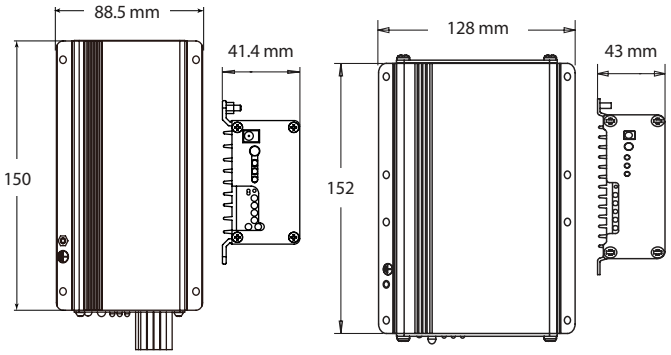
CIS-N-MPPT Series (15-30 A)

Industrial MPPT Charge Controllers w/ Lighting Control



Technical Drawing



CIS-N-MPPT 85/15 CIS-N-MPPT 100/30

Product Introduction

Off-Grid PV systems exposed to extreme weather/environmental conditions impose increased risk of damage to the power electronics. In order to ensure reliable battery protection under such conditions, Phocos developed the CIS-N-MPPT charge controller family to prevent corrosion.

The CIS-N-MPPT series include convenient and advanced lighting control, which allows the user to decide whether they want the automatic lighting control with LED dimming to be either time or low-voltage activated.

Product Features

- Infrared-programmable load timing feature with dimming ideal for lighting systems
- 2 years of system performance data accessible via MXI-IR interface, PC software (CISCOM)
- Up to 98% power conversion efficiency
- Up to 4-stage charging increases battery lifespan
- I/V or I/U curve sweep algorithm increases performance when panels are shaded
- Fully encapsulated anodized aluminum housing design prevents damage from corrosion, insects and dust
- 20 / 30 cm connection wires (CIS-N-MPPT 85/15 / CIS-N-MPPT 100/30)
- Compatible with 60 cell solar modules
- Compatible with Lithium batteries (no BMS communication)
- IP68 Ingress Protection

Optional Accessories

CIS-CU

- Infrared remote control

MXI-IR

- Infrared to USB programming accessory and interface to CISCOM software

Technical Data

Type	CIS-N-MPPT 85/15	CIS-N-MPPT 100/30
System Voltage	12 / 24 V auto recognition	
Max. Charge/Load Current	15 A	30 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), for 2 h activation: battery voltage < 12.3 / 24.6 V	
Equalization Charge	14.8 / 29.6 V (25 °C), for 2 h activation: battery voltage < 12.1 / 24.2 V (at least every 30 days)	
Deep-Discharge Protection	11-11.9 V / 22-23.8 V (by SOC) 11-12.02 V / 22-24.04 V (by voltage)	
Reconnect Level	12.8 V / 25.6 V	
Overvoltage Protection	15.5 V / 31.0 V	
Undervoltage Protection	10.5 V / 21.0 V	
Max. PV Panel Voltage	50 / 85 V	95 V
Max. Usable PV Power	225 W / 450 W	450 W / 900 W
Max. PV Array Power	338 Wp / 675 Wp	675 Wp / 1350 Wp
Temperature Compensation	-25 mV/K (12 V); -50 mV/K (24 V)	
Idle Self-Consumption	8-16 mA	
Dimming Value	0-100 % (0-10 V output)	
Grounding	Common Negative	
Ambient Temperature	-40 to +60 °C	
Battery Type	Lead acid (gel, AGM, flooded) adjustable, Lithium	
Datalogger	2 years	
Wire Cross Section	2.5 mm² (AWG 13)	3.3 mm² (AWG 12)
Dimensions (WxHxD)	88.5 x 150 x 41.4 mm/ 3.5 x 6 x 1.6 in	128 x 152 x 43 mm/ 5.1 x 6 x 2 in
Weight	0.78 kg / 1.72 lbs	1.3 kg / 2.86 lbs
Ingress Protection	IP68 (1.5 m, 72 h)	
Certificates	CE compliant, RoHS compliant	
Warranty	5 years	