

MS-E SERIES | INVERTER/CHARGER

PURE SINE WAVE

Introduction

Magnum Energy now offers the MS-E Series Inverter/Charger for 230 VAC/50 Hz installations. The MS-E Series comes with all of the features you've come to expect from a Magnum 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. Safe and reliable: The MS-E Series is listed to the stringent CE requirements, ensuring the inverter/charger is safe and reliable. Easy-to-install: Install the MS-E Series in four easy steps: simply connect the inverter's output to your distribution circuits or electrical panel, connect your utility power cable to the inverter's easy-to-reach terminal block, connect the batteries, and switch on the power.



Features

- Pure sine wave – Power your T.V.s, stereos, plasma screens, and other sensitive electronics without worry. The pure sine wave inverter and power factor corrected charger provide clean, reliable inverter power with low total harmonic distortion (THD) of less than 5%.
- Versatile mounting – Mount the MS-E Series on a shelf, wall, or even upside down.
- Lightweight – The lightweight aluminum base and cover also provides noise reduction and corrosion resistance.
- Multiple ports – The MS-E Series provides multiple ports, including an RS485 communication port for network expansion, and a remote port.
- Accessible design – The extra large AC access cover with terminal screw block and 360° DC connection terminals with covers make this inverter more accessible when it needs to be.
- Convenient switches – The MS-E Series comes with an on/off inverter-mounted switch with an easy-to-read LED indicator.
- Buy with ease – The MS-E Series is backed by a two-year (24-month) limited warranty.

Model Numbers

- MS1512E
- MS2712E

Available For

- Renewable Energy Systems
 - Off-grid Power
 - Back-up Power
- Marine Systems
- Caravan Systems
- Truck Systems

Available Accessories

- AGS
- Battery Monitor Kit
- Conduit Box
- DC Load Disconnect
- Fuse Blocks
- Ignition Switch Lockout
- MMP-E
- Remote - ME-RC
- Remote - ME-ARC
- Remote Switch Adapter



Pure Sine Wave



12

Battery Voltage Options



1500-2700 VA

Continuous Output Options



SPECIFICATIONS

	MS1512E	MS2712E
INVERTER SPECIFICATIONS		
Input battery voltage range	9 - 17 VDC	9 - 17 VDC
Nominal AC output voltage	230 VAC $\pm 5\%$	230 VAC $\pm 5\%$
Output frequency and accuracy	50 Hz ± 0.4 Hz	50 Hz ± 0.4 Hz
Total Harmonic Distortion (THD)	< 5%	< 5%
1 msec surge current (amps AC)	40	45
100 msec surge current (amps AC)	15	21
5 sec surge power (real watts)	3100	4100
30 sec surge power (real watts)	2800	3750
5 min surge power (real watts)	2200	3600
30 min surge power (real watts)	1800	3500
Continuous power output at 25° C	1500 VA	2700 VA
Maximum continuous input current	200 ADC	360 ADC
Inverter efficiency (peak)	89%	86%
Transfer time	~ 20 ms	~ 20 ms
Search mode (typical)	8 watts	9 watts
No load (230 VAC output, typical)	20 watts	34 watts
Waveform	Pure Sine Wave	Pure Sine Wave
CHARGER SPECIFICATIONS		
Continuous output at 25° C	75 ADC	125 ADC
Charger efficiency (peak)	86%	83%
Power factor	> .95	> .95
Input current at rated output (AC amps)	4.5	8.5
GENERAL FEATURES AND CAPABILITIES		
Transfer relay capability	30 amps AC	
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™	
Battery temperature compensation	Yes, 4.6 m (15') Battery Temp Sensor standard	
Internal cooling	0 to 120 cfm variable speed drive using dual 92mm brushless DC fans	
Overcurrent protection	Yes, with two overlapping circuits	
Overtemperature protection	Yes on transformer, MOSFETS, and battery	
Conformal coating on PCB's for corrosion protection	Yes	
Powder coated chassis & top for corrosion protection	Yes	
Stainless steel fasteners for corrosion protection	Yes	
Listings	CE	
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)	34.9 cm x 32.1 cm x 20.3 cm (13.75" x 12.65" x 8.0")	
Mounting	Shelf (top or bottom up) or wall	
Unit weight	19.1 kg (42 lb)	25.0 kg (55 lb)
Shipping weight	23.2 kg (51 lb)	28.2 kg (62 lb)
Max operating altitude	4570 m (15,000')	



GENERAL NOTES

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



AGENCY APPROVALS & CERTIFICATIONS

- CE

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