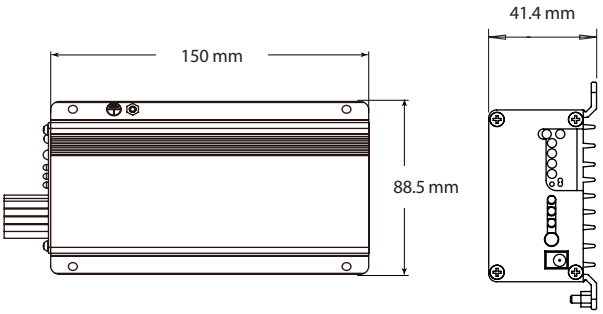
CIS-N-MPPT-LED (15 A)

Industrial MPPT Solar Charge Controller w/ LED Driver



Technical Drawing



Product Introduction

The CIS-N-MPPT-LED is a multi-functional solar charge controller with built-in LED boost driver for solar outdoor lighting systems. Equipped with a widely-adjustable automatic light timer that uses solar input voltage to determine day and night, the CIS-N-MPPT-LED adjusts to seasonal changes. In addition, the built-in LED driver features timed and low-voltage dimming of LED strings.

Like all CIS family products, CIS-N-MPPT-LED has been designed for the harshest industrial environments and features a rugged, fully potted (IP68) enclosure that prevents damage from dust, insect and water ingress. The infrared communication feature allows for full-control of light timer settings and LVD customization via remote control accessory (CIS-CU) and full adjustment of the battery charge regime and access to 2 years of system data via USB adaptor (MXI-IR) and our free PC software (CISCOM).

Product Features

- Three functions in one: MPPT charge controller + light timer + LED driver
- Works in 12 or 24 V systems
- Up to 30% additional power yield compared to conventional PWM controllers
- IP68 ingress protection
- Compatible with 60 cell PV modules
- Input for motion detector (PIR)
- Infrared-programmable load timing feature with dimming, which is ideal for lighting systems
- 2 year datalogging memory
- Programmable for LFP batteries with a BMS using CISCOM in expert mode
- Compatible with Lithium batteries (no BMS communication)

Driver Data

Type	CIS-N-MPPT-LED
Output Voltage	15-69 V (12 V), 30-69 V (24 V)
Nominal Output Current per String	350 - 3,500 mA
Max. Load Power	100 W / 200 W
Dimming Level	0-100 % (1.7 % steps)
PIR-Input	4-30 V with respect to battery negative, ≥0.7 mA; limited protection up to 50 V

Technical Data

Type	CIS-N-MPPT-LED
System Voltage	12 / 24 V auto recognition
Max. Charge Current	15 A
Float Charge	13.8 / 27.6 V (25 °C)
Main Charge	14.4 / 28.8 V (25 °C), 0.5 h daily
Boost Charge	14.4 / 28.8 V (25 °C), 2 h activation: battery voltage <12.3 / 24.6 V
Equalization Charge	14.8 / 29.6 V (25 °C), 2 h activation: battery voltage <12.1 / 24.2 V (at least every 30 days)
Deep-Discharge Protection	11.0-12.0 / 22.0-24.0 V (by SOC) 11.0-11.9 / 22.0-23.8 V (by voltage)
Reconnect Level	12.8 / 25.6 V
Overvoltage Protection	15.5 / 31.0 V
Undervoltage Protection	10.5 / 21.0 V
Max. PV Panel Voltage	50 V / 85 V
Max. Usable PV Power	225 W / 450 W
Max. PV Array Power	250 Wp / 500 Wp
Temperature Compensation	-25 mV/K (12 V); -50 mV/K (24 V)
Idle Self-Consumption	<10 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), Lithium, LFP
Datalogger	2 years
Wire Length	20 cm / 7.9 in
Wire Cross Section	2.5 mm² (AWG 13)
Dimensions (WxHxD)	88.5 x 150 x 41.4 mm / 3.5 x 6 x 1.6 in
Weight	0.78 kg / 1.72 lbs
Ingress Protection	IP68 (1.5 m, 72 h)
Certificates	CE compliant, RoHS compliant
Warranty	5 years