

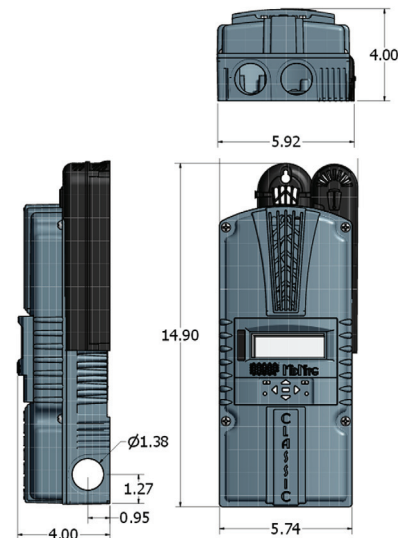
MIDNITE SOLAR INC.

# CLASSIC 150-SL, CLASSIC 200-SL, CLASSIC 250-SL

## CLASSIC SL MPPT SOLAR CHARGE CONTROLLERS

### **The most powerful MPPT solar charge controllers on the market at the BEST Price!**

From the same family of hard working, dependable charge controllers comes the Classic 150-SL, Classic 200-SL and Classic 250-SL. With a streamlined menu, these SOLAR only MPPT charge controllers are easy to setup and a breeze to install! The Classic SL series has all the power of MidNite's Classic line of MPPT Charge controllers and can be paralleled with the Standard Classic and Classic Lite (to coordinate battery charging). The SL series works with the Whizbang Jr, our current sensing module and gives you just the features you need at a MUCH LOWER PRICE!



### PRODUCT FEATURES

- User friendly menu structure
- Manual Equalize
- Built in DC- Ground Fault Protection (Earth Fault)
- Communicates with the Whizbang Jr.
- Dual display capable
- 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
- Communications - Modbus over RS232
- Will parallel with other Classic SL's, Standard Classics and Classic Lites.
- No arch fault or Ethernet
- ETL Listed for the USA & Canada
- Designed and Assembled in the USA



**Keeping Jobs in America!**

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

Nominal Battery Voltage	12 Through 72 volts on Classic SL's
Maximum Output Current	Classic SL-150 = 96A on 12V, 94A on 24V and 86A on 48V battery Classic SL-200 = 79A on 12V, 78A on 24+48V and 65A on 72V battery Classic SL-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>	Classic SL-150 = 150V + HyperVOC (battery voltage up to 48V) Example 150V + 48V = 198VOC Classic SL-200 = 200V + HyperVOC (battery voltage up to 48V) Classic SL-250 = 250V + HyperVOC (battery voltage up to 48V) (NOTE: See HyperVOC at bottom)
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
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 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
Stacking Cables for Follow Me	Standard 4 conductor phone cable, no hub needed
Communications	ModBus over RS232 openly published protocol
Remote Display	Display (MNGP) can be relocated and a second display can be added
Terminal Rating	75 C
Data Logging	380 days of daily history, 24 hours of data at 5 minute intervals
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 standard
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 (NOTE: MNGP standard with all Classic SL models)
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.*

**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.**