MIDNITE SOLAR INC.

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

CLASSIC SL MPPT SOLAR CHARGE CONTROLLERS



From the same family of hard working, dependable charge controllers comes the NEW 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!

Proudly made in the USA with AMERICAN workers!

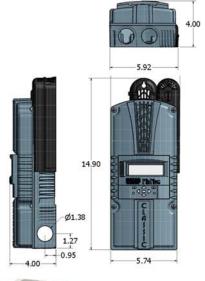
PRODUCT FEATURES

- 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 and RS232
- Will parallel with other Classic SL's, Standard Classics and Classic Lites.
- ETL Listed for the USA & Canada
- Made in the USA



Keeping Jobs in America!







Listed by ETL for US & Canada, CE Certified, FCC Class B, IEC62109 pending	Certifications
MNGP graphical display, 3ft networking cable (NOTE: MNGP standard with all Classic SL models)	Options
19" x 8.5" x 5.7" (482.6mm x 215.9mm x 144.78mm)	Shipping Dimensions HxWxD
12 Lbs. (5.45 kgs) - 14.9" x 6" x 4" (378mm x 152mm x 102mm)	Weight & Dimensions
5 Year standard	Warranty
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.	Conduit knock Outs
Indoor type IP30 (The Classic is IP22 Rated to 60529 when used with Classic Drip Shield)	Environmental Rating
Minimum of -40C to 50C - Controller will auto derate as temperature rises above 25C	Operating Temperature
Requires 2 pole input and output breakers	Positive Ground Applications
380 days of daily history, 24 hours of data at 5 minute intervals	Data Logging
75 C	Terminal Rating
Display (MNGP) can be relocated and a second display can be added	Remote Display
RS232 and ModBus openly published protocol	Communications
Standard 4 conductor phone cable, no hub needed	Networking Cabling
Graphical display	Graphic Display
2 Auxiliary outputs, Aux1 can be 12V out or dry contact, Aux2 is 12V out or Logic IN	Programmable Auxiliary Control Output
Automatic when BTS is installed, Adjustable mV per degree C per 2V cell	Battery Temp Compensation
Fully protected	Battery Short Circuit
Fully protected (Classic MPPT Charger Controllers are fully protected from reverse current on both input and output)	Battery Reverse Polarity
Protected to Max VOC (Classic MPPT Charger Controllers are fully protected from reverse current on both input and output)	PV Reverse Polarity
Adjustable Voltage and Duration, Manual or Auto	Equalization Charging
10-100VDC	Battery Voltage Regulation Set Points
Bulk, Absorb, Float as well as Equalization	Charging Regulation
Standard all models - resettable, no fuse to blow	Ground Fault Protection
Standard all models - Extended VOC range for cold climates	Hyper VOC (NOTE: See HyperVOC at bottom)
disconnect /re-connect switches	
Low Battery voltage disconnect and re-connect of loads fully programmable with 2 Auxiliary outputs to control external load	Low Battery Voltage
Zero - Internal relay for reverse current	Reverse Current At Night
2.8W - 4W	Maximum Stand-By Self-Consumption (12V)
98% (Typical system)	Power Conversion Efficiency
Classic SL-250 = 250V + HyperVOC (battery voltage up to 48V) (NOTE: See HyperVOC at bottom)	
Classic SL-200 = 200V + HyperVOC (battery voltage up to 48V)	(NOTE: See HyperVOC at bottom)
Classic SL-150 = 150V + HyperVOC (battery voltage up to 48V) Example 150V + 48V = 198VOC	PV Open Circuit Voltage VOC
Classic SL-250 = 61A on 12V, 62A on 24V, 55A on 48V and 43A on 72V battery	
Classic SL-200 = 79A on 12V, 78A on 24+48V and 65A on 72V battery	
Classic SL-150 = 96A on 12V, 94A on 24V and 86A on 48V battery	Maximum Output Current
12 Through 72 volts on Classic SL's	Nominal Battery Voltage
Classic SL 150, 200 or 250 MPPT Charge Controllers	

HyerVOC: 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.