

# 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
- MM1324E

## 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	MM1324E
<b>INVERTER SPECIFICATIONS</b>		
<b>Input battery voltage range</b>	9 - 16 VDC	18 - 32 VDC
<b>Nominal AC output voltage</b>	230 VAC ± 5%	230 VAC ± 5%
<b>Output frequency and accuracy</b>	50 Hz ± 0.4 Hz	50 Hz ± 0.4 Hz
<b>1 msec surge current (amps AC)</b>	21	42
<b>100 msec surge current (amps AC)</b>	11	14
<b>5 sec surge power (real watts)</b>	1750	2600
<b>30 sec surge power (real watts)</b>	1600	2100
<b>5 min surge power (real watts)</b>	1350	1850
<b>30 min surge power (real watts)</b>	1180	1650
<b>Continuous power output at 25° C</b>	1000 VA	1300 VA
<b>Maximum continuous input current</b>	133 ADC	87 ADC
<b>Inverter efficiency (peak)</b>	87%	87%
<b>Transfer time</b>	30 ms	30 ms
<b>Search mode (typical)</b>	< 6 watts	< 8 watts
<b>No load (120 VAC output, typical)</b>	16 watts	18 watts
<b>Waveform</b>	Modified Sine Wave	Modified Sine Wave
<b>CHARGER SPECIFICATIONS</b>		
<b>Continuous output at 25° C</b>	50 A	40 A
<b>Charger efficiency</b>	84%	83%
<b>Power factor</b>	> .95	> .95
<b>Input current at rated output (AC amps)</b>	3.5	5.5
<b>GENERAL FEATURES AND CAPABILITIES</b>		
<b>Transfer relay capability</b>	20 AAC (input current for charging and pass through)	
<b>Five stage charging capability</b>	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™	
<b>Battery temperature compensation</b>	Yes, 15 ft Battery Temp Sensor standard	
<b>Internal cooling</b>	0 to 59 cfm variable speed	
<b>Overcurrent protection</b>	Yes, with two overlapping circuits	
<b>Overtemperature protection</b>	Yes on transformer, MOSFETS, and battery	
<b>Corrosion protection</b>	Yes, PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners	
<b>Low battery cutout</b>	10 VDC, adjustable with the ME-RC remote	
<b>Output circuit breaker</b>	7 AAC	
<b>Input circuit breaker</b>	8 AAC	
<b>Listings</b>	None	
<b>Warranty</b>	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.

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