

CXN series (10 – 40 A)

Programmable Solar Charge Controller with Negative Grounding



- Built-in 1 Year Data Logger for System Analysis
- Choose between 5 load disconnect algorithms
- Temperature compensated 3 Stage (Boost/absorption/float) PWM Series Regulation
- Automatic 12/24 V detection
- Prepared for DIN rail mounting (CX-DR2.1)
- Optional external temperature sensor (CXNT)
- Optional remote display (CXM multi-meter)
- Optional USB interface (CXI + CXCOM)

The CXN series is a sophisticated solar charge regulator family with negative grounding. Beside a perfect PWM regulation with integrated temperature compensation, the controllers provide extraordinary display, programming and safety functions. The battery state of charge is clearly displayed with a bar chart. The deep discharge protection

function can be set up to five different modes: voltage controlled, SOC controlled or adaptive SOC controlled. Acoustic warnings are built in, also a programmable night-light function.

The compact case design is prepared for DIN rail mounting (mounting device available as an accessory).

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Type	CXN 10	CXN 20	CXN 40
System voltage	12/24 V auto recognition		
Max. charge/load current	10 A	20 A	40 A
Float charge	13.7/27.4 V (25 °C)		
Main charge	14.4/28.8 V (25 °C), 30 min. (daily)		
Boost charge	14.4/28.8V (25 °C), 2 h activation: battery voltage < 12.3/24.6 V		
Equalization	14.8/29.6 V (25 °C), 2 h activation: battery voltage < 12.1/24.2V		
Deep discharge protection: State of charge dependent	A: 11.4 – 11.9 V / 22.8 – 23.8 V B: 11.0 – 11.75 V / 22.0 – 23.5 V		
Voltage dependent	A: 11.0/22 V B: 11.5/23 V		
Adaptive	11.0 – 12.2 V / 22.0 – 24.4 V		
Reconnect level	12.8/25.6 V		
Overvoltage protection	15.5/31.0 V		
Undervoltage protection	10.5/21.0V		
Max. panel voltage	30 V in 12 V system		
(Overvoltage protection by varistor)	50 V in 24 V system		
Temperature compensation (Charge voltage)	–25 mV/K at 12 V –50 mV/K at 24 V		
Self consumption	< 6 mA		
Grounding	negative grounding possible		
Ambient temperature	–20 to +50 °C		
Max. height	4,000 m above sea level		
Battery type	lead acid (GEL, AGM, flooded)		
Wire cross section	< 16 mm ²		
Weight	168 g		179 g
Dimensions (W x H x D)	92 x 93 x 38 mm		
Type of protection	IP22		