

CXNsolid (50 A)

Programmable Solar Charge Controller, Industrial Grade



- Multifunction LC display shows system status
- User friendly configuration interface with keys
- LEDs display the battery state of charge
- Flexible load disconnect algorithms
- Temperature-compensated four-stage PWM series charging regulation
- Automatic 12/24/48 V detection
- External temperature sensor
- Remote output terminal for the Phocos inverter series
- Optional USB interface (MXI + CXLink)
- Aluminum housing (IP20)
- Data logger (2 years)

The CXNsolid is a programmable solar charge controller with negative grounding. In addition to perfect PWM regulation with integrated temperature compensation, the controller provides extraordinary display, programming, and safety functions. In order to increase its accuracy, CXNsolid is equipped with an external temperature sensor. The battery state of charge is clearly displayed using an LED bar graph. The deep discharge protection function can be set to up to 2 different modes: voltage-controlled or SOC-controlled. Acoustic warnings (e. g. load disconnect) are built-in.

Datasheet_CXNsolid_1/2_e_2016-01-21_Subject to change without notice



CXNsolid (50 A) Programmable Solar Charge Controller, Industrial Grade

Туре	CXNsolid 50
System voltage	12/24/48 V, auto recognition
Max. charge/load current	50 A
Float charge	13.8/27.6/55.2 V (25 °C)
Main charge	14.4/28.8/57.6 V (25 °C), 30 min. (daily)
Boost charge	14.4/28.8/57.6 V (25 °C), 2 h
	Activation: battery voltage < 12.3/24.6/49.2 V
Equalization charge	14.8/29.6/59.2 V (25 °C), 2 h
	Activation: battery voltage < 12.1/24.2/48.4 V
Deep discharge protection:	11.50 – 12.00 V / 23.00 – 24.00 V / 46.00 – 48.00 V current adapted (SOC)
Load disconnect voltage	11.00 – 11.50 V / 22.00 – 23.00 V / 44.00 – 46.00 V independent from current
Reconnect level	12.8/25.6 /51.2 V
Overvoltage protection	15.5/31.0/62.0 V
Undervoltage protection	10.5/21.0/42.0 V
Max. panel voltage	30 V in 12 V system
(Overvoltage protection by varistor)	50 V in 24 V system
	100 V in 48 V system
Temperature compensation	–24 mV/K at 12 V
(Charge voltage)	–48 mV/K at 24 V
	–96 mV/K at 48 V
Remote output for Phocos inverter family	Yes (SI 1500, SI 700, SI 350 inverter)
Idle self-consumption	< 20 mA
Grounding	Negative grounded
Ambient temperature	-20 to +50 °C
Max. altitude	4,000 m above sea level
Battery type	Lead acid (GEL, AGM, flooded)
Data logger	2 years
Wire cross section	Up to 50 mm ²
Dimensions (W x H x D)	168 x 162 x 55 mm
Weight	1,000 g
Type of protection	IP20

Datasheet_CXNsolid_2/2_e_2016-01-21_Subject to change without notice

Phocos AG
 Magirus-Deutz-Str. 12
 Phone
 +49 731 9380688-0

 89077 Ulm, Germany
 Fax
 +49 731 9380688-50