

CXNup Series (10-40 A)

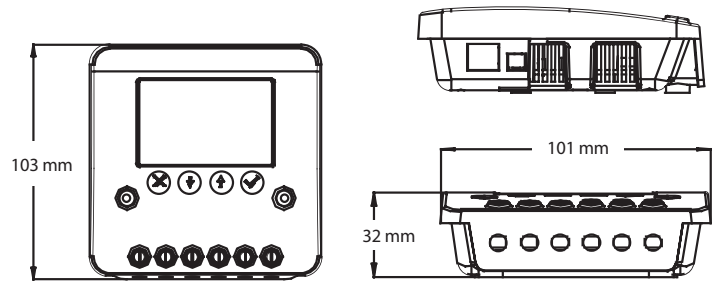
Solar Charge Controller w/ Datalogging and LCD



phocos



Technical Drawing



Product Introduction

The CXNup series is a highly intelligent charge controller family for a wide range of applications. It features an intuitive user interface and stores up to two (2) years of valuable system performance data, which is accessible via the LCD and PhocosLink software.

Real-time battery voltage, battery state-of-charge (SOC) in percent, charge and load current, and system status are clearly displayed on the large, backlit LCD. The CXNup2B offers the possibility to charge two independent batteries with up to 20 A. All other variants offer a USB port to charge mobile phones, tablets and other USB devices. Optional acoustic battery alarms and programmable street light settings are also standard.

Product Features

- USB charging port
- Datalogger information can be exported
- Load status indication**
- Touch keys ensure long lasting operation and eliminates mechanical button failures
- Prepared for 12 or 24 V battery charging
- Suitable for charging systems with up to 1.4 kW
- User friendly LCD shows extensive system information
- 2 year datalogging
- Four-stage PWM charging algorithm with integrated temperature compensation
- Full electronic protection
- Programmable load function suitable for street lights**
- Corrosion-resistant screw terminals
- Programmable battery type
- Compatible with LiFePO4 batteries (no communication to battery)

Optional Accessories



MXI and MXI-232

- Interface for CXNup controller communication with computer via USB or RS232 interface

Technical Data

Type	CXNup10	CXNup20	CXNup2B*	CXNup40
System Voltage	12 / 24 V auto recognition			
Max. Charge Current	10 A	20 A	20 A / 20 A	40 A
Load Current	10 A	20 A	N/A	40 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	11.5-12.0 / 23.0-24.0 V (by SOC) 11.0-11.5 / 22.0-23.0 V (by voltage)			
Reconnect Level	12.8 / 25.6 V		N/A	12.8 / 25.6 V
Overvoltage Protection	15.5 / 31.0 V			
Undervoltage Protection	10.5 / 21.0 V		N/A	10.5 / 21.0 V
Max. PV Panel Voltage	30 V / 50 V			
Temperature Compensation	-25 mV/K (12 V); -50 mV/K (24 V)			
Idle Self-Consumption	<4 mA (backlight off); <12 mA (backlight on)			
Grounding	Common Negative			
Ambient Temperature	-40 to +60 °C			
Max. Altitude	4,000 m above sea level			
Battery Type	Lead acid (gel, AGM, flooded), LiFePO4 (selectable)			
Datalogger	2 years			
USB Charging Port	5.0 V, 1.5 A		N/A	5.0 V, 1.5 A
Max. Wire Cross Section	16 mm ² (AWG 6)			
Dimensions (WxHxD)	101 x 103 x 32 mm / 4 x 4.1 x 1.3 in			
Weight	0.18 kg / 0.39 lbs			
Ingress Protection	IP22			
Certificates	CE compliant, RoHS compliant			
Warranty	5 years			

*CXNup2B features dual battery bank charging, but no load output. Battery voltages must be the same.

**Not for CXNup2B.