

MIDNITE MPPT CHARGE CONTROLLER

The Barcelona, an MPPT battery charger that doesn't skimp on features!

The Barcelona (MNBCLNA) is the most powerful and versatile charge controller in its class. Ideal for large size stand alone and grid-tied renewable energy systems.

PRODUCT FEATURES

- 200 amp 48V output
- 100A per MPPT output
- Min VOC 220 volts
- Ideal VOC 300 to 600 volts
- MPPT window 185 to 585 volts
- Dual independent tracking
- Ideal for larger DC coupled battery based on-grid and off-grid installations
- Talking MNGP2 display (Canbus) No other display required when coupled with MidNite inverters and other MidNite products
- Rotary knob with push button for ease of navigating menus
- Optional Barcelona Breaker Box (MNBCLNA BB) protects against excessive battery voltage excursions
- Die cast aluminum enclosure
- Optional plug in AF/GF module
- BTS included
- 2 Auxiliary outputs
- Quiet fan cooled. Fans relatively easy to replace
- Companion to the 7000 watt Rosie inverter
- Two PV inputs track independently
- Safety certifications: UL1741 and CE low voltage directive EN50178
- 5 year warranty
- Designed and assembled in the USA



*Shown with optional
Barcelona Breaker Box
(MNBCLNA BB)*

Our new built in talking MNGP2 graphics and programming module
The MNGP2 graphics and programming module allows communication, monitoring and programming of all future MidNite products from a single unit.

The rotary dial provides easy access to all menus and devices on the network as well as the selection of custom programming within the various sub-menus.



***Designed and Assembled
in the USA
using as many American
components as feasible!***

BARCELONA SPECIFICATIONS

| | |
|--|--|
| Nominal Battery Voltage | 48V |
| Maximum Output Current | 200 amps 2 X 100 Amps, independent |
| Min / Max Open Circuit Voltage VOC | 220 / 600 VDC |
| Power Conversion Efficiency | 98% (Typical system) |
| Arc Fault and NEC 2020 Ground Fault Protection | Optional plugin modules - user installed |
| Charging Regulation | Bulk, Absorb, Float as well as Equalization |
| Battery Voltage Regulation Set Points | 40V to 65V |
| Equalization Charging | Adjustable voltage and duration |
| Battery Over Voltage | Fully protected. The optional Barcelona Breaker Box (MNBCLNA BB) automatically trips PV input breaker if battery exceeds 68VDC |
| Battery Short Circuit | Fully protected |
| Battery Temp Compensation | Automatic when BTS is installed. Adjustable mV per degree C per 2V cell |
| Programmable Auxiliary | 2 auxiliary outputs |
| Graphic Display | MNGP2 - 64 x 122 |
| Stacking cables for system networking | Standard CAT5 - Canbus |
| Communications | Canbus |
| Remote Display | MNGP2 can be relocated and a second display can be added |
| Operating Temperature | Minimum of -40C to 50C (controller will auto derate as temperature rises above 25C) |
| Terminal Rating | 75C |
| Data Logging | 380 days of daily history |
| Positive Ground Applications | Requires 2 pole input and output breakers |
| Environmental Rating | Type 1 (Indoor only) |
| Warranty | 5 years |
| Weight & Dimensions | 21" x 12-15/16" x 9" 23lbs (10.43kgs) |
| Shipping Dimensions | 24" x 17" x 13" 37lbs (16.78kgs) |
| Certifications | Listed by ETL for US and Canada |
| Optional | Barcelona Breaker Box, SPD115 and SPD 600 (MNSPD-115 for Battery Side and MNSPD-600 for the PV input side) |

