

ECO-N (10 A)

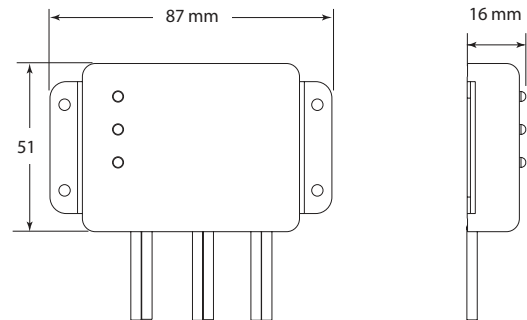
Solar Charge Controller



phocos



Technical Drawing



Product Introduction

Phocos' ECO-N solar charge controller is the perfect option for any low-power application requiring superior resistance to the elements. Its small size, reliability, and price make it a great solution for a wide range of projects.

The ECO-N is equipped with the low-voltage disconnect feature. It is fully protected electronically, and has LEDs that communicate charge, battery and load status.

Product Features

- 3-stage charging: main, boost and float charge
- Deep-discharge protection
- PWM series regulation (PV panel is not short-circuited)
- Integrated temperature compensation
- Fully electronically protected against: panel surge voltage, wrong polarity (PV panel or battery), overload and short circuit at load
- Three LEDs indicate: charge status, state-of-charge (SOC), low-voltage disconnection (LVD), overload/short circuit
- IP68 ingress protection
- Common Negative grounding

Technical Data

| Type | ECO-N |
|---------------------------|--|
| System Voltage | 12 V |
| Max. Charge/Load Current | 10 A |
| Float Charge | 13.8 V (25 °C) |
| Main Charge | 14.4 V (25 °C), 0.5 h daily |
| Boost Charge | 14.4 V (25 °C), 2 h activation: battery voltage < 12.3 V |
| Deep-Discharge Protection | 11.0 V |
| Overvoltage Protection | 15.5 V |
| Undervoltage Protection | 10.5 V |
| Max. PV Panel Voltage | 30 V |
| Temperature Compensation | -25 mV/K |
| Idle Self-Consumption | 4 mA |
| Grounding | Common Negative |
| Ambient Temperature | -40 to +60 °C |
| Max. Altitude | 4,000 m above sea level |
| Battery Type | Lead acid (gel, AGM, flooded) |
| Wire Cross Section | 2.5 mm ² (AWG 13) |
| Dimensions (WxHxD) | 87 x 51 x 16 mm / 3.4 x 2 x 0.63 in |
| Weight | 0.11 kg / 0.24 lbs |
| Ingress Protection | IP68 |
| Certificates | CE compliant, RoHS compliant |
| Warranty | 5 years |