

MMS SERIES | INVERTER/CHARGER

SINE WAVE POWER FOR MOBILE APPLICATIONS

Introduction

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 energy systems. The built-in Power Factor Corrected (PFC) charger uses 25-30% less energy from a generator than a standard charger. The 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

- Battery Profile Presets – Using the ME-RC, ME-ARC, or ME-MR Remote Controls, easily choose from and set standard battery profiles, including Lithium Iron Phosphate (LFP) – only available via the ME-RC and ME-MR, Gel, Flooded, AGM1, and AGM2.
- 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.
- 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.

Model Numbers

- MMS1012-GL
- MMS1012-L-F
- MMS1012-L-U

Available For

- Emergency Vehicles
- Marine Systems
- RV Systems

Available Accessories

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



Pure Sine Wave



12

Battery Voltage Options



1000
VA

Continuous Output Options



SPECIFICATIONS

	MMS1012
INVERTER SPECIFICATIONS	
Input battery voltage range	9 to 17 VDC
Nominal AC output voltage	120 VAC $\pm$ 5%
Output frequency and accuracy	60 Hz $\pm$ 0.1 Hz
Total Harmonic Distortion (THD)	< 5%
1 msec surge current (amps AC)	38
100 msec surge current (amps AC)	21
5 sec surge power (real watts)	1750
30 sec surge power (real watts)	1600
5 min surge power (real watts)	1200
30 min surge power (real watts)	1050
Output power (continuous watts)	1000
Maximum continuous input current	133 ADC
Inverter efficiency (peak)	87%
Transfer time	16 msec
Search mode (typical)	5 watts
No load (120 VAC output, typical)	19 watts
Waveform	Pure Sine Wave
CHARGER SPECIFICATIONS	
Continuous output at 25° C	50 ADC
Charger efficiency	84%
Power factor	> .95
Input current at rated output (AC amps)	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
Output circuit breaker/Input circuit breaker	15A/20AAC
Listings	ETL Listed to UL/cUL1741 and 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



GENERAL NOTES

Testing for specifications at 25° C.
Specifications subject to change without notice.



AGENCY APPROVALS & CERTIFICATIONS

- ETL Listed to UL/cUL1741 and UL/cUL458, CSA C22.2 #107.1-01, meets KKK-A-1822E standard

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.