

CIS-N (5 - 20 A)

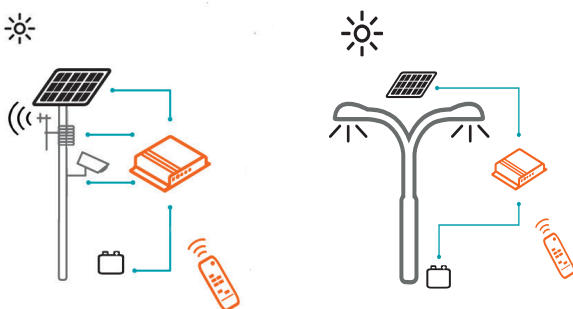
Solar Charge Controller



Robust. Intelligent. Powerful.

- Fully-potted (IP68) construction
- Optional lighting control feature
- Single load (w/ LED dimming) and dual load versions
- 2nd low voltage condition
- NRTL certified for use in ordinary and hazardous locations

Customize your system with CIS-N's wide range of programmable functions



Innovative Design

- Fully programmable charge/discharge program via infrared device (CIS-CU or MXI-IR)
- Timed and low voltage dimming control for LED lighting systems.

Flexible

- Works in 12 or 24V systems (automatic detection)
- Available in three current sizes (5A, 10A, 20A) with single and dual load options

Built-to-Last

- Fully-potted aluminum housing is corrosion, dust and insect proof
- Certified quality for use in ordinary or hazardous locations



Hazardous Locations (HazLoc)
Tested According to:
ANSI/ISA 12.12.01-2012
Class I Division 2 (Groups A-D)



Ordinary Locations (OrdLoc)
Tested According to:
UL1741:2005
CAN/CSA C22.2 No. 107.1-01

The CIS-N was specifically developed to deliver optimum performance in industrial PV systems in demanding environments. It features 4-stage, series-switching PWM charge regulation and is fully programmable via infrared device (CIS-CU or MXI-IR).

There are two available versions of the CIS-N: Single Load, with LED dimming for dimmable ballasted lamps and Dual Load, with two independent load channels to prioritize load disconnect.

Application Examples

- Solar Lighting
- Security/Surveillance
- Chemical Injection Pumps
- SCADA Systems
- Traffic/Transit



Technical Data

Type	CIS-N-05	CIS-N-10	CIS-N-20
	CIS-N-05-2L	CIS-N-10-2L	CIS-N-20-2L
System voltage	12/24 V (Auto detection)		
Max. charge current	5 A	10 A	20 A
Float charge	13.8/27.6 V (77 °F/25 °C)		
Main charge	14.4/28.8 V (77 °F/25 °C), 30 min. (daily)		
Boost charge	14.4/28.8 V (77 °F/25 °C), 2 h Activation: battery voltage < 12.3/24.6 V		
Equalization	14.8/29.6 V (77 °F/25 °C), 2 h Activation: battery voltage < 12.1/24.2 V (at least every 30 days)		
Deep discharge protection:			
Cut-off voltage	11 – 12 V / 22 – 24 V		
Reconnect level	12.8/25.6 V		
Overvoltage protection	15.5/31.0 V		
Undervoltage protection	10.5/21 V		
Max. panel voltage	30/50 V		
Temperature compensation (Charge voltage)	-4.2 mV/K per 2V cell		
Max. self consumption	5 – 8 mA at 12 V 6 – 10 mA at 24 V		
Grounding	Negative ground		
Ambient temperature	-40 to 140 °F / -40 to +60 °C		
Max. elevation	13,000 ft (4,000 m) above sea level		
Battery type	Lead acid (GEL, AGM, flooded)		
Load adjustment range:			
Evening/morning hours	0–15 h (Evenings), 0–14 h (Mornings)		
Night/day detection	2.5 – 10 V		
Connection wire length	10 cm		
Dimensions (W x H x D)	3.2 x 2.5 x .8 in (82 x 64 x 20 mm)		
Weight	5.3 oz (150 g)		
Wire cross section	14 AWG (2.5 mm ²)	14 AWG (2.5 mm ²)	14 AWG (2.5 mm ²)
Type of protection	IP68 (5 ft / 1.5 m water depth, 72 h)		

Technical data dimming output	CIS-N-05	CIS-N-10	CIS-N-20
Dimming value	0 – 100% output power		
Dimming output voltage	0 – 10 V (max. 1 mA)		

Available Accessories



CIS-CU
Infrared programming remote for CIS series controllers



MIXI-IR
Infrared to USB programming accessory for CIS series controllers Interface to CISCOM software



CIS-CU-LCD
Infrared programming remote for CIS series controllers



CIS-DR
12/24 V Buck/Boost LED Driver 350-2800 mA versions Max LED Vf: 54 V