

C12 PWM

CHARGE CONTROLLER

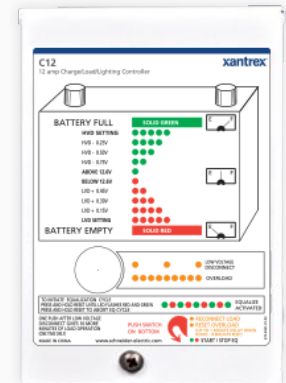


PV charge, diversion and load controller

Available in:

1000 W

2000 W



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.

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

Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Buses / coaches



Specialty vehicles



ETL listed to CSA Standard C22.2 No. 107.1 and UL 458* with Marine supplement

*For marine supplement compliance drip shield in specific mounting orientation is required. See installation guide



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| Electrical specifications – inverter | | C12 |
|--|--|---|
| Rated PV current | | 12 A at 12 V only |
| Max. DC load | | 12 A with auto reset |
| Min. operating voltage | | 6 V |
| Max. PV open circuit array voltage | | 25 V |
| Max. voltage drop (PV to battery) | | 0.3 V |
| Max. voltage drop (battery to DC load) | | 0.5 V |
| Regulation setting | | 13 to 15 V |
| Equalize setting | | Bulk plus 1 volt for two hours |
| Max. stranded wire size | | #10 AWG stranded (5.2 mm ²) |
| Typical consumption while charging | | 0.007 A |
| Typical consumption with load disconnected | | 0.003 A |

| General specifications | |
|---------------------------------------|---|
| Power consumption, night time | 0.003 A |
| Enclosure material | Powder coated steel with strain relief for wiring and knockouts for up to 3.5 in conduits |
| Product weight | 0.9 kg (2.0 lb) |
| Shipping weight | 1.1 kg (2.5 lb) |
| Product dimensions (H x W x D) | 16.5 x 11.0 x 4.0 cm (6.5 x 4.3 x 1.6 in) |
| Shipping dimensions (H x W x D) | 20.3 x 11.7 x 4.0 cm (8.0 x 4.6 x 1.6 in) |
| Device mounting | Vertical wall mount – indoor only |
| Ambient air temperature for operation | 0°C to 40°C (32°F to 104°F) |
| Warranty | Two-year standard |
| Part number | C12 |

| Features | |
|------------------------------------|---|
| Regulation method | Three-stage (bulk, absorption, and float), solid state, pulse width modulation |
| Field adjustable control setpoints | Removable knobs and calibrated scales |
| Testpoints | Provided for each setting |
| Automatic equalization | Every 30 days or after voltage reaches low voltage disconnect – can be disabled |
| Short circuit detection | Auto reset and manual reset switch |
| Low voltage disconnect | Adjustable automatic or manual operation |

| Options | |
|----------------|---|
| 130-0004-02-01 | BTS – battery temperature sensor for increased charging precision, 7.62 m (25 ft) cable |

| Regulatory and environmental compliance | |
|---|--|
| CE marked for the Low Voltage Directive and EMC Directive | |
| Specifications are subject to change without notice. | |