

Qoltec®



USER MANUAL

LIFEPO4 14.6V AUTOMATIC CHARGER

MODEL: 52670 52671 52672

Introduction

Thank you for choosing a Qoltec product. Our devices have been designed with high reliability, safety and ease of use in mind.

Before use, please read this user manual carefully, as it contains all the necessary information regarding correct installation, operation and safety guidelines. We are confident that the device will meet your expectations and provide reliable service for many years to come.

If you have any questions or require technical support, please do not hesitate to contact our customer service department.

About the product

This device has been designed for the safe and efficient charging of lithium iron phosphate (LiFePO₄) and lithium polymer (Li-Poly) batteries with a voltage of 14.6V.

The charger utilises an automatic CC/CV (constant current / constant voltage) mode, which ensures optimal charging conditions and extends the battery's service life.

Safety instructions

The following warnings are intended to ensure the safe use of the charger. Failure to follow these instructions may result in electric shock, fire, personal injury or damage to equipment.

1. Risk of electric shock

- a) Do not touch the charger with wet hands, and do not use it in a damp, wet or condensation-prone environment.
- b) Do not immerse the device in water or expose it to rain or spilled liquids.
- c) All work relating to connecting and disconnecting the battery must only be carried out when the charger is disconnected from the mains.
- d) Do not use the charger if the cables, terminals or casing are damaged.

2. Risk of battery gas explosion

- a) During charging, batteries may release hydrogen – an extremely flammable gas. Do not charge batteries near open flames, sparks or equipment that may generate sparks.
 - b) Ensure the room is well ventilated whilst charging.
 - c) Do not allow sparks to form when connecting the terminals to the battery poles.
 - d) Use only batteries that are compatible in terms of technology, voltage and capacity as specified in the charger's technical specifications.
 - e) Do not charge batteries that are damaged, cracked, deformed, leaking electrolyte or showing signs of corrosion on the terminals.
3. Do not cover the charger or restrict its ventilation. Minimum clearance around the unit: 20 cm.
 4. Do not use the device at ambient temperatures below 0°C or above 40°C.
 5. Protect the charger from direct sunlight and heat sources.
 6. Do not modify the device, cables, connectors or safety features. Modifications invalidate the declaration of conformity and may pose a hazard.
 7. Before starting to charge, ensure that the polarity of the connection is correct: red – (+), black – (–).
 8. If the battery or charger becomes excessively hot, stop charging immediately and disconnect the device.
 9. The charger is intended solely for the uses described in the manual — do not use it as a power source or for any other purpose.
 10. The device is not intended for use by children, people with reduced physical or cognitive abilities, or by those without technical training.
 11. Use only with LiFePO₄ and lithium batteries. **Do not use with AGM, GEL or SLA lead-acid batteries.**

Connecting to the battery

Before starting to charge, ensure that the battery is a 12.8V LiFePO₄ type and that the charger is disconnected from the mains.

1. Connect the DC leads to the battery:

red → positive terminal (+)

black → negative terminal (-)

2. Then plug the charger into a 230V AC mains socket

3. Charging will start automatically in CC/CV mode, which is tailored to the characteristics of LiFePO₄ batteries.

CC (Constant Current) – constant charging current

CV (Constant Voltage) – constant voltage of 14.6V

LED indicators:

red – charging

green – battery fully charged

Once the battery is fully charged, the current drops and the charging process ends. **Note: The charger does not have a float mode and is not designed to remain connected continuously once charging is complete.**

4. Once the process is complete, first disconnect the charger from the mains, then remove the black terminal, and finally the red one.

Technical specifications

Parameter	52670	52671	52672
Input voltage	220–240V AC		
Battery voltage	12.8V		
Charging voltage	14.6V±0.2V		
Charging current (max.)	10A	20A	30A
Power	150W	292W	438W
Frequency	50/60Hz		

Supported battery types	LiFePO4, Li-Poly 14.6V
Charging method	CC/CV
Cooling	Fan
Connector	Red + black alligator clips
Efficiency	≥90%
Protection	- reverse polarity protection - overvoltage protection - thermal protection - short-circuit protection - automatic charge termination
Material	ABS
Operating temperature	0°C to +40°C
Storage temperature	−10°C to +45°C
Warranty	24 months

Maintenance, disposal and servicing requirements

1. Before cleaning or maintenance, disconnect the charger from the mains and from the battery.
2. Use a dry cloth for cleaning — do not use solvents, detergents or corrosive substances.
3. If you notice a burning smell, smoke, unusual noises or any deformation of the casing, immediately disconnect the power supply and stop using the device.
4. Repairs to the device may only be carried out by a qualified service centre.

5. Store in a dry place at a temperature between -10°C and $+45^{\circ}\text{C}$, protected from dust and moisture.
6. Do not dispose of used batteries in household waste — they must be taken to a disposal point compliant with the WEEE Directive.