

# TURBO ENERGY PWM SOLAR CHARGE CONTROLLER



| Model                          | LS1024B                                   | LS2024B | LS3024B |
|--------------------------------|---|---------|---------|
| Nominal system voltage         | 12 / 24 Vdc auto work                     |         |         |
| Rated battery current          | 10A                                       | 20A     | 30A     |
| Rated load current             | 10A                                       | 20A     | 30A     |
| Maximum battery voltage        | 50Vdc                                     |         |         |
| Grounding                      | Common positive                           |         |         |
| Self-consumption               | 8.4 mA (12V), 7.8 mA (24V)                |         |         |
| Temp. Compensation             | -3 mV / °C / 2V (25 °C ref)               |         |         |
| Equalize charging voltage      | Sealed: 14.6V, Flooded: 14.8V             |         |         |
| Boost charging voltage         | Gel: 14.2V, Sealed: 14.4V, Flooded: 14.6V |         |         |
| Float charging voltage         | Gel / Sealed / Flooded: 13.8V             |         |         |
| Low voltage reconnect voltage  | Gel / Sealed / Flooded: 12.6V             |         |         |
| Low voltage disconnect voltage | Gel / Sealed / Flooded: 11.1V             |         |         |

\* Technical data for 12V system at 25 °C

| Model      | LS1024B              | LS2024B                | LS3024B               |
|------------|----------------------|------------------------|-----------------------|
| Dimensions | 138.6 x 69.3 x 37 mm | 159.6 x 81.4 x 47.8 mm | 200.6 x 101.3 x 57 mm |
| Terminal   | 4 mm <sup>2</sup>    | 10 mm <sup>2</sup>     | 10 mm <sup>2</sup>    |
| Net weight | 0.13 kg              | 0.3 kg                 | 0.5 kg                |

## Environmental Specification

|               |                 |
|---------------|-----------------|
| Working temp. | -35 °C ~ +55 °C |
| Storage temp. | -35 °C ~ +80 °C |
| Humidity      | ≤ 95 % (NC)     |
| Enclosure     | IP30            |

## APPLICATION

- Solar home system
- Solar lighting system
- Solar road signals
- Solar surveillance
- Solar RVs and boats
- Small solar power station

## FEATURES

- Three system voltage configuration: 12V / 24V auto work
- High efficiency PWM charging with temperature compensation
- 3 LEDs shows PV charging, battery and load status
- RS-485 bus communication
- Software update function

## ELECTRONIC PROTECTIONS

- PV short circuit
- Battery Over discharge
- Battery reverse polarity
- Load overload
- Overheating
- PV reverse polarity
- Battery overcharge
- Load short circuit

## MORE POWERFUL FUNCTION VIA MT50 OR PC

- Battery type option: Gel, sealed, flooded and USER
- Programmable parameters
- LVD or SOC load disconnect function

