



## THE MMS SERIES INVERTER/CHARGER

### *Sine Wave Power for Rugged Mobile Applications*



Pure  
Sine  
Wave



Battery  
Voltage  
Options



Continuous  
Output  
Options

#### Model Numbers

- MMS1012
- MMS1012-G

#### Available For

- Emergency Vehicles
- Marine Systems
- RV Systems

#### Available Accessories

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

The MMS Series Inverter / Charger is a pure sine wave inverter providing a cost effective solution for those with smaller power needs in mobile applications. Versatile, easy-to-use, and lightweight, the MMS Series provides a reliable base for your energy system.

**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.

**Safe and reliable:** The MMS Series 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.

## FEATURES

#### Standard transfer relay:

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

#### Low/high battery protection:

If your battery voltage reaches below 10 VDC or above 17 VDC, the MMS Series will automatically shut down.

#### Versatile mounting:

Mount the MMS Series on a shelf, bulkhead, or even upside down.

#### Fan cooled:

The MMS 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 MMS Series will auto-matically shut down if its output wattage is exceeded or it detects a short in the wiring, saving the unit from costly damage.

#### Convenient switches:

The MMS Series comes with an on/off front-mounted switch with an easy-to-read LED indicator.

#### Circuit breaker protection:

This model comes with built in input and output circuit breakers for ease of installation.

#### Battery temp sensor:

The standard battery temp sensor monitors temperatures from 0 - 50° C.

#### Buy with ease:

The MMS Series is backed by a two-year (24-month) parts and labor warranty.

# MMS SERIES SPECIFICATIONS

|                                              | MMS1012                                                                   | MMS1012-G          |
|----------------------------------------------|---------------------------------------------------------------------------|--------------------|
| INVERTER SPECIFICATIONS                      |                                                                           |                    |
| Input battery voltage range                  | 9 to 17 VDC                                                               | 9 to 17 VDC        |
| Nominal AC output voltage                    | 120 VAC ± 5%                                                              | 120 VAC ± 5%       |
| Output frequency and accuracy                | 60 Hz ± 0.1 Hz                                                            | 60 Hz ± 0.1 Hz     |
| Total Harmonic Distortion (THD)              | < 5%                                                                      | < 5%               |
| 1 msec surge current (amps AC)               | 38                                                                        | 38                 |
| 100 msec surge current (amps AC)             | 21                                                                        | 21                 |
| 5 sec surge power (real watts)               | 1750                                                                      | 1750               |
| 30 sec surge power (real watts)              | 1600                                                                      | 1600               |
| 5 min surge power (real watts)               | 1200                                                                      | 1200               |
| 30 min surge power (real watts)              | 1050                                                                      | 1050               |
| Maximum continuous input current             | 133 ADC                                                                   | 133 ADC            |
| Inverter efficiency (peak)                   | 87%                                                                       | 87%                |
| Transfer time                                | 16 msecs                                                                  | 16 msecs           |
| Search mode (typical)                        | 5 watts                                                                   | 5 watts            |
| No load (120 VAC output, typical)            | 19 watts                                                                  | 19 watts           |
| Waveform                                     | Pure Sine Wave                                                            | Pure Sine Wave     |
| CHARGER SPECIFICATIONS                       |                                                                           |                    |
| Continuous output at 25° C                   | 50 ADC                                                                    | 50 ADC             |
| Charger efficiency                           | 84%                                                                       | 84%                |
| Power factor                                 | > .95                                                                     | > .95              |
| Input current at rated output (AC amps)      | 7                                                                         | 7                  |
| GENERAL FEATURES AND CAPABILITIES            |                                                                           |                    |
| Transfer relay capability                    | 20 AAC (input current for charging and pass through)                      |                    |
| Battery temperature compensation             | Yes, 15 ft Battery Temp Sensor standard                                   |                    |
| 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 cutout                           | 10 VDC, adjustable with the ME-RC remote                                  |                    |
| AC output/AC input                           | Hardwire/Hardwire                                                         | Hardwire/3 ft cord |
| Output circuit breaker/Input circuit breaker | 15A/20AAC                                                                 | NA/20AAC           |
| Listings                                     | ETL Listed to UL/cUL458, CSA C22.2 #107.1-01, meets KKK-A-1822E standard  |                    |
| Warranty                                     | Two years                                                                 |                    |
| ENVIRONMENTAL SPECIFICATIONS                 |                                                                           |                    |
| Temperature (Operating/Non-operating)        | -20° C to +60° C (-4° F to 140° F) to -40° C to +70° C (-40° F to 158° F) |                    |
| Operating humidity                           | 0 to 95% RH non-condensing                                                |                    |
| PHYSICAL SPECIFICATIONS                      |                                                                           |                    |
| Dimensions (l x w x h)                       | 16.6" x 8.4" x 4.7" (42 cm x 21 cm x 12 cm)                               |                    |
| Mounting                                     | Shelf (top or bottom up) or bulkhead (vents up)                           |                    |
| Weight                                       | 23 lb (10.4 kg)                                                           |                    |
| Shipping weight                              | 25 lb (11.3 kg)                                                           |                    |
| Max operating altitude                       | 15,000' (4570 m)                                                          |                    |
| Construction                                 | ABS plastic top and cast aluminum bottom                                  |                    |



## OFFICES

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