

# THE CLASSIC

## CLASSIC MPPT CHARGE CONTROLLER

***The most powerful MPPT charge controller on the market at a great price!***

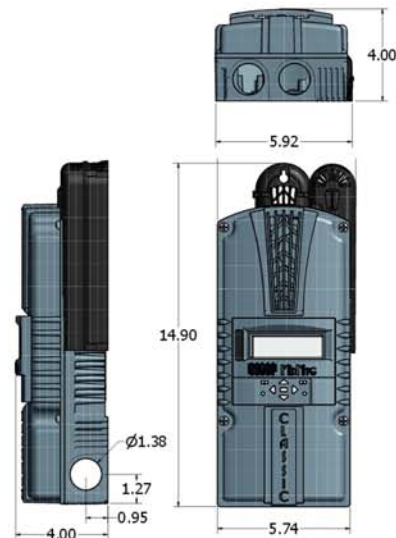
The Classic substantially increases the flexibility, features and range currently found on MPPT controllers at an incredible price. With all the Classics you receive reliability, functionality and an incredibly powerful MPPT charge controller!

### PRODUCT FEATURES

- Manual and Auto EQ
- Built in DC-GFP
- Arc Fault Protection
- Communicates with the Clipper
- Communicates with the Whizbang Jr.
- Mymidnite.com: Online Status Monitoring
- Full Internet capability
- Remote and local displays possible
- 150, 200 & 250VDC operating voltage
- Exclusive HyperVOC extends VOC limits
- 380 days of daily history, 24 hours of data at 5 minute intervals
- 12-72V battery charging standard
- Solar, Wind and Hydro MPPT modes
- Communications is Modbus over Ethernet and RS232
- Parallel operation for multiple Classic systems
- ETL Listed for the US & Canada
- Made in America

***The Classic Now Speaks in English!***

**More languages coming soon!**



Included: Local Application for local network or worldwide command and control of all Classic functions.



Designed and built in the U.S.A.

CAUTION HOT SURFACES



[www.midnitesolar.com/classic](http://www.midnitesolar.com/classic)

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**Classic 150, 200 or 250 MPPT Charge Controllers**

|   |   |
|---|---|
| Nominal Battery Voltage   | 12 Through 72 volts on Classic's  |
| Maximum Output Current  | Classic 150 = 96A on 12V, 94A on 24V and 86A on 48V battery<br>Classic 200 = 79A on 12V, 78A on 24+48V and 65A on 72V battery<br>Classic 250 = 61A on 12V, 62A on 24V, 55A on 48V and 43A on 72V battery<br>Classic150 = 150V + HyperVOC (battery voltage up to 48V) Example 150V + 48V = 198VOC<br>Classic200 = 200V + HyperVOC (battery voltage up to 48V)<br>Classic250 = 250V + HyperVOC (battery voltage up to 48V) (NOTE: See HyperVOC at bottom) |
| PV Open Circuit Voltage VOC<br><i>(NOTE: See HyperVOC at bottom)</i>                                  |   |
| Power Conversion Efficiency   | 98% (Typical system)  |
| Maximum Stand-By Self-Consumption (12V)   | 2.8W - 4W   |
| Reverse Current At Night  | Zero - Internal relay for reverse current   |
| Low Battery Voltage   | Low Battery voltage disconnect and re-connect of loads fully programmable with 2 Auxiliary outputs to control external load disconnect /re-connect switches   |
| Hyper VOC <i>(NOTE: See HyperVOC at bottom)</i>   | Standard all models - Extended VOC range for cold climates  |
| Arc Fault Protection  | Standard on Classic, 0.25 second detect and trip speed  |
| Ground Fault Protection   | Standard all models - resettable, no fuse to blow   |
| Charging Regulation   | Bulk, Absorb, Float as well as Equalization   |
| Battery Voltage Regulation Set Points   | 10-100VDC   |
| Equalization Charging   | Adjustable Voltage and Duration, Manual or Auto   |
| PV Reverse Polarity   | Protected to Max VOC ( Classic MPPT Charger Controllers are fully protected from reverse current on both input and output)  |
| Battery Reverse Polarity  | Fully protected ( Classic MPPT Charger Controllers are fully protected from reverse current on both input and output)   |
| Battery Over Voltage  | Fully protected (Classic MPPT Charger Controllers are fully protected from over current on both input and output)   |
| Battery Short Circuit   | Fully protected   |
| Battery Temp Compensation   | Automatic when BTS is installed. Adjustable mV per degree C per 2V cell   |
| Programmable Auxiliary Control Output   | 2 Auxiliary outputs, Aux1 can be 12V out or dry contact, Aux2 is 12V out or Logic IN  |
| Graphic Display   | Graphical display   |
| Networking Cabling  | Standard 4 conductor phone cable, no hub needed   |
| Communications  | Modbus openly published over Ethernet and RS232   |
| Remote Display  | Display (MNGP) can be relocated and a second display can be added   |
| Remote Monitoring And Control   | Local Application software included allows viewing and control from the network or over the Internet.<br>MyMidNite.com - online status monitoring   |
| Terminal Rating   | 75 C  |
| Internet Ready  | All models  |
| Data Logging  | 380 days of daily history, 24 hours of data at 5 minute intervals   |
| Wind And Hydro Applications   | Standard on all models  |
| 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 IP30 (The Classic is IP22 Rated to 60529 when used with Classic Drip Shield)  |
| Conduit knock Outs  | Single 1" conduit (35.05mm) on left and right sides. Two 1" conduit (35.05mm) on bottom. Two 3/4" conduit (27.76mm) on back.  |
| Warranty  | 5 Year  |
| Weight & Dimensions   | 12 Lbs. (5.45 kgs) - 14.9" x 6" x 4" (378mm x 152mm x 102mm)  |
| Shipping Dimensions HxWxD   | 19" x 8.5" x 5.7" (482.6mm x 215.9mm x 144.78mm)  |
| Options   | MNGP graphical display, 3ft networking cable  |
| Certifications  | Listed by ETL for US & Canada, CE Certified, FCC Class B  |
| HyperVOC: A non-operative VOC safety zone over and above the maximum input voltage for cold climates. | <b>NOTE:</b> Turbine short circuit protection is provided by the additional MidNite Clipper Turbine voltage and speed protection provided when used with MidNite Clipper  |

**To ensure proper start up and MPPT operation, the minimum initial PV input voltage should be at least 30% higher than the highest expected battery voltage.**