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

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PRODUCT CATALOGUE

ISO14001 · ISO9001 · SA8000 · WEEE · RoHS · REACH · FSC

2027

Mutual Trust ·
· Win Together

MINWA
Since 1977

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 on 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



• Cycling in the park



• Auto patrol



• Well trained security guards

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 then 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 Certificate



ISO14001 Certificate



SA8000 Certificate

Words from founder

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

GAN PD USB Charger P.7 - 9
PD USB Charger P.11
USB Charger P.11 - 13

MW MG30

30W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

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, PS, QC4.0
Dimension: 40 x 37 x 41.3 mm



VI GaN

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

MW MG45

45W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

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, PS, QC4.0
Dimension: 48.1 x 52 x 32 mm



VI GaN

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

MW MG65

65W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

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, PS, QC4.0
Dimension: 62.8 x 62.5 x 30 mm



VI GaN

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

MW MG65-2

New

65W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

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, PS, QC4.0
Dimension: 62.5 x 30 x 62.8 mm



VI GaN

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

MW MG65-3

New

65W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

AVS Charging Support

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 Compatible : PD3.2 (AVS), PS, QC4.0
USB-C2/C3 Compatible : PD3.0, PS, QC4.0
Output USB-A1 18W :
5.0V / 3.0A, 9.0V / 2.0A, 12.0V / 1.5A (QC3.0)
Dimension: 65 x 30 x 66.8 mm



VI GaN

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

MW MG100

New

100W GaN PD AC/DC USB Charger

Made for iPhone | iPad | iPod

AVS Charging Support

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

Input voltage: 100-240V AC
Output USB-C 100W :
5.0 - 15.0V / 3.0A, 20.0V / 5.0A
USB-C1 Compatible : PD3.2 (AVS), PS, QC4.0
USB-C2 Compatible : PD3.0, PS, QC4.0
Dimension: 75.5 x 30 x 77.4 mm



VI GaN

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

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, PS, 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

VI

GaN

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

CE

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, PS, 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

VI

GaN

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

CE

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, PS, 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

VI

GaN

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

CE

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

VI

GaN

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

CE

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

VI

GaN

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

CE

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

VI

GaN

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

CE

MW PD20AEU

Made for iPhone | iPad | iPod

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



5mins

Qualcomm Quick Charge compatible

VI

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

CE

MW PD30AU

Made for iPhone | iPad | iPod

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)

s3.6-6.5V / 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



5mins

Qualcomm Quick Charge compatible

VI

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

CE

MW PD40A1

Made for iPhone | iPad | iPod

40W PD AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

MEPS: VI

Channel 1 (USB-C):

PD: 14.5V/1.25A; 9V/2A; 5V/3A

Channel 2-5 (USB-A):

4A Shared by 4

Dimension: 60 x 30 x 68 mm



VI

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

CE

MW CA15W

15W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

MEPS: VI

Input voltage: 100-240V AC

Output: 5.0V/ 3.0A (Shared by 3)

1 x USB-C

2 x USB-A

LED indication

Dimension: 54 x 52 x 27 mm



VI

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

CE

MW CA40W

40W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

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



VI

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

CE

MW U05AU

Made for iPhone | iPad | iPod

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



MW U05AUK



UK plug version

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

CE

MW U12AU

VI

12W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

MEPS: VI

Input voltage: 100-240V AC
Output: 5.0V/ 2.4A
2 x USB-A
Dimension: 35.7 x 34 x 32 mm



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

MW USB12AU

VI

12W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

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 CE

MW USB24AU

VI

24W AC/DC USB Charger

Erp 3rd stage compliance

CEC efficiency: Level VI

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 CE

USB Power DC

Notes:

PD DC/DC USB Charger — P.15 - 16
DC/DC USB Charger — P.17

MW PD75DR New

75W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

Input: 12-24V DC
Output (Channel 1 – USB-C):
PD - 5.0 - 15.0V/3.0A; 20.0V/2.25A
PPS - 5.0 - 11.0V/3.0A
Output (Channel 2 – USB-C):
PD - 5.0,9.0V/3.0A; 12.0V/2.5A; 15.0V/2.0A
PPS - 5.0 - 11.0V/3.0A
LED indication
Dimension: 100 x 50 x 29 mm (TBC)



5mins
Qualcomm Quick Charge compatible

CE

MW PD20D

20W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

Input: 12-24V DC
Output: 5.0V/3.0A; 9.0V/2.22A
Dimension: 30 x 28 x 67 mm



5mins
Qualcomm Quick Charge compatible

CE

MW PD30D

30W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

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



5mins
Qualcomm Quick Charge compatible

CE

MW PD60D

60W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

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



5mins
Qualcomm Quick Charge compatible

CE

MW PD40D1

40W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

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



5mins
Qualcomm Quick Charge compatible

CE

MW PD40D2

40W Power Delivery USB-C DC/DC Charger

Made for iPhone | iPad | iPod

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



5mins
Qualcomm Quick Charge compatible

CE

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



CE

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



CE

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





CE

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.19
USB-C to USB-C Cable — P.19

MW iBz-200PD

Lightning to USB-C Cable

Made for iPhone | iPad | iPod

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



CE

MW CB23-B300

USB-C to USB-C Aluminum Braided Cable

USB Data & Charge

HI-SPEED CERTIFIED USB

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




USB TypeC

CE

Automobile Power

Notes:

Jump Starter — P.25
Automotive Battery Chargers — P.21 - 38
Marine Battery Chargers — P.39 - 40
Lead Acid Battery Charger — P.41 - 42
Battery Status Indicator — P.42
DC/AC Inverters — P.42

MW LC400 New

CE

40A 10 steps Intelligent Battery Charger

Input Voltage: 220-240V ~ 50Hz 4.0A
Battery Type:
- Lead-acid Battery:
  - 12V/16V/24V (Wet, Gel, MF, AGM)
  - 12V: 100Ah - 1000Ah
  - 16V: 75Ah - 500Ah
  - 24V: 50Ah - 250Ah
- Lithium:
  - 12.8V 4-cells LiFePO4: 40 – 350Ah
  - 16.0V 5-cells LiFePO4: 40 – 350Ah
  - 25.6V 8-cells LiFePO4: 20 – 200Ah

Charge Voltage:
- Normal - 14.4 / 28.8V DC
- Cold/AGM - 14.8 / 29.6V DC
- 12V/24V Lithium - 14.4 / 28.8V DC
- 16V AGM Racing - 19.6VDC
- 16V Lithium Racing - 19VDC
- 13.6V Power Supply - 13.6V DC

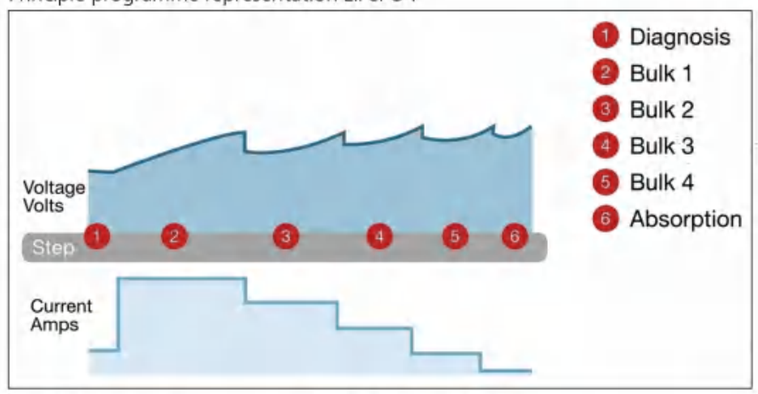
Charge Current:
- 40.0A for 12V battery
- 30.0A for 16V battery
- 20.0A for 24V battery
- 10.0A for 13.6V Power Supply

Insulation: IP20
Dimension: 321 x 144.5 x 77.5mm
LED indication
Trickle Charge
0V Battery Enable

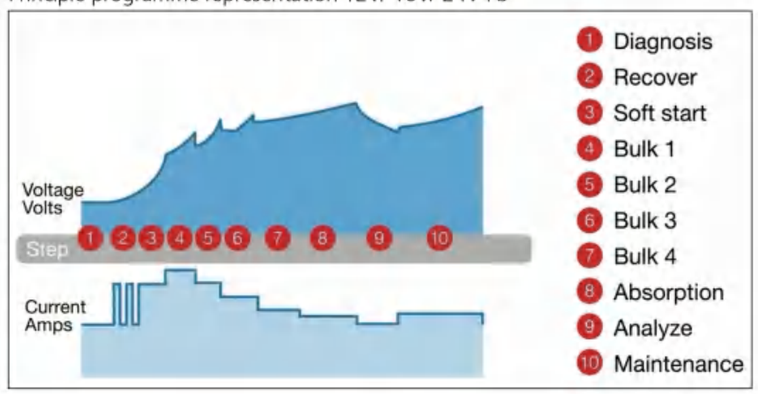
Protection:
√ Short Circuit Protection
√ Reversed Polarity Protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Safety Time Protection



Principle programme representation LiFePO4



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



MW LC260 New

CE

26A 10 steps Intelligent Battery Charger

Input Voltage: 220-240V ~ 50Hz 2.5A
Battery Type:
- Lead-acid Battery:
  - 12V/16V/24V (Wet, Gel, MF, AGM)
  - 12V: 50Ah - 500Ah
  - 16V/24V: 25Ah - 250Ah
- Lithium:
  - 12.8V 4-cells LiFePO4: 30 – 200Ah
  - 16.0V 5-cells LiFePO4: 25 – 250Ah
  - 25.6V 8-cells LiFePO4: 20 – 120Ah

Charge Voltage:
- Normal - 14.4 / 28.8V DC
- Cold/AGM - 14.8 / 29.6V DC
- 12V/24V Lithium - 14.4 / 28.8V DC
- 16V AGM Racing - 19.6VDC
- 16V Lithium Racing - 19VDC
- 13.6V Power Supply - 13.6V DC

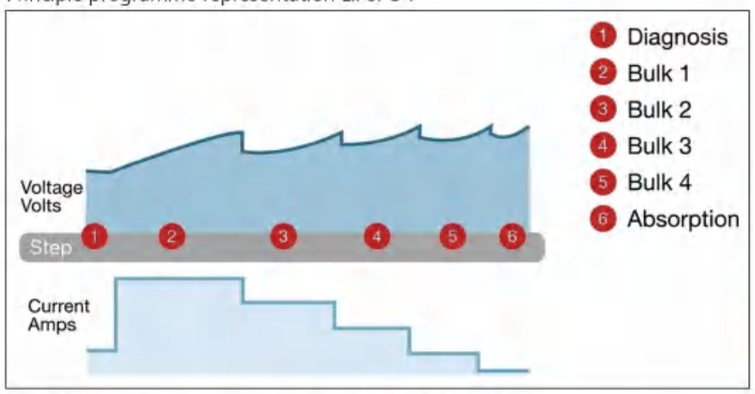
Charge Current:
- 26.0A for 12V battery
- 19.5A for 16V battery
- 13.0A for 24V battery
- 5.0A for 13.6V Power Supply

Insulation: IP20
Dimension: 279.3 x 119 x 68.2mm
LED indication
Trickle Charge
0V Battery Enable

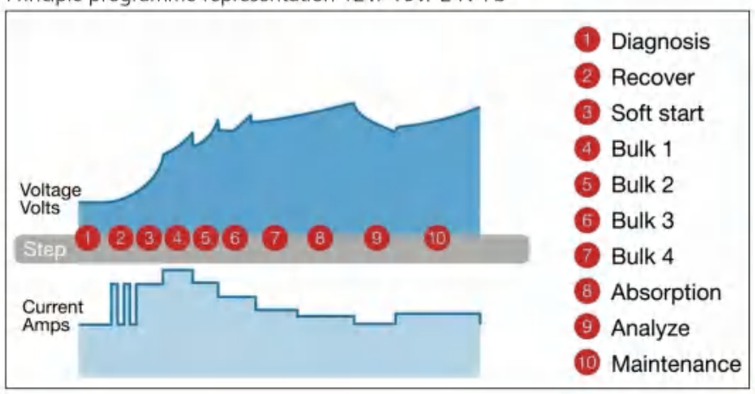
Protection:
√ Short Circuit Protection
√ Reversed Polarity Protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Safety Time Protection



Principle programme representation LiFePO4



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



MW 4LA20 New

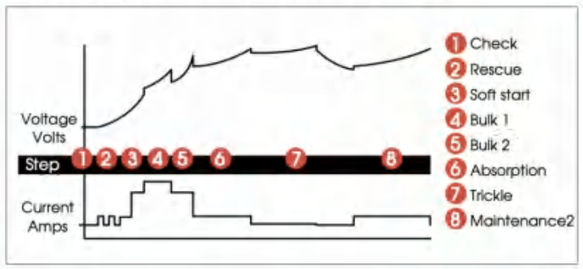
4-Bank 8A 8 steps Intelligent Battery Charger

Input Voltage: 220-240V ~ 50Hz 500mA
Battery Type:
Lead-acid Battery: 6V/12V (Wet, Gel, MF, AGM) 4-26Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 2-15Ah
Charge Voltage: 6V / 12V / 12.8V DC
Charge Current: 8A (2A per bank)
Insulation: IP65
Dimension: 220.4 x 138.7 x 37.6mm (TBC)
LED indication
Trickle Charge
0V Battery Enable

Protection:
√ Short Circuit Protection
√ Reversed Polarity Protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Safety Time Protection



Principle programme representation 6V/ 12V Pb





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 on
Error	Flashing: 1. Timer>2hours at step2 and step3 Recovery+Soft start charge. (red on) 2. Total Timer>40hours at Pb battery modes. (Red on) 3. Battery voltage>14V, Vbat=1.0-2.0V (Red on) 4. Reversed Polarity. (red flash)	Color：Red 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: White
12V	Mode selected	Color: White
12V AGM	Mode selected	Color: White
12.8V Lithium	Mode selected	Color: blue

MW 2LA20 New

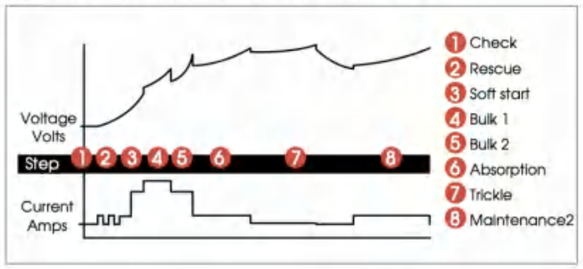
2-Bank 4A 8 steps Intelligent Battery Charger

Input Voltage: 220-240V ~ 50Hz 500mA
Battery Type:
Lead-acid Battery:
6V/12V (Wet, Gel, MF, AGM) 4-26Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 2-15Ah
Charge Voltage: 6V / 12V / 12.8V DC
Charge Current: 4A (2A per bank)
Insulation: IP65
Dimension: 120.4 x 138.7 x 37.6mm (TBC)
LED indication
Trickle Charge
0V Battery Enable

Protection:
√ Short Circuit Protection
√ Reversed Polarity Protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Safety Time Protection



Principle programme representation 6V/ 12V Pb





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 on
Error	Flashing: 1. Timer>2hours at step2 and step3 Recovery+Soft start charge. (red on) 2. Total Timer>40hours at Pb battery modes. (Red on) 3. Battery voltage>14V, Vbat=1.0-2.0V (Red on) 4. Reversed Polarity. (red flash)	Color：Red 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: White
12V	Mode selected	Color: White
12V AGM	Mode selected	Color: White
12.8V Lithium	Mode selected	Color: blue

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: 258.8 x 115 x 159.5mm



Car Battery
Voltage Display



Torch Function

Protection:
√ Over voltage protection
√ Over current protection
√ Short circuit protection
√ Reverse battery protection
√ Over and Under temperture protection



LED Indication



	LED1	LED2	LED3	LED4
Booster mode	Green, running	Green, running	Green, running	Green, running
Override mode	Yellow, running	Yellow, running	Yellow, running	Yellow, running
Extern Voltage Test mode	Blue, running	Blue, running	Blue, running	Blue, running
Error (wrong polarity connection, short output, out of voltage range, Amb. Temp >60°C or <-20°C)	Red, flashing	Red, flashing	Red, flashing	Red, flashing
Booster battery voltage (VB) under charging indication	LED1	LED2	LED3	LED4
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			
	Display voltage			

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
Battery Type:
Lead-acid Battery: 12V/16V/24V (Wet, Gel, MF, AGM)
12V: 50Ah-500Ah
16V/24V: 25Ah-250Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 30-200Ah
16V 4-cells $LiFePO_4$: 25-250Ah
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

Bluetooth compatible
Available on the App Store
ANDROID APP ON Google play

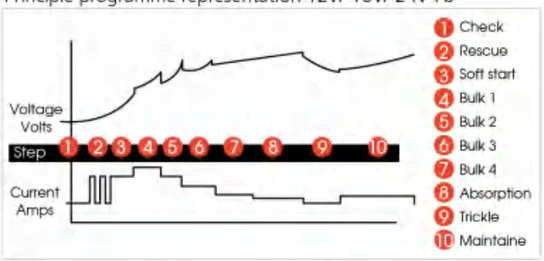


Protection:
√ Short circuit protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Reversed Polarity Protection
√ Safety timer protection

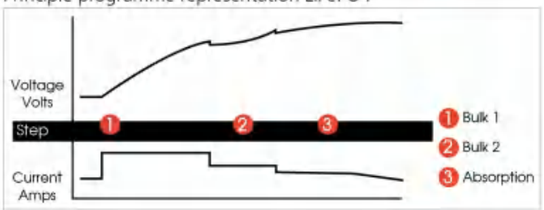
Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours 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
mini	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
and	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
JUMP CHARGE	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

CE

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
Battery Type:
Lead-acid Battery: 12V/16V/24V (Wet, Gel, MF, AGM, AGM+ (12V only))
12V: 50Ah-400Ah
24V: 25Ah-200Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 30-200Ah
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

Bluetooth compatible

Available on the App Store

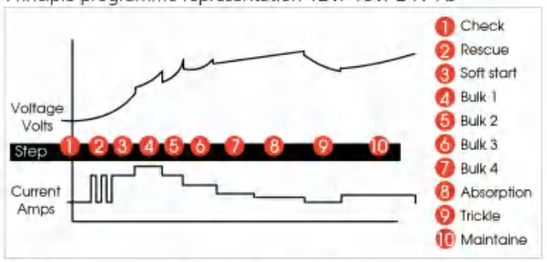
ANDROID APP ON Google play



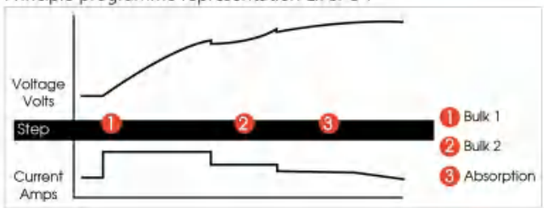
Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours 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
and	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
and	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
JUMP CHARGE	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

CE

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
Battery Type:
Lead-acid Battery: 12V/16V/24V (Wet, Gel, MF, AGM)
12V: 18Ah-240Ah
24V: 10Ah-120Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 10-80Ah
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

Bluetooth compatible

Available on the App Store

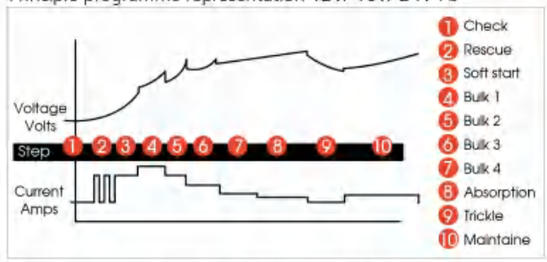
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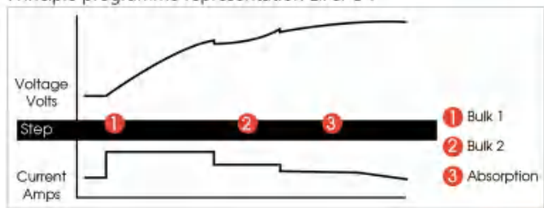
Item	Indication	LCD indication
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours 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
and	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
and	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
and	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

CE

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

Bluetooth compatible

Available on the App Store

ANDROID APP ON Google play

Input Voltage: 220-240V ~ 50Hz 1.0A
Battery Type:
Lead-acid Battery: 6V/12V (Wet, Gel, MF, AGM)
12V Small: 1.2Ah-12Ah
6V/12V Normal: 12Ah-120Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 8-50Ah
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



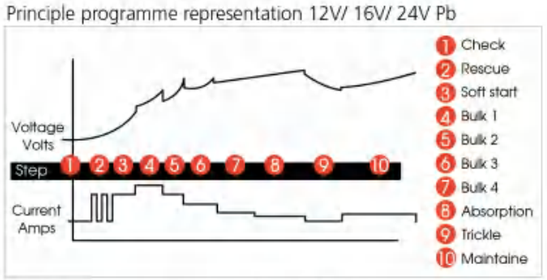
LB60 Pro also Available



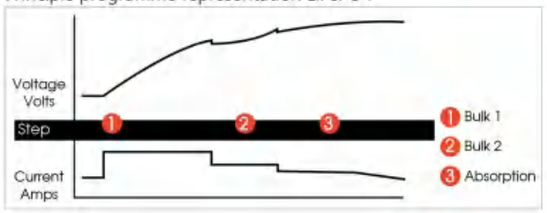


Item	Indication	LED
Power On Reset	All LED flash 2times for self-check.	Flashing: ON=0.5S,OFF=0.5S
Stand-by	ON: no battery at Standby. OFF: Battery Charging.	Color: Pure Green
Error(dual color)	Flashing: 1. Timer>2hours at step2 and step3 Recovery+Soft start charge. (red on) If 12V recover (+) mode <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

CE

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
Battery Type:
Lead-acid Battery: 6V/12V (Wet, Gel, MF, AGM) 4-26Ah
Lithium: 12.8V 4-cells $LiFePO_4$: 2-15Ah
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

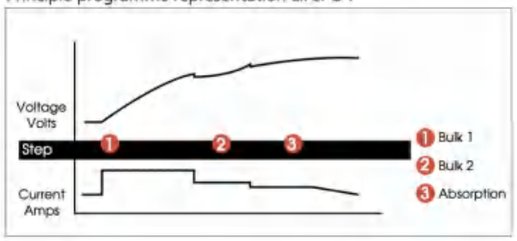


Protection:
√ Short circuit protection
√ High Battery Voltage Protection
√ Over Temperature Protection
√ Reversed Polarity Protection
√ Safety timer protection

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

MW LF-CC260ALCD

CE

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

Input: 220-240V AC, 50Hz, 2.5A
Output current: 26A (max)
Charging voltage:
Lead acid (normal): 14.4/28.8VDC
Cold/AGM: 14.7/29.4VDC
16V AGM Racing: 19.6VDC
16V LITHIUM Racing:19VDC
LiFePO4; 12.8V/4 cells 30 Ah-200Ah
and 16V/4 cells 25Ah-250Ah
Charging current:
12V lead acid: 26A
24V lead acid: 13A
LiFePO4: 26A
13.6V Power Supply: 5.0A
Insulation: IP 20 (Dust and Water proof)
Dimension: 321 x 144.5 x 77.5mm

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

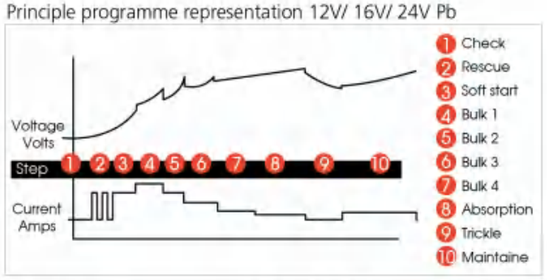




LCD indication:

Item	Indication	LED
Power On Reset	All LED flash 2 times 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. (Green on) 3. Total Timer>50hours at Pb battery modes. (yellow flash) 4. Battery voltage>28V, Vbat=1.0-2.0V (yellow on). 5. Reversed Polarity. (red flash)	Color: Red and Yellow Flashing: ON=0.5S, OFF=0.5S
25%	Flashing: Vbat<12.8/16.5/25.6V Steady: Vbat>12.8/17/25.6V after 3sec. OFF: after full charged	Color: Red Flashing: ON=0.5S, OFF=0.5S
50%	Flashing: 12.8/17.1/25.6V<Vbat<13.6/17.5/27.2V Steady: Vbat>13.6/17.5/27.2V after 3sec. OFF: after full charged	Color: Orange Flashing: ON=0.5S, OFF=0.5S
75%	Flashing: 13.6/17.6/27.2V<Vbat<13.9/18.8/27.8V Steady: Vbat>13.9/18.9/27.8V after 3sec. OFF: after full charged	Color: Yellow Flashing: ON=0.5S, OFF=0.5S
100%	Flashing: 13.9/19/27.8V<Vbat<full charged. Steady: Full charged after 3sec.	Color: Pure Green Flashing: ON=0.5S, OFF=0.5S
12V Normal	Mode selected	Color: Red
12V Cold/AGM	Mode selected	Color: Red
24V Normal	Mode selected	Color: Red
24V Cold/AGM	Mode selected	Color: Red
12V AGM+	Mode selected	Color: Red
12V Normal Silent Night Mode	Mode selected	Color: OFF
Jump Charge	Mode selected	Color: Red
12.8V Lithium	Mode selected	Color: Red
13.6V Power Supply	Mode selected	Color: Red
16V Lithium Racing	Mode selected	Color: Red
16V AGM Racing	Mode selected	Color: Red
12V Recover(+)	Steady: Mode selected(3sec.) Flashing: Start charging after Step1 (Diagnosis) started. Steady: after go to 12V Small 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 LF-CC150ALCD

CE

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

Input: 220-240V AC, 50Hz, 2.0A
Output current: 15A (max)
Charging voltage:
Lead acid (normal): 14.5/29.0V DC
Cold/AGM: 14.7/29.4V
LiFePO4; 12.8V/4 cells
Charging current:
12V lead acid: 15 A
24V lead acid: 7.5A
LiFePO4: 15A
13.6V Power Supply: 5.0A
Insulation:
IP 65 (Dust and Water proof)
Dimension: 279 x 119 x 68mm

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

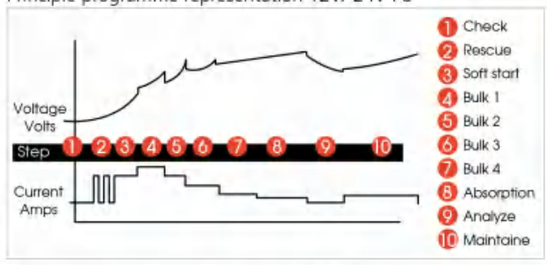




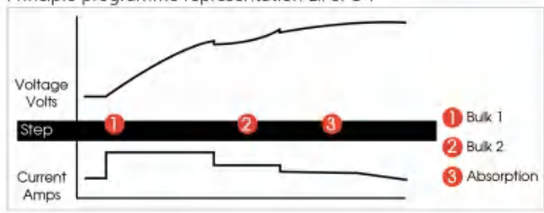
LCD indication:

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
and	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
and	Mode selected: cold mode 24V Lead acid battery (small capacity)	On
JUMP CHARGE	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

Principle programme representation 12V/ 24V Pb



Principle programme representation LiFePO4



MW LF-CC075LCD

CE

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

LCD display



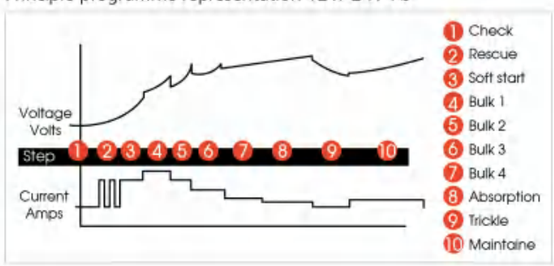
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection
√ Reverse battery protection
√ Safety timer protection



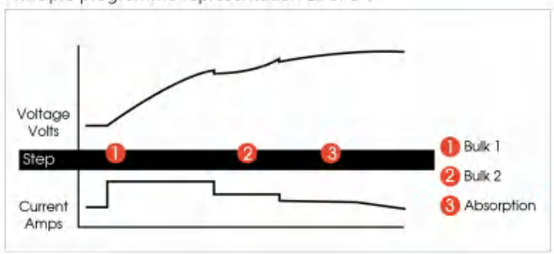
LCD indication:

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
and	Mode selected: cold mode 12V Lead acid battery (regular capacity)	On
	Mode selected: 24V Lead acid battery (small capacity)	On
and	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

CE

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

LCD display



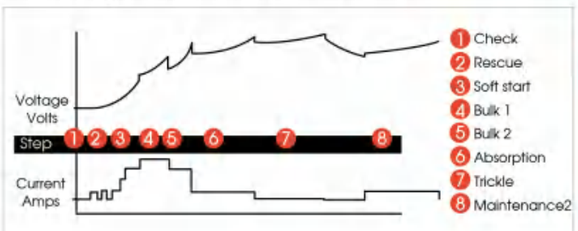
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection
√ Reverse battery protection
√ Safety timer protection



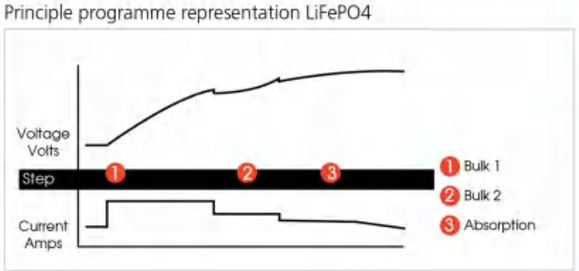
LCD indication:

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
and	Mode selected: cold mode 12V Lead acid battery (small capacity)	On
	Mode selected: 12V Lead acid battery (regular capacity)	On
and	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

CE

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

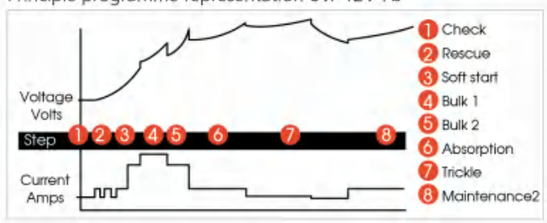
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection
√ Reverse battery protection
√ Safety timer protection



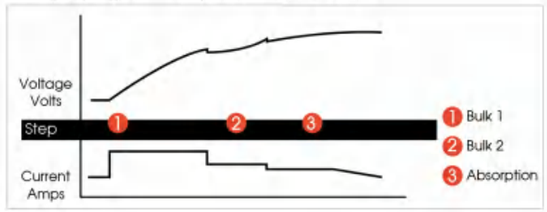
LED indication:

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

CE

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

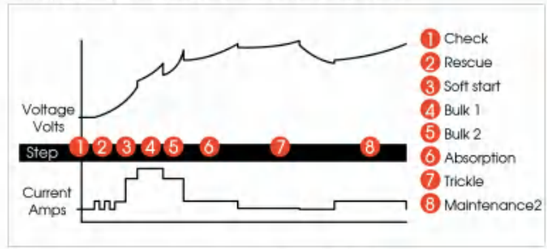
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection
√ Reverse battery protection
√ Safety timer protection



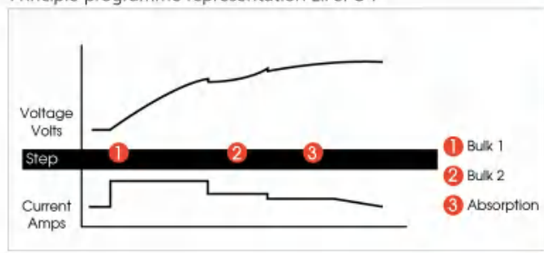
LED indication:

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

CE

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

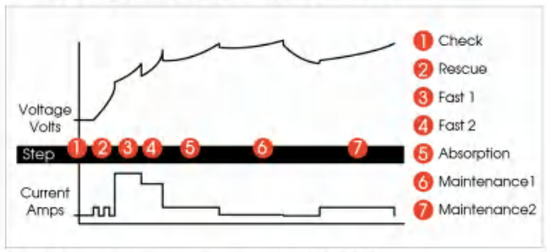
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection
√ Reverse battery protection
√ Safety timer protection



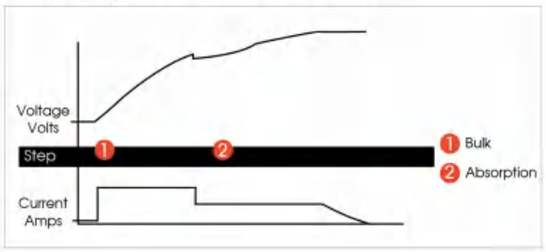
LED indication:

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

CE

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

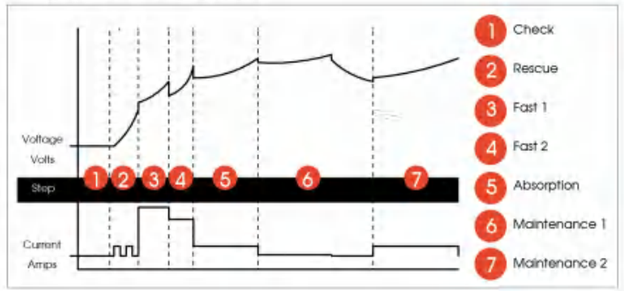
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection



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

CE

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

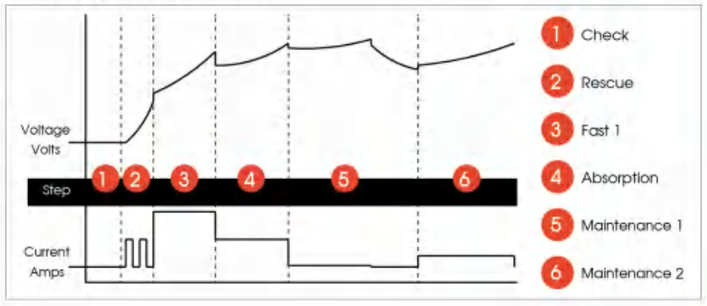
Protection:
√ Short circuit protection
√ Overload protection
√ Wrong polarity protection



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

CE

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

	Diagnosis	Recovery	Soft Start	Bulk	Absorption	Analysis	Float	Maintenance
Max Time	3 sec.	8 hours	2 hours	25 hours	10 hours	5 mins	12 days	Depend Voltage rise, 20 hours
Voltage(V)								
Step	1	2	3	4	5	6	7	8
Current(A)								

MW MLF-CC280U

CE

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

	Diagnosis	Recovery	Soft Start	Bulk	Absorption	Analysis	Float	Maintenance
Max Time	3 sec.	8 hours	2 hours	25 hours	10 hours	5 mins	12 days	Depend Voltage rise, 20 hours
Voltage(V)								
Step	1	2	3	4	5	6	7	8
Current(A)								

MW 606HCN

Tiny 6V Lead Acid Battery Charger

Input: 100-240V AC, 60/50Hz
Charging current: 600mA
Charging voltage: 6.0V
Float output voltage: 7.2-8.4V
Bulk charge mode voltage: 3.0-6.8V
Dimension: 68.4 x 38.7 x 68.4mm



MW 1210HCN

Tiny 12V Lead Acid Battery Charger

Input: 100-240V AC, 60/50Hz
Charging current: 1000mA
Charging voltage: 12.0V
Float output voltage: 14.4V
Bulk charge mode voltage: 6.0-14.0V
Dimension: 76.5 x 42.4 x 72.2mm



MW C2612

Lead Acid Battery Charger

Input Voltage: 100-240V AC, 60/50Hz
Output Voltage: 2.0V – 6.0V – 12.0V
Output Current: 600mA
Output Power: 7.2VA (max)
Dimension: 82 x 56 x 80mm



MW 2WR-LC-BT New

Connector for Battery Charger w/ Battery Status Indicator

Input Voltage: 5.5V - 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 (≥12.07V, ±3%)
	Green LED off, Yellow LED on, Red LED off	Charge recommended (11.77V - 12.06V, ±3%)
	Green LED off, Yellow LED off, Red LED on	Charge necessary (11.35V - 11.76V, ±3%)
	Green LED off, Yellow LED off, Red LED flash	Charge necessary (9V - 11.34V, ±3%)
For 6V battery	Green LED on, Yellow LED off, Red LED off	Charge not necessary (6.04V - 8.9V, ±3%)
	Green LED off, Yellow LED on, Red LED off	Charge recommended (5.89V - 6.03V, ±3%)
	Green LED off, Yellow LED off, Red LED on	Charge necessary (5.68V - 5.88V, ±3%)
	Green LED off, Yellow LED off, Red LED flash	Charge necessary (≤5.67V, ±3%)

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.44
Socket Multiplier — P.45
Socket Multiplier w/ USB Output — P.46
DC/DC Converter — P.47

MW PD10230 New

CE

48W PD 3 Way Socket Multiplier w/USB Port

Input Voltage: 12-24V DC
Output Voltage: 12-24V DC
Output Current: 10A
USB Port 1 Output (12V Input):
5.0V / 9.0V, 3.0A; 12.0V, 2.5A (PD)
3.3V – 12.0V, 2.5A (PPS)
USB Port 1 Output (24V Input):
5.0V / 9.0V, 3.0A; 12.0V, 2.5A; 15.0V, 2.0A; 20.0V, 1.5A (PD)
3.3V – 11.0V, 2.5A; 3.3V – 16.0V, 2.0A (PPS)
USB Port 2 Output:
5.0V, 3.0A; 9.0V, 2.0A; 12.0V, 1.5A (QC)
USB Port 1+2 Output: 5V, 4.8 A (Shared)
LED indication in White
Replacable Fuse Included
Dimension: 120 x 95.5 x 47.2mm





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

CE

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



MW 206

CE

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



MW 292

CE

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



Notebook Power Supply

Notes:

90W Notebook AC Power P.49
70W Notebook AC Power P.49
45W Notebook AC Power P.49
Tips P.50

MW M90W

90W Notebook Power Supply

ErP 3rd stage compliance
CEC efficiency: Level VI
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 VI
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

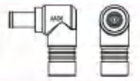
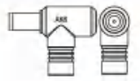
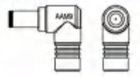
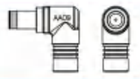
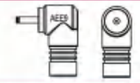
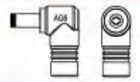
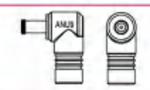
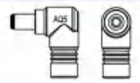
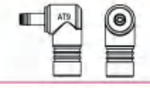
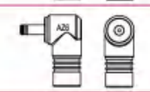
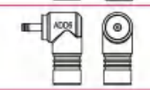
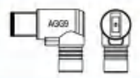
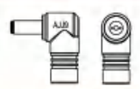
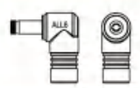
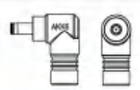
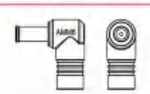
ErP 3rd stage compliance
CEC efficiency: Level VI
MEPS: VI

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

Tips

Model	Dimension	2D Diagram	Brand(s)	Available voltage
AAD6, AAD9	6.5X1.4/ 10		Sony VAIO TZ series/ Samsung/ Fujitsu/ Dell	16V, 19V
AK6, AK9	7.4X5.4/ 13		HP notebook	16V, 19V
AAM9	7.4X5.1/ 12		Dell	19V
AAO9	7.9X5.6/ 12		IBM	19V
AEE9	2.5X0.75/ 9		Asus (netbook)/ Samsung XE363	16V, 19V
AG6, AG9	2.5X5.5/ 12		Gigatech/ IBM/ BenQ Joybook Lite	16V, 19V
ANU9	5.0X3.4/ 12		Samsung	19V
AQ5, AQ9	6.3X3.0/ 10		Toshiba/ NEC/ IBM	15V, 19V
AT9	4.75X1.75/ 10.5		Compaq	19V
AZ6, AZ9	4.0X1.2/ 9.7		Asus Zenbook	16V, 19V
ADD6, ADD9	3.0X1.1/ 8		Asus UX31 Ultrabook/ Acer C720	16V, 19V
AGG9	7/12.5 (square)		Lenovo	19V
AJJ9	5.5X1.75/ 13		Acer	19V
ALL6, ALL9	5.5X2.5/ 13		Toshiba CB30	16V, 19V
AKK6, AKK9	4.5X3.0/ 12		HP Chromebook 14	16V, 19V
AMM6, AMM9	6.5X1.4/ 14		Sony VAIO TZ series/ Samsung/ Fujitsu/ Dell	16V, 19V

AC-AC Step Down Converter

Notes:

AC/AC Adaptor P.52

MW 2P045

45W Single-Voltage AC/AC Adaptor

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



MW 2P075

75W Single-Voltage AC/AC Adaptor

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



MW 2P100

100W Single-Voltage AC/AC Adaptor

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



MW 2P300

300W Single-Voltage AC/AC Adaptor

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



Battery Tester

Notes:

Battery Tester P.54

MW 226N New

CE

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 × 62 × 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

CE

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.56 - 57
Universal Battery Charger — P.58 - 60
Power Bank — P.59

MW AA40 PRO New

Professional Battery Charger

Input USB-C: 12.0V / 1.66A (20W)
Rechargeable battery type: Ni-MH, Li-ion
Battery size: NiMH: AAA / AA / C / D
Li-ion: 10340 – 32650
Output voltage: 1.2V (NIMH); 3.6V / 3.7V (Li-ion)
Output current: 500 / 1000 / 1500 / 2000mA
Protection: Short Circuit, Wrong Polarity and Over Temperature
Trickle Charge
Safety Timer
Discharge function
LCD indication
Dimension: 160.2 x 110 x 40.3mm

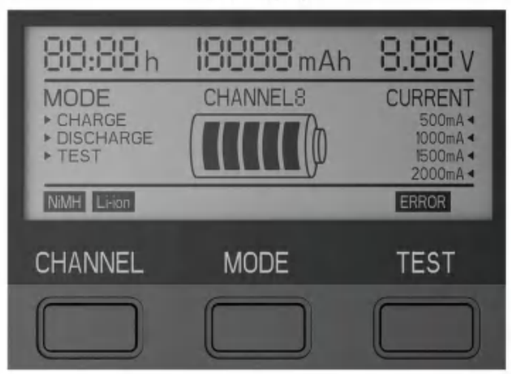


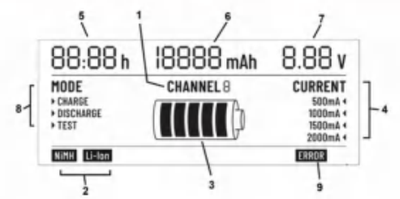


Input USB-C

Battery Size (mm)	NiMH: AAA/AA/C/D Li-ion: 10340 / 10350 / 10440 / 10500 / 14350 / 14430 / 14500 / 14650 / 16340 (RCR123A) / 16500 / 16650 / 17350 / 17500 / 17650 / 17670 / 18350 / 18490 / 18500 / 18650 / 18700 / 20700 / 21700 / 22500 / 22650 / 25500 / 26500 / 26650 / 32650
Battery Capacity	Max 1100mAh for AAA Max 2800mAh for AA Max 5000mAh for C Max 10000mAh for D Max 10000mAh Li-ion

LCD Display





1	Charging channel indicator
2	Rechargeable battery type - NiMH: NiMH - Li-ion: Li-Ion
3	Charge level Indicator / Charge level approx. 0-20 % approx. 20-40 % approx. 40-60 % approx. 60-80 % approx. 80-100 %
4	Charging current
5	Timer
6	mAh indicator
7	Voltage indicator
8	Mode
9	Error

MW UC80 New

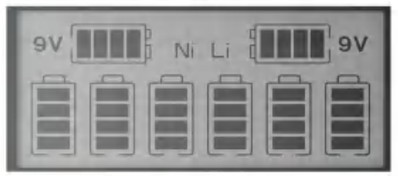
CE

Smart Battery Charger

Input USB-C: 12.0V / 1.66A (20W)
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 166.1 x 44.7mm



LCD Display





Input USB-C

MW UA05-4C New

CE

Multi-Channel Battery Charger

Input USB-C: 5.0V / 2.4A
Rechargeable battery type:
Ni-MH (AAAA/ AAA/ AA/ C/ D)
Li-ion (Max 32650)
1.5V Li-ion ACCU (AAA/ AA)
Output Voltage:
1.2V (NiMH); 3.7V (Li-ion); 5V (1.5V Li-ion)
Output current:
500mA (NiMH, Li-ion, 1.5V Li-ion)
Protection:
Short Circuit, Wrong Polarity and Over Voltage
Trickle Charge (Ni-MH)
LED indication in Breathing White
Dimension: 122.6 x 118.6 x 40.3mm





Input USB-C

MW LFAA05V-4U New

CE

Battery Charger

Input: 100-240V AC 50/60Hz
Rechargeable battery type:
Ni-MH (AA / AAA / 9V), 1.5V Li-ion ACCU (AA / AAA)
Output: 1.2V/ 500mA; 4pcs (Ni-MH AA/AAA)
5V/ 500mA; 1-2pcs (1.5V Li-ion ACCU AA/AAA)
5V/ 250mA; 3-4pcs (1.5V Li-ion ACCU AA/AAA)
9V/ 13mA; 2pcs (9V)
Protection: Channel 1 - 4: Short Circuit and Polarity
End of charge: dV
Trickle Charge
LED indication in Breathing White
Dimension: 108 x 68 x 68.1mm



MW AA01V-4U

CE

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-6U

CE

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 BUAA4

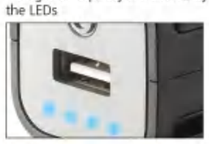
Compact Powerbank

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











4pcs AA-size Alkaline/rechargeable batteries

MW 6883

Battery Charger L w/ LCD Display

Input: 100-240V AC 50/60Hz 450mA
Rechargeable battery type: Ni-MH (AA / AAA / C / D / 9V)
Output: 1.2V/ 500mA (AAA, max 6 cells)
1.2V/ 1000mA (AA, max 6 cells)
1.2V/ 1000mA (C / D, max 4 cells)
2V/ 70mA (9V block)
Dimension: 158.9 x 180 x 55.8mm

Item	Description
Power on	All Symbol flash 3 times.
Symbol:	1)The indication of the charging progress is as follows: <1.32V "00%", 1.35V "10%" 1.37V "20%", 1.38V "30%" 1.39V "40%", 1.40V "50%" 1.42V "60%", 1.43V "70%" 1.45V "80%", 1.47V "90%" FULL "100%" 2) Refresh-mode: "00%" flash
Symbol:	Error: the symbol will be flash.
Symbol:	1)The indication of 9V battery of the charging progress is as follows: <9.24V "00%", 9.45V "10%" 9.52V "20%", 9.59V "30%" 9.73V "40%", 9.80V "50%" 9.94V "60%", 10.0V "70%" 10.15V "80%", 10.29V "90%" FULL "100%" 2) Refresh-mode: "00%" flash
Symbol:	Error: the symbol of 9V battery will be flash .
Stand_by	All off



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



Gaming Accessories

Notes:

Xbox Controller Charging Dock — P.62
PlayStation 5 Controller Charging Dock — P.63

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 × 127.8 × 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

CE

Multiple Output Power

Notes:

3.6W – 60W AC/DC Switching Adaptor — P.65 - 71
Universal Power Supply — P.68

IMPORTANT ANNOUNCEMENT

Conquering the EU ErP Level 7 Era

Unveiling Our New Flagship Multi-Voltage Switching Power Supply

The EU has introduced strict new energy and compatibility regulations for External Power Supplies (EPS), known as **ErP Level 7 (EU 2025/2052)**. The regulation has been forced at the end of 2025 and will be fully mandatory by **December 14, 2028**, bringing big changes to the whole industry.

We are thrilled to introduce our **Flagship Multi-Voltage Output Switching Power Supply Series** — a premium lineup engineered not just to meet the new standards, but to redefine them.

The ErP Level 7 Challenge: Raising the Bar

Unprecedented Energy Efficiency Thresholds

- **No-load power slashed by 25%:** The limit for products ≤49W has been tightened to a strict 0.075W.
- **The "10% Low-Load Efficiency" Game-Changer:** For the first time, regulators demand peak efficiency even at extremely low loads, pushing circuit design to its absolute limits.

USB-C & USB-PD: The New Universal Standard

AC-DC power supplies ≤100W and ≤48V must now integrate USB-C interfaces and support USB-PD protocols, driving global charging unification.

Our Flagship Solution: Redefining Power Delivery

As our ACE product line, this new series represents the pinnacle of our engineering capabilities, delivering three unbeatable advantages:

☑ **Shattering the "10% Low-Load" Barrier with Ultimate Efficiency**

Our flagship series achieves no-load power consumption far below the 0.075W limit. To conquer the toughest "10% low-load efficiency" requirement, we've optimized transformer designs and implemented advanced Synchronous Rectification (SR).

☑ **Unmatched Flexibility: One Power Supply, Infinite Possibilities**

- **Dynamic Multi-voltage Output:** Users can manually switch voltages, providing the best Versatility and Flexibly.
- **Smart Compliance Edge:** Under (EU) 2025/2052, this manual voltage selection classifies the product as a "User-selectable EPS", granting exemption from the mandatory USB-PD requirement (Annex II, 3(c)(5)).

☑ **Future-Proof Your Business: Zero Compliance Risks**

By choosing our Flagship **ErP Level 7 Series**, your end products will seamlessly continue to sell in the EU post-2028, eliminating the risks of product delisting or costly re-certifications.

MW MA06 E7 New

7.2W AC/DC Switching Adaptor

ErP Lot 7
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
Dimension: 66 x 37 x 65.8 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version CE

MW MB10 E7 New

12W AC/DC Switching Adaptor

ErP Lot 7
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; 12V, 1.0A
Dimension: 72 x 40 x 65.8 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version CE

MW MC15 E7 New

18W AC/DC Switching Adaptor

ErP Lot 7
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
Dimension: 72 x 42 x 66.3 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version CE

MW MD15 E7 New

24W AC/DC Switching Adaptor

ErP Lot 7
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
Dimension: 74 x 43.5 x 70.3 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version

MW MD25 E7 New

27W AC/DC Switching Adaptor

ErP Lot 7
MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz
Output Voltage: 3.0/ 4.5/ 5.0/ 6.0/ 7.5/ 9.0/ 12.0V DC
Output Current: 2250mA (max)
Dimension: 74 x 43.5 x 70.3 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version

MW ME30 E7 New

36W AC/DC Switching Adaptor

ErP Lot 7
MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz
Output Voltage: 5.0 – 24.0V DC
Output Current: 5.0 – 12.0V/3A; 13.0V/2.7A; 14.0V/2.5A;
15.0V/2.4A; 16.0V/2.2A; 17.0V/2.1A;
18.0V/2.0A; 19.0V/1.88A; 20.0V/1.8A;
21.0V/1.7A; 22.0V/1.63A; 23.0V/1.56A; 24.0V/1.5A
LCD Display: 88V
Dimension: 110.06 x 30.4 x 32.2 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version

MW MG36 E7 New

36W AC/DC Switching Adaptor

ErP Lot 7
MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz
Output: 5.0/ 6.0/ 7.5/ 9.0/ 12.0V, 3.0A;
13.5/ 15.0V, 2.4A
Dimension: 90.6 x 50.6 x 69 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version

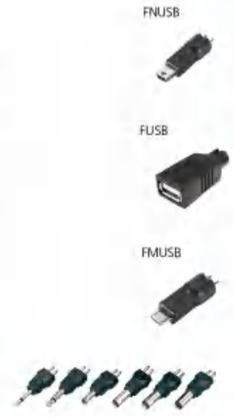
MW MD40 E7 New

60W AC/DC Switching Adaptor

ErP Lot 7
MEPS: VI

Input Voltage: 100-240V AC, 60/ 50Hz
Output: 12.0V, 5.0A; 15.0V, 4.0A; 16.0V, 3.2A;
18.5V/ 19.0V/ 20.0V, 3.0A; 24.0V, 2.5A
Dimension: 118 x 51 x 71 mm
√ Over voltage protection
√ Over current protection
√ Short circuit protection





Japan version, US version, UK version & SAA version

MW PS235

80W Universal Power Supply w/ CC/CV Output

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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







MW MA03

3.6W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW MA06L / MA06H

7.2W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW MB10L / MB10H

12W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW MC15L / MC15H

18W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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, 1.5ALED 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



FUSB



FMUSB



FNUSB



CE

MW MD15

24W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW MD25

27W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW ME25

27W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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



CE

MG36 / MG36D

36W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

MW MD40PU

60W AC/DC Switching Adaptor

ErP 3rd stage compliance
CEC efficiency: Level Ⅵ
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





CE

Note Page

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 Byphenyls, Polybrominated Dyphenyl 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 comsumption of harzard 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 cetificate 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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