

MM-E SERIES | INVERTER/CHARGER

Introduction

Sensata Technologies now offers the MM-E Series Inverter/Charger for 230 VAC / 50 Hz installations. The MM-E Series comes with all of the features you've come to expect from a Magnum Energy brand product, including: 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. Battery temp sensor: The standard battery temp sensor monitors temperatures from 0 - 50° C. Convenient switches: All models come with an on/off inverter-mounted switch with an easy-to-read LED indicator.



Features

- 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.
- Fan cooled – The MM-E 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.
- Versatile mounting – Mount the MM-E Series on a shelf, wall, or even upside down.
- Battery and inverter protection – The MM-E Series protects your batteries and itself with low battery, high battery, current overload, and circuit breaker protection.

Model Numbers

- MM1012E

Available For

- Renewable Energy Systems
- Off-grid Power
- Back-up Power

Available Accessories

- Battery Monitor Kit
- Fuse Blocks
- Remotes - MM-RC/ME-RC



Modified Sine Wave



12 Battery Voltage Options



1000-1300 VA Continuous Output Options



SPECIFICATIONS

	MM1012E
INVERTER SPECIFICATIONS	
Input battery voltage range	9 - 16 VDC
Nominal AC output voltage	230 VAC $\pm$ 5%
Output frequency and accuracy	50 Hz $\pm$ 0.4 Hz
1 msec surge current (amps AC)	21
100 msec surge current (amps AC)	11
5 sec surge power (real watts)	1750
30 sec surge power (real watts)	1600
5 min surge power (real watts)	1350
30 min surge power (real watts)	1180
Continuous power output at 25° C	1000 VA
Maximum continuous input current	133 ADC
Inverter efficiency (peak)	87%
Transfer time	30 ms
Search mode (typical)	< 6 watts
No load (120 VAC output, typical)	16 watts
Waveform	Modified Sine Wave
CHARGER SPECIFICATIONS	
Continuous output at 25° C	50 A
Charger efficiency	84%
Power factor	> .95
Input current at rated output (AC amps)	3.5
GENERAL FEATURES AND CAPABILITIES	
Transfer relay capability	20 AAC (input current for charging and pass through)
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™
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, MOSFETS, and battery
Corrosion protection	Yes, PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners
Low battery cutout	10 VDC, adjustable with the ME-RC remote
Output circuit breaker	7 AAC
Input circuit breaker	8 AAC
Listings	None
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)	15.0" x 6.5" x 5.0" (38.1 cm x 16.5 cm x 12.7 cm)
Mounting	Shelf (top or bottom up) or wall
Weight	23 lb (10.4 kg)
Shipping weight	24 lb (10.9 kg)
Max operating altitude	15,000' (4570 m)



GENERAL NOTES

Testing for specifications at 25° C.

Specifications subject to change without notice.

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.

CONTACT US

651-653-7000
800-553-6418
InverterInfo@sensata.com

Power Conversion
www.magnum-dimensions.com



This manual is provided courtesy of **RV Tech Cheat Sheet**



Professional resources for the whole RV industry — free.

We put manuals, wiring diagrams and hard-won tech knowledge in every technician's hands, so repairs get done right the first time, techs work faster, and RV owners everywhere get better service.



rvtechcheatsheet.com/manuals

Find thousands more RV manuals, wiring diagrams and parts lists

RV techs: share fixes, ask questions and learn from each other.

Join our free Facebook group →



Follow proper safety practices. If in doubt, consult a professional RV technician.