

**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 Classic 200 = 79A on 12V, 78A on 24+48V and 65A on 72V battery Classic 250 = 61A on 12V, 62A on 24V, 55A on 48V and 43A on 72V battery
PV Open Circuit Voltage VOC <i>(NOTE: See HyperVOC at bottom)</i>	Classic150 = 150V + HyperVOC (battery voltage up to 48V) <i>Example 150V + 48V = 198VOC</i> Classic200 = 200V + HyperVOC (battery voltage up to 48V) Classic250 = 250V + HyperVOC (battery voltage up to 48V) <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. 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. **NOTE:** Turbine short circuit protection is provided by the additional MidNite Clipper Turbine voltage and speed protection provided when used with MidNite Clipper