

# LandStar E/EU series Solar Charge Controller



The LandStar E/EU series controller is a PWM charge controller that adopts the most advanced digital technique. It's an easy operation and cost efficient controller.



Model:

LS0512E LS0512EU

LS1012E LS1012EU

LS2024E LS2024EU

LS1024E LS1024EU

LS3024EU

## Features

- 3-Stage intelligent PWM charging: Bulk, Boost/Equalize, Float
- Support 3 charging options: Sealed, Gel, and Flooded
- Battery status LED indicator can indicates battery situation
- Battery temperature compensation function

- With humanized settings, operation will be more comfortable and convenient
- The USB will provide power supply that can charge for electronic equipment(**LS EU series only**)
- Battery type and load output can be set via button
- Extensive Electronic protection



## Protection

- Battery Over Voltage Protection
- Battery Over Discharge Protection
- Load Overload Protection
- Load Short Circuit Protection

## Specifications

| Item                                 | LS0512<br>E              | LS1012<br>E            | LS1024<br>E            | LS2024<br>E            | LS0512<br>EU             | LS1012<br>EU           | LS1024<br>EU           | LS2024<br>EU           | LS3024<br>EU           |
|--------------------------------------|--------------------------|------------------------|------------------------|------------------------|--------------------------|------------------------|------------------------|------------------------|------------------------|
| Nominal system voltage               | 12VDC                    |                        | 12/24VDC Auto          |                        | 12VDC                    |                        | 12/24VDC Auto          |                        |                        |
| Rated charge current                 | 5A                       | 10A                    |                        | 20A                    | 5A                       | 10A                    |                        | 20A                    | 30A                    |
| Rated discharge current              | 5A                       | 10A                    |                        | 20A                    | 5A                       | 10A                    |                        | 20A                    | 30A                    |
| Battery input voltage range          | 8V~16V                   |                        | 8V~32V                 |                        | 8V~16V                   |                        | 8V~32V                 |                        |                        |
| Max. PV open circuit voltage         | 30V                      |                        | 50V                    |                        | 30V                      |                        | 50V                    |                        |                        |
| Self-consumption                     | 12V≤5mA; 24V≤7mA         |                        |                        |                        |                          |                        |                        |                        |                        |
| Charge Circuit Voltage Drop          | ≤0.21V                   |                        |                        |                        | ≤0.13V                   |                        |                        |                        |                        |
| Discharge Circuit Voltage Drop       | ≤0.12V                   |                        |                        |                        | ≤0.17V                   |                        |                        |                        |                        |
| USB input interface                  | —                        |                        |                        |                        | 5VDC/1.2A                |                        |                        |                        | 5VDC/2A                |
| Temperature compensation coefficient | -5mV/°C/2V               |                        |                        |                        |                          |                        |                        |                        |                        |
| Working environment temperature      | -35°C ~ +55°C            |                        |                        |                        |                          |                        |                        |                        |                        |
| Humidity                             | ≤95%,(N.C.)              |                        |                        |                        |                          |                        |                        |                        |                        |
| Enclosure                            | IP30                     |                        |                        |                        | IP20                     |                        |                        |                        |                        |
| Grounding                            | Common Positive          |                        |                        |                        |                          |                        |                        |                        |                        |
| Overall dimension(mm)                | 92.8x65x20.2             | 101.2x67x21.8          | 101.2x67x21.8          | 128x85.6x34.8          | 109.7x65.5x20.8          | 120.3x67x21.8          | 120.3x67x21.8          | 148x85.6x34.8          | 148x106.8x43.7         |
| Mounting dimension(mm)               | 84.4                     | 92.7                   | 92.7                   | 118                    | 100.9                    | 111.5                  |                        | 138                    |                        |
| Mounting hole size                   | Φ4.5                     |                        |                        |                        |                          |                        |                        |                        |                        |
| Terminals                            | 14AWG/2.5mm <sup>2</sup> | 12AWG/4mm <sup>2</sup> | 12AWG/4mm <sup>2</sup> | 10AWG/6mm <sup>2</sup> | 14AWG/2.5mm <sup>2</sup> | 12AWG/4mm <sup>2</sup> | 12AWG/4mm <sup>2</sup> | 10AWG/6mm <sup>2</sup> | 8AWG/10mm <sup>2</sup> |
| Net weight                           | 0.07kg                   | 0.08kg                 | 0.08kg                 | 0.15kg                 | 0.09kg                   | 0.10kg                 | 0.10kg                 | 0.18kg                 | 0.29kg                 |