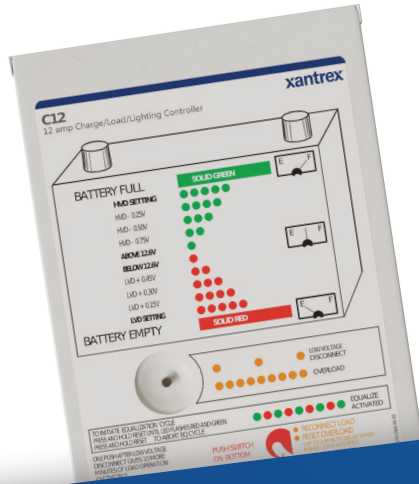


# C12 PWM CHARGE CONTROLLER DATASHEET



AVAILABLE IN:  
**1000A**  
**2000A**

## PV CHARGE, DIVERSION, AND LOAD CONTROLLER

The C12 charge, lighting, or load controller is uniquely sophisticated. As a charge controller, it features three-stage charging, user definable voltage parameters, and automatic equalization. Standard in the C12's load control circuitry are field adjustable low voltage disconnect and reconnect points, along with a five-minute low battery disconnect signal. The C12 also functions as a lighting controller. Lighting run time is adjustable from two to eight hours or can be set from dusk to dawn operation. It is used worldwide in a variety of applications, including remote village lighting systems and automatic outdoor lighting. An optional battery temperature sensor manages battery charging based on battery temperature.



Three-stage Regulation, Solid State, and Pulse Width Modulation



Automatic Equalization



Field Adjustable Control Setpoints



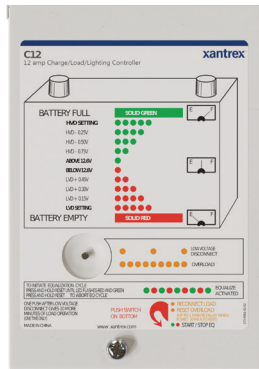
Short Circuit Detection and Low Voltage Disconnect

### APPLICATIONS:



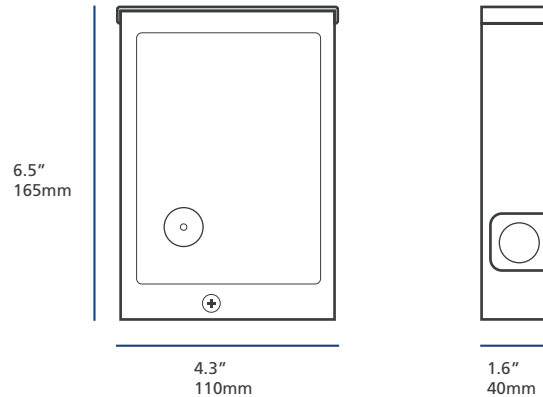
**2 YEAR  
WARRANTY**

[www.xantrex.com](http://www.xantrex.com)  
CUSTOMER CARE: 1.800.670.0707



FRONT VIEW

### C12 PWM CHARGE CONTROLLER DIMENSIONS



## PRODUCT FEATURES

- Improve battery life with pulse width modulated (PWM) multi-stage temperature compensated charging
- PV charge, diversion, load controller
- Automatic lighting controller
- Electronic detection of short-circuit, overload, over- temperature and reverse polarity conditions
- Tolerance to hostile environments with conformal-coated boards and powder-coated enclosure

## PROTECTION FEATURES

- Field adjustable voltage and battery set points
- Automatically disconnects from the battery at night
- Compatible with negative ground and ungrounded systems

### ACCESSORIES

Mfg Part #	Description
CM/R-50	Meter, digital volt, C series remote with 50ft cable
130-004-02-01	Battery temperature sensor with 25ft cable

NOTE: Contact Xantrex or your dealer to order these accessories.

## ELECTRICAL SPECIFICATIONS

C12 PWM CHARGE CONTROLLER	
Rated PV Current	12A at 12V only
Maximum DC Current	12A with auto reset
Minimum Operating Voltage	6V
Maximum PV Open Circuit Array Voltage	25V
Maximum Voltage Drop (PV to Battery)	0.3V
Maximum Voltage Drop (Battery to DC Load)	0.3V
Regulation Setting	13 – 15V
Equalize Setting	Bulk plus 1 volt for two hours
Maximum Stranded Wire Size	#10 AWG stranded (5.2mm <sup>2</sup> )
Typical Consumption While Charging	0.007A
Typical Consumption with Load Disconnected	0.003A

## GENERAL SPECIFICATIONS

C12 PWM CHARGE CONTROLLER	
Power Consumption (night time)	0.003A
Enclosure Material	Powder coated steel with strain relief for wiring and knockouts for up to 3.5 in conduits
Product Weight	2.0lb (0.9kg)
Shipping Weight	2.5lb (1.1kg)
Product Dimensions (H x W x L)	6.5 x 4.3 x 1.6in (165 x 110 x 40mm)
Shipping Dimensions (H x W x L)	8.0 x 4.6 x 1.6in (203 x 117 x 40mm)
Device Mounting	Vertical wall mount – indoor only
Ambient Air Temperature for Operation	32°F to 104°F (0°C to 40°C)
Part Number	C12

## REGULATORY AND ENVIRONMENTAL COMPLIANCES

CE marked for the Low Voltage Directive and EMC Directive

Specifications are subject to change without notice.

### CONTACT

#### CUSTOMER SERVICE

1.800.670.0707  
 customerservice@xantrex.com  
**Hours of operation:**  
 6:30am - 4:30pm PST, Monday to Friday



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