



## MMA SERIES INVERTER/CHARGER

### *Waterproof LED Panel for Rugged Conditions*

#### Model Numbers

- MMA1212

#### Available For

- Emergency Vehicle Systems
- Marine Systems
- RV Systems
- Trucks

#### Available Accessories

- DC Load Disconnect
- Fuse Blocks
- MagWeb
- Remote Monitor - MM-C
- Remote - ME-ARC
- Remote - ME-RC
- Remote - MM-RC

The Magnum Energy MMA Series Inverter/Charger from Sensata Technologies is a modified sine wave inverter providing a cost effective solution for those with smaller power needs in mobile applications. Ideal for Emergency Vehicles, the MMA is versatile, easy-to-use, lightweight, and provides a reliable base for your energy system.

**Connect with Ease:** The MMA comes with DC cables with Anderson quick connectors, a GFCI outlet, and an AC input cord.

**Auxiliary DC Output Port:** Add a small load, such as an interior lamp or backup camera, of less than 20 amps. MMA must be connected to the battery for the AUX output to be available.

**Power Factor Corrected (PFC) Charger:** Our PFC charger is built into all of our inverter/chargers. It uses less energy from a generator than a standard charger – using 25-30% less AC current than standard chargers.

## FEATURES

### Waterproof Panel

The MMA boasts a waterproof switch and LED panel for use in the most rugged territory.

### Safe and Reliable

The MMA Series Inverter/Charger is ETL Listed to the stringent requirements of UL/cUL 458 and CSA C22.2 #107.1-01 for mobile use.

### Attractive Styling

The modern, hourglass case, paired with the die cast aluminum base combines form with function, creating an attractive unit that uses its base as a heat sink for superior high temperature operation.

### Standard Transfer Relay

The standard 20 amp transfer relay will pass AC power through the inverter when using shore or generator power.

### Versatile Mounting

Mount the MMA Series on a shelf, bulkhead (with DC terminals to the right), or even upside down.

### Low/High Battery Protection

If your battery voltage reaches below 10 VDC or above 16 VDC, the MMA Series will automatically shut down.

### Fan Cooled

The MMA Series is fan cooled, enabling the unit to work well in confined spaces. If the inverter does exceed its temperature limits, it will automatically shut down and then restart when it cools down.

### Current Overload Protection

The MMA Inverter/Charger will automatically shut down if its output wattage is exceeded or it detects a short in the wiring, saving the unit from costly damage.

### Integrated Programming

The MMA Series comes with an on/off front-mounted switch with an easy-to-read LED indicator. And easily toggle through settings with the accessible DIP switch.

### Battery Temp Sensor

Automatically adjusts the voltage set-points based on temperature for better charging performance and longer battery life.

### Buy with Ease

The MMA Inverter/Charger is backed by a two-year (24-month) parts and labor warranty.

## MMA SERIES INVERTER/CHARGER SPECIFICATIONS

MMA1212	
<b>INVERTER SPECIFICATIONS</b>	
Input battery voltage	9 to 16 VDC
Nominal AC output voltage	120 VAC $\pm$ 5%
Output frequency and accuracy	60 Hz $\pm$ 0.1 Hz
1 msec surge current (amps AC)	42
100 msec surge current (amps AC)	23
5 sec surge power (real watts)	2100
30 sec surge power (real watts)	1750
5 min surge power (real watts)	1450
30 min surge power (real watts)	1375
Continuous power output at 45° C	1200 VA
Maximum continuous input current	160 ADC
Inverter efficiency (peak)	95%
Transfer time (typical)	16 msec
Search mode (typical)	5 watts (with no remote)
No load (120 VAC output, typical)	18 watts (with no remote)
Waveform	Modified Sine Wave
<b>CHARGER SPECIFICATIONS</b>	
Continuous output at 45° C	70 ADC
Charger efficiency (peak)	88%
Power factor	> 0.95
Input current at rated output (AC amps)	9
<b>GENERAL FEATURES AND CAPABILITIES</b>	
Transfer relay capability	20 AAC (input current for charging and pass through)
Battery temperature compensation	Yes, with ME-BTS
Internal cooling	0 to 59 cfm variable speed
Overcurrent protection	Yes, with two overlapping circuits
Overtemperature protection	Yes, on transformer and MOSFETS
On/Off with status indicator	Yes, front mounted and easily accessible
Low battery cutoff	10 VDC, adjustable with the ME-RC or ME-ARC remote
AC output	15 amp GFCI outlet
AC input	3 ft AC cord
Output circuit breaker	15 AAC
Input circuit breaker	20 AAC
Listings	ETL Listed to UL/cUL458, CSA C22.2 #107.1-01
Warranty	Two years
<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Operating temperature	-20° C to +60° C (-4° F to 140° F)
Nonoperating temperature	-40° C to +70° C (-40° F to 158° F)
Operating humidity	0 to 95% RH non condensing
<b>PHYSICAL SPECIFICATIONS</b>	
Dimensions (l x w x h)	16.6" x 8.4" x 6.75" (42 cm x 21 cm x 17 cm)
Mounting	Shelf (top or bottom up) or bulkhead (DC terminals to the right)
Weight	24 lb (10.9 kg)
Shipping weight	25 lb (11.3 kg)
Max operating altitude	15,000' (4570 m)

