## THE HAWKE'S BAY

### MIDNITE CHARGE CONTROLLER

# HAWKE'S BAY MPPT Solar Charge Controller

Full featured 600VDC to 48VDC 6600 watt MPPT charge controller with control panel

#### **PRODUCT FEATURES**

- 90 and 120 amp vented models (MNHAWKE'S BAY 90 and MNHAWKE'S BAY 120)
- Least expensive large output 600VDC MPPT either by itself or when outfitted with options
- Ideal for larger DC coupled battery based on-grid and off-grid installations
- Widest MPPT tracking range 185-585VDC
- Faster and less expensive installation. Typically no combiner needed
- Battery temp sensor included
- · External battery voltage sense
- 3 aux input/outputs, the most in the industry
- Add on Hawke's Bay Breaker Box (MNHAWKE'S BAY BB-125) protects against excessive battery voltage excursions
- 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)
- Canbus communications seamlessly integrate with other MidNite products
- Optional MidNite ComBox communicates with many 3rd party Lithium batteries
- Safety certifications: UL1741, CSA 107.1 and CE low voltage directive EN50178
- 5 year warranty standard.
- Die cast and extruded aluminum enclosure rather than sheet metal
- · Quiet and reliable fan cooled
- · Weight: 20 Lbs.
- · Breaker box weight: 9 Lbs.
- · Made in Arlington, WA. USA



Hawke's Bay MPPT Charge Controller (MNHAWKE'S BAY 90 or MNHAWKE'S BAY 120)



Hawke's Bay Charge Controller with Hawke's Bay Breaker box attached

(MNHAWKE'S BAY BB-125)



### HAWKES BAY SPECIFICATIONS

| Nominal Battery Voltage               | 48V  |
|---------------------------------------|--|
| Maximum Output Current                | 120 amps   |
| 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 Hawkes Bay 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 Hawkes Bay 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 MidNite                       | 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  |