

12VDC 25A 8-Step Lead Acid and Lithium Battery Charger

MB3920



INSTRUCTION MANUAL

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WARNINGS & SAFETY INFORMATION

- Explosive gases may escape from the battery during charging. Prevent flames and sparks. Provide adequate ventilation.
- Before charging, read the instructions.
- For indoor use. Do not expose to rain.
- For charging 12V Lithium-ion with LiFePO4 batteries and Lead Acid batteries ONLY.
- Disconnect the 220-240V AC mains supply before making or breaking the connections to the battery.
- The battery charger must be plugged into an earthed socket-outlet.
- Connection to supply mains is to be in accordance with National wiring rules.
- Do not attempt to charge non-rechargeable batteries.
- Never charge a frozen battery.
- If the AC cord is damaged, do not attempt to use. It must be replaced or repaired by a qualified person.
- Corrosive substances may escape from the battery during charging and damage delicate surfaces. Store and charge in a suitable area.
- Ensure all vehicle accessories including lights, heaters, appliances etc are turned off prior to charging.
- This appliance is not intended for use by children.

WARNING: The manufacturer is not responsible for any potential injury from misuse

Caution

Always place the battery charger in an environment which is:

- Well ventilated.
- Not exposed to direct sunlight or heat source.
- Out of reach from children.
- Away from water / moisture, oil or grease.
- Away from any flammable substance.

Safety

- The charger is designed for charging 12V Lithium batteries and lead-acid batteries. Do not use the charger for any other purpose.
- Check the charger cables prior to use. Ensure that the cable is in good repair. A charger with damaged cables must not be used.
- A damaged cable must be replaced by a certified technician.
- Never charge a damaged battery.
- Never charge a frozen battery.
- Never place the charger on top of the battery when charging.
- Always use the charger in a well ventilated area.
- Avoid covering the charger.
- A battery being charged could emit explosive gasses. Prevent sparks close to the battery. When batteries are reaching the end of their lifecycle internal sparks may occur.
- All batteries fail sooner or later. A battery that fails during charging is normally taken care of by the chargers advanced control, but some rare errors in the battery could still exist. Do not leave a battery unattended while charging.
- Ensure that the cabling does not come into contact with hot surfaces or sharp edges.
- Battery acid is corrosive. Rinse immediately with water if acid comes into contact with skin or eyes, seek immediate medical advice.
- Batteries consume water during use and charging. For batteries where water can be added, the water level should be checked regularly. If the water level is low add distilled water.
- Store and use the battery charger out of the reach of children.
- Connection to the mains supply must be in accordance with the national regulations for electrical installations.

BOX CONTENTS



1x Battery Charger

PRODUCT DIAGRAM



- 1. Mode button
- 2. Stage status display indicates power, charging and fully charged.
- 3. Power indicator
- 4. Fault indicator
- 5. Output voltage meter
- 6. Battery type indicator
- 7. DC leads

- 8. Power Cord
- 9. Thermostatically controlled cooling fan.
- 10. Ground terminal
- 11. Mounting flange
- 12. Ventilation hole
- 13. 3.5mm mounting hole
- 14. Power supply indicator
- 15. Lithium battery indicator

BEFORE FIRST USE

Prior to using your product, please read all the safety and operating instructions thoroughly. Please ensure you follow the steps below before using the product. We recommend you keep the original packaging for storing the product when not in use.

Please pay close attention to the section entitled Warnings & Safety Information. Find a safe and convenient place to keep this instruction manual for future reference.

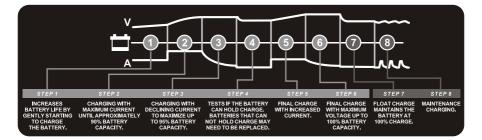
Unpack the product but keep all packaging materials until you have made sure your new product is undamaged and in good working order. Ensure you have all accessories listed in this manual.

FEATURES

- This is a fully Power Factor Correction (PFC) automatic battery charger with 8 charge stages.
- Automatic charging protects your battery from being overcharged. So you can leave the charger connected to the battery indefinitely.
- 8-stage charging is a very comprehensive and accurate charging process that gives your battery longer life and better performance compared to using traditional chargers.
- 8-stage chargers are suitable for most battery types including LITHIUM, GEL, AGM, WET, MF and CALCIUM batteries. They may also help restore drained and sulphated batteries.

8-STAGE AUTOMATIC CHARGING

Lithium Battery Mode



STEP		LIMIT
1. Soft Start	25% Current until 11V	Max 30s
2. Bulk	100% Current until 13.8V	Max 10h
3. Absorption	Constant 13.8V until current drops to 15%	30 mins
4. Analyse	Checks if voltage drops to 12V	3 mins
5. Completion	30% Current until 14.5V	
6. Maximisation	Constant 14.5V until current drops to 15%	30 mins
7. Float	13.6V, 100% Current	10 days Charge cycle restarts if voltage drops*
8. Maintain	During 13.0-13.8V, the current control at 100%-20%	Charge cycle restarts if voltage drops

STEP 1 SOFT START

A preliminary charge processes that gently introduces power to the battery. This protects the battery and increases battery life.

STEP 2 BULK

Charging with maximum current until approximately 90% battery capacity. Bulk mode for the charging cycle. The start phase continues until the battery's terminal voltage has risen above the set limit, at which point the charger switches to bulk charging. If the terminal voltage has not passed the voltage limit within the time limit, the charger switches to fault mode (Step 2 light solid) and discontinues the charging. If so, the battery is faulty or its capacity is too large.

STEP 3 ABSORPTION

Charging with declining current to maximize up to 95% battery capacity.

STEP 4 ANALYSE

Tests if the battery can hold charge. Batteries that can not hold charge may need to be replaced.

STEP 5 COMPLETION

Final charge with increased current.

STEP 6 MAXIMISATION

Final charge with maximum voltage up to 100% battery capacity.

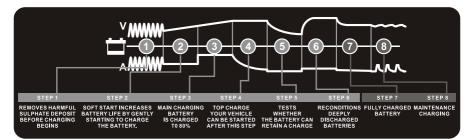
STEP 7 FLOAT

The Float stage maintains the battery at 100% charge without overcharging or damaging the battery. This means the charger can be left connected to the battery indefinitely.

STEP 8 MAINTAIN

Maintaining the battery at 95 - 100% capacity. The charger monitors the battery voltage and gives a maintain when necessary to keep the battery fully charged.

Lead Acid Battery Mode



STEP	GEL	AGM	WET	CALCIUM	LIMIT
1. Desulphation	11V			Max 8h	
2. Soft Start		Half the rate	ed until 12.5∨	/	Max 8h
3. Bulk		100% cur	rent until		Max 24h
	14.1V	14.4V	12	1.7V	
4. Absorption	Cons	stant until cur	rrent drops t	:o 15%	30 mins
	14.1V	14.4V	12	1.7V	
5. Analyse	Ch	ecks if voltag	e drops to 1	3.2V	90 secs
6.	Cor	istant current	t (15%) limite	ed to	30 mins or 4h
Recondition	14.1V	14.4∨	1	6V	depending on battery voltage (Calcium model must enter Recondition stage
7. Float	13.7V 100% Current		10 days Charge cycle restarts if voltage drops*		
8. Pulse	During 12.6- 14.1V	During 12.6- 14.4V		uring -14.7V	Charge cycle restarts if voltage drops
	the	current cont	rol at 100%~	20%	

STEP 1 DESULPHATION

The Desulphation stage may break down sulphation that occurs in batteries that have been left flat for extended periods of time, returning them back to full charge.

Sulphation occurs when leadsulphate hardens and clogs up the battery cells.

STEP 2 SOFT START

A preliminary charge processes that gently introduces power to the battery.

This protects the battery and increases battery life.

STEP 3 BULK (CONSTANT CURRENT)

Charging with maximum current until approximately 80% battery capacity.

Bulk mode for the charging cycle. The start phase continues until the battery's terminal voltage has risen above the set limit, at which point the charger switches to bulk charging. If the terminal voltage has not passed the voltage limit within the time limit, the charger switches to fault mode (Step 3 lamp solid) and discontinues the charging. If so, the battery is faulty or its capacity is too large.

STEP 4 ABSORPTION (CONSTANT VOLTAGE)

Charging with declining current to maximize up to 100% battery capacity.

STEP 5 ANALYSE

An automatic battery test is conducted immediately after the absorption stage.

The test monitors the voltage for 90

seconds to determine if the charge was successful.

- 12V charger If the voltage is below 13.2 volts (fail), the charger will initiate the Recondition stage.
- 12V charger If the voltage is above 13.2 volts (pass), the charger will proceed to the final stage: Float.

STEP 6 RECONDITION

Choose the Recond program to add the Recond step to the charging process.

During the Recond step voltage increases to create controlled gasing in the battery. Gasing mixes the battery acid and gives back energy to the battery.

This recondition stage can recover batteries from a deeply discharged state increasing performance and battery life.

RECOND - This mode is used to recover deep discharged flooded batteries where you could expect a stratified acid (high acid weight in the bottom, low on top). Check with battery manufacturer when in doubt.

Use this mode with care, because the high voltage will cause some water loss.

16V is normally no problem for electronics in 12V system. Consult your supplier when in doubt. Life of light bulbs will be reduced at higher voltage.

Try to disconnect light from the battery during this phase. Maximum effect and minimum risk for electronics is achieved by charging a disconnected battery.

STEP 7 FLOAT

The Float stage maintains the

battery at 100% charge without overcharging or damaging the battery. This means the charger can be left connected to the battery indefinitely.

STEP 8 PULSE

Maintaining the battery at 95-100% capacity. The charger monitors the battery voltage and gives a pulse when necessary to keep the battery fully charged.

The AUTOMATIC BATTERY CHARGER has an 8-step fully automatic charging cycle, the cycle is repeated infinitely. If the terminal voltage drops below a lower limit, the charger automatically goes back to the beginning of the charging curve.

SWITCHMODE TECHNOLOGY

Using the latest technology in battery chargers, switch mode chargers convert 220-240V AC power to 12V DC power using electronic components unlike traditional battery chargers that rely on heavy transformers. This allows the charger to be light weight and compact without sacrificing on performance.

POWER SUPPLY (CONSTANT VOLTAGE OF 13.8 VOLTS)

This mode can be used for float maintenance charging when the battery needs to be maintained at 100% after being fully charged. This mode is similar to stage 7, but is not limited by time or voltage.

PROTECTIVE FEATURES

POLARITY PROTECTION

Prevents the output leads from sparking due to accidental reverse connection or short circuit, making the charger safer to use around batteries.

OUTPUT SHORT PROTECTION

Short circuit connection of the clips: Check clips are not touching each other OR Check the clips are correctly connected to the battery.

NON BATTERY LINK PROTECTION

If battery charger connects with non battery load, it will go into protection state.

DISCONNECT PROTECTION

The charger has entered the energy save mode. This happens if the charger isn't connected to the battery in 2 minutes.

OVER VOLTAGE PROTECTION

Lithium battery mode

The 12V lithium battery charger will automatically protection if the voltage is higher than 15.5V.

Lead Acid battery mode (Including GEL, AGM, WET, MF and CALCIUM)

The 12V lead acid charger will automatically protection if the voltage is higher than 17.5V.

OVER TEMPERATURE PROTECTION

Internal temperature is above 65°C +/-5°C

COOLING FAN

The charger is fitted with a thermostatically controlled fan to cool onboard electronics and maintain charging performance. The cooling fan will engage automatically when there is a high load on the battery or there is sufficient heat build up.

CHARGE STATUS INDICATOR

The LITHIUM BATTERY CHARGING and STAGE LIGHT will illuminate and flash in various patterns to indicate the different stages of charging. See below for flash / steady patterns.

		POWER ON LIGHT	STAGE LIGHT	FAULT LIGHT	LED DISPLAY
Po	wer Off	Off	Off	Off	Off
Po	wer On	On	Off	Off	0.0
	1. Soft Start	On	Flashing / On	Off	
	2. Bulk	On	Flashing / On	Off	
	3. Absorption	On	Flashing / On	Off	
e	4. Analyse	On	Flashing / On	Off	
Stage	5. Completion	On	Flashing / On	Off	Out volt
ίΩ,	6. Maximisation	On	Flashing / On	Off	
	7. Float	On	Flashing / On	Off	
	Fully Charged	On	Flashing / On	Off	
	8. Maintain	On	Flashing / On	Off]
No	n Battery Link Protection	On	Off	Off	0.0
Ou	tput Short Protection	On	Off	Flashing	
Ou	tput Polarity Reverse Protection	On	Off	Flashing	- U -
Dis	sconnect Protection	Flashing	Off	Off	0.0
Ov	er Voltage Protection	On	Off	Flashing	- U -
No	t accept charge	On	Step 1 Flashing	On	
Fa	ulty Battery	On	Step 2 Flashing	On	Battery
Ca	n not keep charge	On	Step 4 Flashing	On	Volt
Ba	ttery Charge Fully	On	On	Off	
Th	ermal Protection	On	Off	Flashing	- t -

STAGE LIGHT: illuminates and flashes when 8-stage charging process.

STAGE LIGHT: illuminates solid when fully charged.

POWER ON LIGHT

If the power light is lit with a:

1. STEADY LIGHT - The mains cable is connected to the wall socket.

2. FLASHING LIGHT - The charger has entered the energy save mode. This happens if the charger isn't connected to the battery in 2 minutes.

FAULT LIGHT STEADY

If the fault light is lit solid, check the

following:

Has charging been interrupted in STEP 1, 2, or 4? Restart the charger by pressing the MODE-button. If charging is still being interrupted, the battery.

STEP 1: ...can not accept charge and may need to be replaced.

STEP 2: ... battery is faulty and may need to be replaced. (Bulk charging has timed out and stopped after 10 hours.)

STEP 4: ...can not keep charge and may need to be replaced.

FAULT LIGHT FLASHING

Charger's internal temperature is higher than 65 +/-5°C

The Lead Acid battery CHARGING and STAGE LIGHT will illuminate and flash in various patterns to indicate the different stages of charging. See below for flash / steady patterns.

		POWER ON LIGHT	STAGE LIGHT	FAULT LIGHT	LED DISPLAY	
Po	wer Off	Off	Off	Off	Off	
Po	wer On	Flashing	Flashing	Flashing	Off	
Po	wer On	On	Off	Off	0.0	
	1. Desulphation	On	Flashing / On	Off		
	2. Soft Start	On	Flashing / On	Off		
	3. Bulk	On	Flashing / On	Off		
ge	4. Absorption	On	Flashing / On	Off	Quitauralt	
Stage	5. Analyse	On	Flashing / On	Off	Out volt	
	6. Recondition	On	Flashing / On	Off	-	
	7. Float	On	Flashing / On	Off		
	8. Pulse	On	On	Off		
No	n Battery Link Protection	On	Off	Off		
Ou	tput Short Protection	On	Off	Off		
Ou	tput Polarity Reverse Protection	On	Off	Off	0.0	
Dis	sconnect Protection	Flashing	Off	Off		
Ov	er Voltage Protection	On	Off	Flashing	- U -	
ls s	seriously sulphated	On	Step 1 Flashing	On		
No	t accept charge	On	Step 2 Flashing	On	Battery	
Faulty Battery		On	Step 3 flashing	On	Volt	
Ba	ttery Charge Fully	On	On	Off		
Th	ermal Protection	On	Off	Flashing	- t -	

STAGE LIGHT: illuminates and flashes when 8-stage charging process.

STAGE LIGHT: illuminates solid when fully charged.

POWER ON LIGHT

If the power light is lit with a:

1. STEADY LIGHT - The mains cable is connected to the wall socket.

2. FLASHING LIGHT - The charger has entered the energy save mode. This happens if the charger isn't connected to the battery in 2 minutes.

FAULT LIGHT STEADY

If the fault light is lit solid, check the

following:

Has charging been interrupted in STEP 1, 2, or 3? Restart the charger by pressing the MODE-button. If charging is still being interrupted, the battery.

STEP 1: ...is seriously sulphated and may need to be replaced.

STEP 2: ...can not accept charge and may need to be replaced.

STEP 3: ... battery is faulty and may need to be replaced. (Bulk charging has timed out and stopped after 24 hours.)

FAULT LIGHT FLASHING

Charger's internal temperature is higher than 65 +/-5°C

CHARGING INSTRUCTIONS

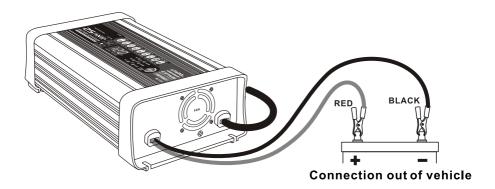
- 1. Settings are made by pressing the MODE-button. After about two seconds the charger activates the selected program. The selected program will be restarted next time the charger is connected.
- 2. When the charging process is interrupted, press the ON/OFF button, and then restart the charger.
- 3. To turn off the charger by pressing and holding the Mode button for 3 seconds.
- 4. To restart the charger by pressing and holding the Mode button for 3 seconds.

STEP 1 CHECK THE ELECTROLYTE LEVEL

Prior to charging the battery, remove the vent caps and check the electrolyte level (not required on sealed & maintenance free batteries). The electrolyte should be 6mm (1/4") above the battery's plates. If low, top up with distilled water to the correct level and refit the vent caps.

STEP 2A CONNECTION OUT OF THE VEHICLE

Connect the RED lead (battery clip) from the charger to the Positive (+) battery post. Connect the BLACK lead (battery clip) from the charger to the Negative (-) battery post.



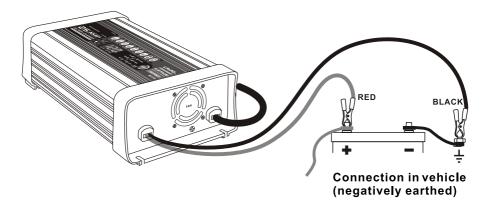
STEP 2B CONNECTION IN VEHICLE

Determine if the vehicle is Positively (+) or Negatively (-) earthed. Negatively earthed vehicles have a cable (usually black) from the Negative battery terminal to the vehicle's chassis.

A) Negatively earthed (most vehicles)

Connect the RED lead (battery clip) from the charger to the Positive (+) battery terminal.

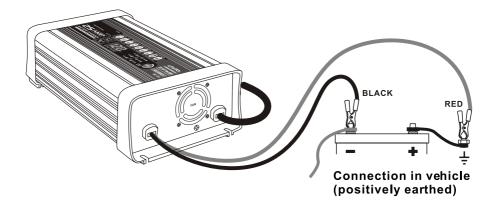
Connect the BLACK lead (battery clip) from the charger to the vehicle's chassis away from the fuel line or moving parts.



B) Positively earthed

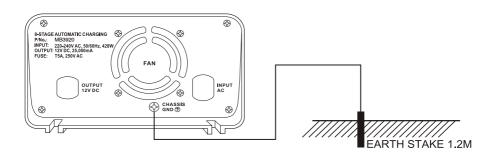
Connect the BLACK lead (battery clip) from the charger to the Negative (-) battery terminal.

Connect the RED lead (battery clip) from the charger to the vehicle's chassis away from the fuel line or moving parts.



C) Chassis earthing

The chassis earthing lug should be connected to an earting point which will be depending on where the battery charger is installed. In a vehicle, connect the chassis ground lug to the chassis of the vehicle. In a boat, connect to the boat's grounding systems. In a fixed location, connect to earth.



STEP 3 CONNECT TO 220-240V AC MAINS POWER

Connect the battery charger to the 220-240V AC mains powered socket and turn on the mains power.

STEP 4 CHARGING

During the charge process, the CHARGING and STAGE LIGHT will flash various patterns. This is normal and indicates the various charge stages. Refer to "How can I know what stage the battery charger is in" in the FAQ section. When the STAGE LIGHT remains on, this is known as the float stage and the charger can be left connected to the battery without over charging. If the POWER ON LIGHT is flashing, there is fault; refer to "Troubleshooting" section.

STEP 5 DISCONNECTION

Ensure the 220-240V AC mains switch is turned off and the charger is disconnected from the 220-240V AC mains power.

Battery out of vehicle

Remove the BLACK lead (battery clip) from the battery. Remove the RED lead (battery clip) from battery.

Battery in vehicle

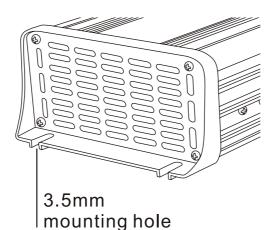
Remove the chassis connection. Remove the battery terminal connection.

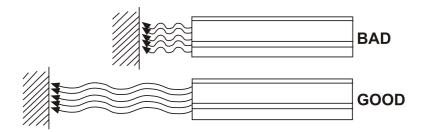
MOUNTING INSTRUCTIONS

8-stage chargers are designed for indoor, out of weather use only. Ensure that both charger and battery are in a well-ventilated space during charging.

The battery charger end plates include a mounting flange for easy mounting.

If permanently fixed the charger should be mounted to a suitable horizontal or vertical panel, with at least 10cm clearance from the end plates to provide adequate ventilation for the cooling fan.





ADJUSTABLE CHARGE RATES

BATTERY SIZE	CHARGE RATE	BATTERY SIZE (AH)	CHARGER TIME (HRS)
Lithium 12V	25Amp	50-250	2-14
Lead Acid Battery 12V	25Amp	200-600	7-24

TROUBLESHOOTING

FAULT	POWER LIGHT	STAGE LIGHT	FAULT LIGHT	CAUSE	REMEDY
Polarity reverse / Output short	On	Off	Lithium (Flashing) Lead Acid (Off)	Short circuit or reverse connection of the clips	Check clips are not touching each other. OR Check the clips are correctly connected to the battery.
Non Battery Link	On	Off	Off	Non battery link	Please choose the right battery type for connection.
Faulty Battery	On	Lithium (Step 2 flashing) Lead Acid (Step 3 Flashing)	On	Bulk charging has timed out and stopped after 10 hours (Lithium Mode) / 24 hours (Lead Acid Mode).	Battery is faulty and may need to be replaced.
Over Voltage	On	Off	Flashing	Lithium: The 12V lithium battery voltage is above 15.5V. OR Lead Acid: The 12V battery voltage is above 17.5V.	Disconnect the charger and check the battery voltage. This charger is suitable for 12V Lithium and Lead Acid batteries ONLY.
Over Temp.	On	Off	Flashing	Internal temperature is above 65 +/-5°C	Turn off charger and allow to cool.

FREQUENTLY ASKED QUESTIONS

How do I know if the battery is charged?

The charger's FULLY STAGE LIGHT will illuminate (solid). Alternatively use a Battery Hydrometer A reading of 1.250 or more in each cell indicates a fully charged battery.

I have connected the charger properly but the 'STAGE LIGHT' does not come on?

In some cases batteries can be flattened to the point where they have very little or no voltage. This can occur if a small amount of power is used for a long time, for example a map reading light is left on for a week or more. 8-Stage chargers are designed to charge Lithium battery from as little as 1.0 Volts (12V). Lead Acid battery from as little as 12V charger 2.0 Volts.

LITHIUM battery mode If the voltage is less than 1.0 Volts (12V) this is very low and the battery may not be rechargeable. You could try a very an electronic power supply to gradually bring the battery voltage above 1.0 Volts (12V) so the charger can then take over or take the battery back to the place of purchase so they can try and repair it.

Lead Acid battery mode (Including GEL, AGM, WET, MF and CALCIUM) If the voltage is lower than 2.0 Volts (12V) use a pair of booster cables to connect between two batteries to provide more than 2.0 Volts (12V) to the battery being charged. The charger can then start to charge the battery and the booster cables can be removed.

SPECIFICATIONS

Charger Type	8-stage Automatic
Input Voltage	220-240V~, 50/60Hz
Input Power	428W
Output Voltage	12V DC
Output Current	25A
Minimum Start Voltage	Lead Acid: 2.0V Lithium: 1.0V
Back Drain	1.5mA
Current Fuse Rating	220-240V , T5A, 250V AC

Lithium Battery Charge Control

Soft Start	25% Current until 11V
Bulk	25A up to 13.8V
Absorption	Constant voltage until current drops to 3.75A
Analyse	Monitors voltage for 3 minutes
Completion	7.5A Current until 14.5V
Maximisation	Constant 14.5V until current drops to 3.75A
Float	13.6V, 100% Current
Maintain	13.0V-13.8V, 25-5A
Over Voltage Protection	The 12V lithium battery charger will automatically protection if the voltage is higher than 15.5V. The 12V lead acid charger will automatically protection if the voltage is higher than 17.5V.

Lead Acid Battery Charge Control

Desulphation	Pulse charge up to 11V	
Soft Start	Half the rated set current up to 12.5V	
Bulk	25A up to 14.1V (GEL) 14.4V (AGM) 14.7V (WET) 14.7V (CALCIUM)	
Absorption	Constant voltage until current drops to 3.75A	
Analyse	Monitors voltage for 90 seconds	
Recondition	Constant current (3.75A) for 30 mins or4 hours limited to: 14.1V (GEL) 14.4V (AGM) 16V (WET) 16V (CALCIUM)	
Float	13.7V also with pulse feature	
Pulse	12.6V - 14.1V, 25-5A (GEL) 12.6V- 14.4V, 25-5A (AGM) 12.6V- 14.7V, 25-5A (WET) 12.6V- 14.7V, 25-5A (CALCIUM)	
Over Voltage Protection	The 12V lithium battery charger will automatically protection if the voltage is higher than 15.5V. The 12V lead acid charger will automatically protection if the voltage is higher than 17.5V.	

Power Supply

Set Voltage	13.8V
Maximum Current	25A
Efficiency	Арр.85%
Thermal Protect	65°C +/-5°
Cooling Fan	Automatic temperature controlled
Ambient temperature	-20°C to +50°C, output power is reduced automatically at high temperatures

Battery Range

Deep Cycle	50-250Ah / 167-500Ah
Types of Batteries	Most types of 12VLithium-ion LiFePO4 batteries and LeadAcid batteries including WET, MF, Calcium, AGM and GEL
Dimension (LXWXH)	217 X 116 X 62mm
Weight	1.32Kg

WARRANTY INFORMATION

Our product is guaranteed to be free from manufacturing defects for a period of 12 Months.

If your product becomes defective during this period, Electus Distribution will repair, replace, or refund where a product is faulty; or not fit for intended purpose.

This warranty will not cover modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim warranty, please contact the place of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by: Electus Distribution Address 46 Eastern Creek Drive, Eastern Creek NSW 2766 Ph. 1300 738 555