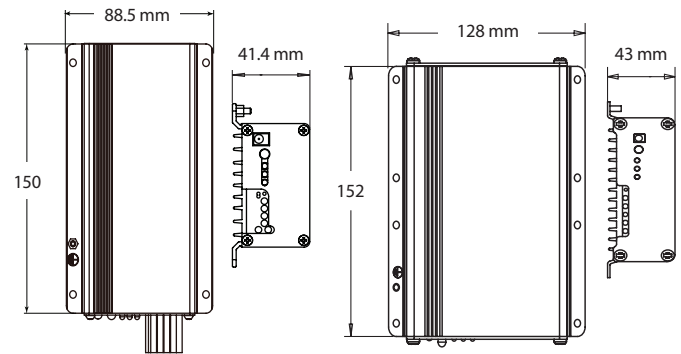


Phocos CIS-MPPT Series (15-20 A)

Industrial MPPT Charge Controllers w/ Lighting Control



Technical Drawing



CIS-MPPT 85/15

CIS-MPPT 85/20

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-MPPT charge controller family to prevent corrosion.

The CIS-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 cm connection wire
- Compatible with 60 cell modules
- Ingress Protection: IP68

Optional Accessories

CIS-CU

- Infrared remote control

MXI-IR

- Infrared to USB programming accessory and interface to CISCOM software

Technical Data

Type	CIS-MPPT-85/15	CIS-MPPT-85/20
System Voltage	12/24 V auto recognition	
Max. Charge/Load Current	15 A	20 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. Panel Voltage	50/85 V	85 V
Temperature Compensation	-25 mV/K (12 V), -50 mV/K (24 V)	
Max. Usable PV Power Input	225 W/450 W	300 W/600 W
Max PV Array Power	250 Wp/500 Wp	400 Wp/800 Wp
Idle Self-Consumption	15 mA/8 mA	
Dimming Value	0-100% (0-10 V output)	
Grounding	Positive grounded	Negative grounded
Ambient Temperature	-40 to +60 °C	
Battery Type	Lead acid (gel, AGM, flooded), adjustable	
Datalogging	2 years	
Max. Wire Cross Section	2.5 mm ² (AWG 13)	
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	1.05 kg / 2.31 lbs
Ingress Protection	IP68 (1.5 m, 72 h)	
Certificates	CE compliant, RoHS compliant	
Warranty	5 years	