



# MM-AE SERIES | INVERTER/CHARGER

COST EFFECTIVE INVERTER/CHARGERS

## Introduction

The Magnum Energy MM-AE Series Inverter/Charger is a modified sine wave inverter providing a cost effective solution for those with smaller power needs in renewable energy applications. Versatile, easy-to-use, and lightweight, the MM-AE 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. 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

- Versatile mounting – Mount the MM-AE Series on a shelf, wall, or even upside down.
- Fan cooled – The MM-AE 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.
- Low battery protection – If your battery voltage goes below the cut-out setting, the MM-AE Series will automatically shut down, saving your batteries.
- High battery protection – If your battery voltage reaches over the cut-out setting, the MM-AE Series will shut down.
- Current overload protection – The MM-AE Series will automatically 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 MM-AE Series comes with an on/off front-mounted switch and an easy-to-read LED indicator.
- Circuit breaker protection – Every 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 MM-AE Series is backed by a two-year (24-month) parts and labor warranty.

## Model Numbers

- MM1512AE
- MM1524AE

## Available For

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

## Available Accessories

- Battery Monitor Kit
- Fuse Blocks
- MagWeb
- Remote - ME-ARC
- Remote - ME-RC



Modified Sine Wave



Battery Voltage Options



Continuous Output Options



# SPECIFICATIONS

	MM1512AE	MM1524AE
<b>INVERTER SPECIFICATIONS</b>		
<b>Input battery voltage range</b>	9 to 16 VDC	18 to 32 VDC
<b>Nominal AC output voltage</b>	120 VAC ± 5%	120 VAC ± 5%
<b>Output frequency and accuracy</b>	60 Hz ± 0.1 Hz	60 Hz ± 0.1 Hz
<b>1 msec surge current (amps AC)</b>	42	45
<b>100 msec surge current (amps AC)</b>	23	24
<b>5 sec surge power (real watts)</b>	2100	2650
<b>30 sec surge power (real watts)</b>	1750	2500
<b>5 min surge power (real watts)</b>	1550	2350
<b>30 min surge power (real watts)</b>	1525	1900
<b>Continuous power output at 25° C (with 1.0 PF)</b>	1500 VA	1500VA
<b>Continuous current output</b>	10 ACC	13 ACC
<b>Maximum input battery current</b>	200 ADC	100 ADC
<b>Inverter efficiency (peak)</b>	95%	91%
<b>Transfer time</b>	16 msecs	16 msecs
<b>Search mode (typical)</b>	6 watts	4 watts
<b>No load (120 VAC output, typical)</b>	18 watts	9 watts
<b>Waveform</b>	Modified Sine Wave	Modified Sine Wave
<b>CHARGER SPECIFICATIONS</b>		
<b>Continuous output at 25° C</b>	70 ADC	35 ADC
<b>Charger efficiency</b>	88%	88%
<b>Power factor</b>	> 0.95	> 0.95
<b>Input current at rated output (AC amps)</b>	9	9
<b>GENERAL FEATURES AND CAPABILITIES</b>		
<b>Transfer relay capability</b>	20 AAC (input current for charging and pass through)	
<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 and MOSFETS	
<b>On/Off with status indicator</b>	Yes, front mounted and easily accessible	
<b>Low battery cutout</b>	10 or 20 VDC, adjustable on most models with the ME-RC remote	
<b>AC output/AC input</b>	Hardwire	Hardwire
<b>Output circuit breaker/Input circuit breaker</b>	15A / 20AAC	15A / 20AAC
<b>Listings</b>	NA	
<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)	16.6" x 8.4" x 4.7" (42 cm x 21 cm x 12 cm)	
Mounting	Shelf (top or bottom up) or wall (vents up)	
Weight	22 lb (10 kg)	22 lb (10 kg)
Shipping weight	24 lb (10.9 kg)	24 lb (10.9 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.

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