## THE BARCELONA

### 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 it's class. Ideal for large size stand alone and grid-tied renewable energy systems.

#### **PRODUCT FEATURES**

- 200 amp 48V output
- Operating Voltage of 185 to 585 volts
- 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
- Add on Barcelona Breaker Box (MNBCLNA-BB) protects against excessive battery voltage excursions
- Die cast aluminum enclosure
- Optional plug in UL1699B listed arc fault
- Optional plug in NEC2020 compliant ground fault
- Optional plug in Sunspec compliant Rapid Shutdown transmitter (module or string level)
- BTS included
- 3 aux input/outputs
- · Remote battery voltage sense
- Quiet fan cooled. Fans relatively easy to replace
- Companion to the 6800 watt Rosie inverter
- Two PV inputs track independent or as one
- Safety certifications: UL1741, CSA 107.1 and CE low voltage directive EN50178
- 5 year warranty the Barcelona Breaker Box
- · Designed and built in the USA



Shown with optional Barcelona Breaker Box

# 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.



## **MADE IN THE USA**



## BARCELONA SPECIFICATIONS

	4017
Nominal Battery Voltage	48V
Maximum Output Current	200 amps combined 2 x
	100 Amps, independent
PV Open Circuit Voltage VOC	600VDC
Power Conversion Efficiency	98% (Typical system)
Arc Fault and NEC 2020 Ground	Optional plugin modules - user installed
Fault Protection	
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 Barcelona Breaker Box
	automatically trips PV input breaker if battery
	exceeds 69VDC)
Battery Short Circuit	Fully protected
Battery Temp Compensation	Automatic when BTS is installed. Adjustable
	mV per degree C per 2V cell
Programmable Axillary	3 axillary input/outputs
Graphic Display	MNGP2 - 64 x 122
Stacking cables for Follow Me	Standard CAT5 - Canbus
Communications	Canbus
Remote Display	MNGP2 can be relocated and a second display
	can be added
External Monitoring	Phone Application software allows local
	control and monitoring within normal
	blue tooth range from Barcelona options.
Terminal Rating	75C
Data Logging	380 days of daily history, 24 hours of data
	at 5 minute intervals
Wind and Hydro Applications	Coming soon (firmware upgradeable)
Positive Ground Applications	Requires 2 pole input and output breakers
Operating Temperature	Minimum of -40C to 50C (controller will auto
	derate as temperature rises above 25C)
   Environmental Rating	Indoor type 1
Warranty	5 years
Weight & Dimensions	23 Lbs (23.43 kgs)
Shipping Dimensions	23 x15.05 x 11.05
Options	Barcelona Breaker Box, SPD115 and
	SPD 600 (MNSPD-115 for Battery Side and
	MNSPD-600 for the PV input side)
Certifications	Listed by ETL for US & Canada
	MinNine