



## The MS-E Series Pure Sine Wave Inverter/Charger



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### MODEL NUMBERS

- MS1512E
- MS2712E
- MS4124E

### 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
- Smart Battery Combiner

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%.

**Choices:** The MS-E Series comes in 12 and 24 volt configurations, allowing you to choose the model that is right for you.

**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.

The Powerful Difference



## MS-E Series Specifications

	MS1512E	MS2712E	MS4124E
<b>Inverter Specifications</b>			
Input battery voltage range	9 - 16 VDC	9 - 17 VDC	18 - 34 VDC
Nominal AC output voltage	230 VAC $\pm$ 5%	230 VAC $\pm$ 5%	230 VAC $\pm$ 5%
Output frequency and accuracy	50 Hz $\pm$ 0.4 Hz	50 Hz $\pm$ 0.4 Hz	50 Hz $\pm$ 0.4 Hz
Total Harmonic Distortion (THD)	< 5%	< 5%	< 5%
1 msec surge current (amps AC)	40	45	65
100 msec surge current (amps AC)	15	21	30
5 sec surge power (real watts)	3100	4100	6300
30 sec surge power (real watts)	2800	3750	5300
5 min surge power (real watts)	2200	3600	4750
30 min surge power (real watts)	1800	3500	4600
Continuous power output at 25° C	1500 VA	2700 VA	4100 VA
Maximum continuous input current	200 ADC	360 ADC	273 ADC
Inverter efficiency (peak)	89%	86%	90%
Transfer time	~ 20 ms	~ 20 ms	~ 20 ms
Search mode (typical)	8 watts	9 watts	9 watts
No load (230 VAC output, typical)	20 watts	34 watts	30 watts
Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
<b>Charger Specifications</b>			
Continuous output at 25° C	75 ADC	125 ADC	125 ADC
Charger efficiency (peak)	86%	83%	88%
Power factor	> .95	> .95	> .95
Input current at rated output (AC amps)	4.5	8.5	14
<b>General Features and Capabilities</b>			
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		
<b>Environmental Specifications</b>			
Operating temperature	-20° C to +60° C (-4° F to 140° F)		
Nonoperating temperature	-40° C to +70° C (-40° F to 158° F)		
Operating humidity	0 to 95% RH non condensing		
<b>Physical Specifications</b>			
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		
Weight	19.1 kg (42 lb)	25.0 kg (55 lb)	25.0 kg (55 lb)
Shipping weight	23.2 kg (51 lb)	28.2 kg (62 lb)	28.6 kg (63 lb)
Max operating altitude	4570 m (15,000')		

### Magnum Energy, Inc.

2211 West Casino Road  
Everett, Washington 98204 USA

**Phone:** 425-353-8833  
**Fax:** 425-353-8390  
**Web:** [www.magnumenergy.com](http://www.magnumenergy.com)

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

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#### New Zealand

Independent Power (NZ) Ltd

Phone: 09 415 6686

Email: [sales@indepower.co.nz](mailto:sales@indepower.co.nz)

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