 104 x 51 x 71mm

✓ Over voltage protection

✓ Over current protection

✓ Short circuit protection

✓ Memory function

*Detachable AC Cord Version Available



CE

MW MD40PU

60W AC/DC Switching Apaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage: 12.0 / 15.0 / 16.0 / 18.5 / 19.0 / 20.0 / 24.0V DC

Output Current: 4A @ 12.0 / 15.0V;

3A @ 16.0 / 18.5 / 19.0 / 20.0V; 2.5A @ 24.0V

LED indication

Dimension: 118 x 51 x 71mm

✓ Over voltage protection

✓ Over current protection

✓ Short circuit protection

✓ Memory function

*Detachable AC Cord Version Available



FNUSB



FUSB



FMUSB



MW MA06PU

7.2W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage: 3.0/ 4.5/ 5.0/ 6.0/ 7.5/ 9.0/ 12V DC

Output Current: 600mA (max)

LED indication

Dimension: 69 x 39 x 31mm

✓ Over voltage protection

✓ Over current protection

✓ Short circuit protection

✓ Memory function



FNUSB



FUSB



FMUSB



MW MB10PU

12W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage: 3.0/ 4.5/ 5.0/ 6.0/ 7.5/ 9.0/ 12V DC

Output Current: 1000mA (max)

LED indication

Dimension: 75 x 43 x 32mm

✓ Over voltage protection

✓ Over current protection

✓ Short circuit protection

✓ Memory function



FNUSB



FUSB



FMUSB



MW MA03

3.6W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output: 3.0V/4.5V/5.0V, 0.6A;

6.0V, 0.5A; 7.5V, 0.48A

9.0V, 0.4A; 12.0V, 0.3A

LED indication

Dimension: 69 x 39 x 31mm



FNUSB



FUSB



FMUSB



MW MA06L / MA06H

7.2W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output: 3.0V/ 4.5V/ 5.0V/ 6.0V, 1.0A;

7.5V, 0.9A; 9.0V, 0.8A; 12.0V, 0.6A

*MA06H - High Voltage Version Also Available

Output: 13.5V, 0.53A; 15.0V, 0.48A

18.0V, 0.4A; 20.0V/ 21.0V, 0.34A

24.0V, 0.3A; 30.0V, 0.24A

LED indication

Dimension: 69 x 39 x 31mm



FNUSB



FUSB



FMUSB



MW MB10L / MB10H

12W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output: 3.0V/ 4.5V/ 5.0V, 2.0A; 6.0V/ 7.5V, 1.5A;

9.0V, 1.3A; 12.0V, 1.0A

*MB10H - High Voltage Version Also Available

Output: 13.5V/ 15.0V, 0.8A; 18.0V, 0.67A

20.0V/ 21.0V/ 24.0V, 0.5A; 30.0V, 0.4A

LED indication

Dimension: 75 x 43 x 32mm



FNUSB



FUSB



FMUSB



MW MC15L / MC15H

18W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output: 3.0V/ 4.5V/ 5.0V, 2.1A;

6.0V/ 7.5V/ 9.0V/ 12.0V, 1.5A LED indication

*MC15H - High Voltage Version Also Available

Output: 15.0V, 1.2A; 17.0V/ 18.0V, 1.0A

19.0V/ 20.0V, 0.9A

22.0V/ 24.0V, 0.75A

Dimension: 82 x 52 x 36mm



MW MD15

24W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output: 9.0V/ 12.0V/ 13.5V/ 15.0V, 1.5A;

18.0V/ 20.0V, 1.2A; 24.0V, 1.0A

LED indication

Dimension: 88 x 51 x 42mm



MW MD25

27W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage:

3.0/ 4.5/ 5.0/ 6.0/ 7.5/ 9.0/ 12V DC

Output Current: 2250mA (max)

LED indication

Dimension: 88 x 51 x 42mm



MW ME25

27W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage:

3.0/ 4.5/ 5.0/ 6.0/ 7.5/ 9.0/ 12V DC

Output Current: 2250mA (max)

LED indication

Dimension: 100.4 x 51 x 31.8mm



MW MG36

36W AC/DC Switching Adaptor

ErP 3rd stage compliance

CEC efficiency: Level ⑤

MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz

Output Voltage:

5.0/ 6.0/ 7.5/ 9.0/ 12.0/ 13.5/ 15V DC

Output Current: 3000mA (max)

LED indication

Dimension: 115.5 x 50 x 32mm



*Detachable AC Cord Version Available

Minwa has Successfully Conformed to WEEE and RoHS Directives

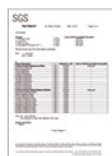


About WEEE and RoHS Directives

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.



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 Biphenyls, 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.

Every product we make is completely compliant with the requirements of both RoHS and WEEE 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, We also work closely to international laboratories to get the update information about REACH regulation and the banned materials to ensure the components and raw materials we use are complied to REACH requirements. Minwa Electronics is fully committed to support both the RoHS & WEEE 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

ISO 14001

We moved a big step to strengthen our commitment not only to our staff, our products but also to the environment. In 2013, we obtain the certificate of ISO14001 which is a organization planning, implementation, inspection, review environmental management operational systems normative standards. The system consists of five parts, includes control the consumption of hazard materials, the establishment of procedures and established a planned and ongoing assessment Improved circulation within the organization in order to ensure the continuous improvement of environmental management systems and improve.

We understand we all live in one world. The more we can do on control and improvement of our production and factory running, the more benefit to environment. We made certain efforts to achieve the goal. Other than products itself, we also pay attention to air, land or water, anything relates to the conservation.



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

EuP (2005/32/EC), the directive of energy efficiency and saving launched by the EU (European Union). It has been effective in April 2009, and it will become 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 then the CEC and MEPS ones. This explains our new series also complies with CEC (US market) and MEPS (Australian market).

FSC CERTIFICATION

The future of the world's forests is very important – to the planet, to animals, to businesses, to all of us. That's why FSC certification exists. ... Being FSC certified means that your forest, or supply chain, is managed responsibly; that Minwa is complying with their environmental, social, and economic standards.

We provide various products with reliability, affordability and environmental friendly, contact us today at sales@minwa.com.hk for details.

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