

# PHOCOS CHARGE CONTROLLER

## Technical SPECIFICATIONS:

Product	Phocos CIS-10   CIS-20
Type	Waterproof Charge Controller 12/24V
System	Photovoltaic Systems
Function	Overcharge Protection
Batteries	GEL, AGM, Lead-Acid, Flooded
Charging Mode	PWM
Nominal Voltage	12/24V automatic detection
Max. charge/load current	10A   20A
Float charge	13.8/27.6V (25°C)
Main charge	14.4/28.8V (25°C) 30min (daily)
Boost charge	14.4/28.8V (25°C) 2h activation: battery voltage <12.3/24.6V
Equalization	14.8/29.6V (25°C) 2h activation: battery voltage <12.1/24.2V
Max. panel voltage	55V (Voc)
Deep discharge protection	Cut-off voltage 11–12V/22–24V   Reconnect level 12.8/25.6V
Overvoltage protection	15.5/31.0V
Under voltage protection	10.5/21.0V
Temperature compensation	-25 mV/K at 12V   -50 mV/K at 24V
Self-consumption	5–8 mA at 12V   6–10 mA at 24V
Grounding	positive grounding possible
Ambient temperature	–40 to +60°C
Max. height	4.000m above sea level
Wire cross section	1.5 mm <sup>2</sup>   1.5 mm <sup>2</sup>   2.5 mm <sup>2</sup>
Adjustment range	Evening/morning hours Night/day detection 0–15 h/0–14 h   2.5–10V
Wire length	10cm
Weight	150 g
Dimensions (WxHxD)	82x58x20 mm
Protection class	IP68 (waterproof)
Technical data dimming output	Dimming value 0–100% output power   dimming output voltage 0–10V (max. 1mA)
Warranty	2 years