



CC SOLAR CHARGE CONTROLLER

Optimize Battery Maintenance and Monitoring via a Large LCD Display

Model Numbers

- CC-30
- CC-40

Works With

- Works as a stand-alone controller using internal settings.

Accessories & Options

- Alarm contact
- External temperature sensor



- On the CC-40

The Magnum Energy CC Series Charge Controllers by Sensata Technologies provide exceptional control and state-of-charge determination via an easy-to-read LCD display. The large display shows operating modes with the aid of symbols, and the state of charge is represented visually in the form of a level meter. Voltage, current, and an energy meter can also be displayed. The CC-40 also features an integrated USB charging port for charging smartphones and tablets.

Product Features

- Shunt topology with MOSFETs
- Accurate state of charge (SOC) determination
- Automatic detection of voltage
- PWM control
- Multistage charging technology
- Load disconnection depending on SOC
- Automatic load reconnection
- Temperature compensation
- Option to use negative earthing of one or positive earthing of several terminals
- Integrated data logger (energy meter)
- Evening, night light and daylight functions
- Integrated self test
- Monthly equalization charge
- USB charge socket for smartphones and tablets (CC-40 only)

Electronic Protection Functions

- Overcharge protection
- Deep discharge protection
- Reverse polarity protection of module, load and battery
- Automatic electronic fuse
- Short circuit protection of load and module
- Overvoltage protection at module input
- Open circuit protection without battery
- Reverse current protection at night
- Overtemperature and overload protection
- Load disconnection on battery overvoltage



CC SOLAR CHARGE CONTROLLER SPECIFICATIONS

| | CC-30 | CC-40 |
|--|--|--|
| OPERATING PERFORMANCE | | |
| System voltage | 12 V (24 V) | 12 V (24 V) |
| Power consumption | 12.5 mA | 18.5 mA |
| DC INPUT SIDE | | |
| Open circuit voltage solar module (at minimum operating temperature) | < 47 V | < 47 V |
| DC OUTPUT SIDE | | |
| Load current | 30 A | 40 A |
| USB charge socket | n/a | 5.2 V / 1.5 A |
| Reconnection voltage (SOC/LVR) | > 50% / 12.6 V (25.2 V) | > 50% / 12.6 V (25.2 V) |
| Deep discharge protection < 30% (SOC/LVD) | < 30% / 11.1 V (22.2 V) | < 30% / 11.1 V (22.2 V) |
| BATTERY SIDE | | |
| End-of-charge voltage | 13.9 V (27.8 V) | 13.9 V (27.8 V) |
| Boost charge voltage | 14.4 V (28.8 V) | 14.4 V (28.8 V) |
| Equalization charge | 14.7 V (29.4 V) | 14.7 V (29.4 V) |
| Set battery type | flooded (adjustable via menu) | flooded (adjustable via menu) |
| Charge current | 30 ADC | 40 ADC |
| ENVIRONMENTAL SPECIFICATIONS | | |
| Ambient temperature | 14° F to 122° F (-10° C to +50° C) | 14° F to 122° F (-10° C to +50° C) |
| PHYSICAL SPECIFICATIONS | | |
| Terminal (fine/single wire) | AWG 6 / 4 (16 mm ² / 25 mm ²) | AWG 6 / 4 (16 mm ² / 25 mm ²) |
| Degree of protection | IP 31 | IP 30 |
| Dimensions (width x height x depth) | 7.4" x 3.8" x 1.7" (187 mm x 96 mm x 44 mm) | 7.4" x 3.8" x 1.8" (187 mm x 97 mm x 45 mm) |
| Shipping dimensions (width x height x depth) | 7.6" x 4.1" x 2" (195mm x105mm x 50mm) | 7.6" x 4.1" x 2" (195mm x105mm x 50mm) |
| Weight | .77 lb (350 g) | .77 lb (350 g) |
| Shipping weight | 1 lb (450g) | 1.1 lb (480g) |
| GENERAL SPECIFICATIONS | | |
| Warranty | 5 years | 5 years |

