

# 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



Battery Voltage Options



Continuous Output Options

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	MM1012E
INVERTER SPECIFICATIONS	
Input battery voltage range	9 - 16 VDC
Nominal AC output voltage	230 VAC ± 5%
Output frequency and accuracy	50 Hz ± 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 (I 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)	



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

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