

## CX series (10 – 40 A)

Solar Charge Controller with LCD Display



- LCD display
- Display indicates charge and discharge status
- Load disconnect prewarning by acoustic signal
- Load status indication
- Choose among five load disconnect algorithms
- Four-stage PWM charging algorithm with integrated temperature compensation
- Protected terminals (up to 16 mm<sup>2</sup> wire size)
- Full electronic protection
- Programmable nightlight function

The CX series offers outstanding features in this class. In addition to sophisticated PWM charge regulation with integrated temperature compensation, the CX controllers provide substantial display, programming, and safety functions. The battery state of charge is clearly displayed by means of a bar graph, as well as energy flow from and to the battery and the load status (e.g. overload, load short circuit). The deep discharge protection function can be set to five different modes: two voltage-controlled, two SOC-controlled, or one adaptive (battery deep discharge protection). Acoustic alarms are built in and a programmable nightlight function as well. The CX-DR can optionally be used for DIN rail mounting.

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System voltage12/24 V auto recognitionMax. charge/load current10 A20 A	40 A
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Float charge 13.7/27.4 V (25 °C)	
Main charge 14.4/28.8 V (25 °C), 30 min. (daily)	
Boost charge 14.4/28.8 V (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 < 12.1/24.2 V	
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 10.5/21.0 V	
Max. panel voltage 30 V in 12 V system	
(Overvoltage protection by varistor) 50 V in 24 V system	
Temperature compensation –25 mV/K at 12 V	
(Charge voltage) –50 mV/K at 24 V	
Own consumption < 4 mA	
Grounding Positive 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 Up to 16 mm <sup>2</sup>	
Weight 168 g	179 g
Dimensions (W x H x D)       92 x 93 x 38 mm	
Type of protection IP22	

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