

## 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)

