

ECO-N (10 A)

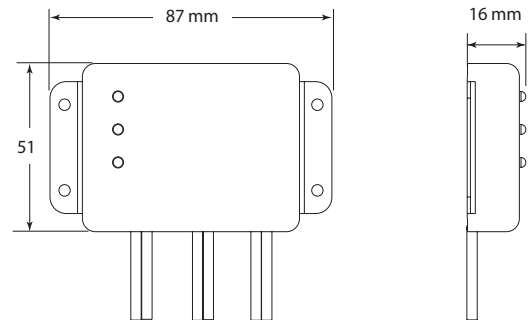
Solar Charge Controller



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 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
- Negative grounded

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