

## Export Inverter/Chargers



### MODEL NUMBERS

- MM1012E
- RD2624E
- RD4024E

### AVAILABLE FOR

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

### AVAILABLE ACCESSORIES

- **MM-E Series**
  - Battery Monitor Kit
  - Fuse Blocks
  - Remotes - MM-RC & ME-RC
- **RD-E Series**
  - AGS
  - Battery Monitor Kit
  - Conduit Box
  - DC Load Disconnect
  - Fuse Blocks
  - Ignition Switch Lockout
  - Remote - ME-RC
  - Remote Switch Adapter

### The Powerful Difference

Magnum Energy now offers two inverter/charger options for 230 VAC / 50 Hz installations. The MM-E Export Series and the RD-E Export Series Inverter/Chargers come 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.

**Battery temp sensor:** The standard battery temp sensor monitors temperatures from 0 - 50° C.

**Convenient switches:** All Export Inverter/Chargers come with an on/off inverter-mounted switch with an easy-to-read LED indicator.

### MM-E 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.

**Versatile mounting:** Mount the MM-E Series on a shelf, wall, or even upside down.

**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.

**Battery and inverter**

**protection:** The MM-E Series protects your batteries and itself with low battery, high battery, current overload, and circuit breaker protection.

### RD-E Features

**Easy-to-install:** Install the RD-E Series in four easy steps. See your installation manual for specific instructions.

**Versatile mounting:** Mount the RD-E Series on a shelf or wall.

**Multiple ports:**

The RD-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 easily accessible.



## Export Inverter/Charger Specifications

	MM1012E	RD2624E	RD4024E
<b>Inverter Specifications</b>			
Input battery voltage range	10 - 15.5 VDC	18 - 31 VDC	18 - 31 VDC
Nominal AC output voltage	230 VAC ± 5%	230 VAC ± 5%	230 VAC ± 5%
Output frequency and accuracy	50 Hz ± 0.04%	50 Hz ± 0.04%	50 Hz ± 0.04%
1 msec surge current (amps AC)	21	85	100
100 msec surge current (amps AC)	11	22	40
5 sec surge power (real watts)	1750	4700	7500
30 sec surge power (real watts)	1600	4100	6750
5 min surge power (real watts)	1350	3350	6000
30 min surge power (real watts)	1180	2700	5500
Continuous power output at 25° C	1000 VA	2600 VA	4000 VA
Rated input battery current	111 A	130 A	222A
Inverter efficiency (peak)	87%	91%	89%
Transfer time	30 ms	16 ms	20 ms
Search mode (typical)	< 6 watts	< 7 watts	< 8 watts
No load (230 VAC output, typical)	16 watts	22 watts	32 watts
Waveform	Modified Sine Wave	Modified Sine Wave	Modified Sine Wave
<b>Charger Specifications</b>			
Continuous output at 25° C	50 A	75 A	105 A
Charger efficiency	84%	85%	85%
Power factor	> 0.95	> 0.95	> 0.95
Input current at rated output (AC amps)	3.5	11.5	16
<b>General Features and Capabilities</b>			
Transfer relay capability	20 AAC	30 AAC	30 AAC
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™		
Battery temperature compensation	Yes, 15 ft Battery Temp Sensor standard		
Remote available (optional)	Yes, MM-RC or ME-RC		
Internal cooling	0 to 59 cfm variable speed	0 to 120 cfm variable speed	0 to 120 cfm variable speed
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		
Output circuit breaker	7 amps switchable	NA	NA
Input circuit breaker	8 AAC	30 AAC	30 AAC
Listings	None		
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 (h x w x d)	15.0" x 6.5" x 5.0" (38.1 cm x 16.5 cm x 12.7 cm)	15.0" x 6.5" x 5.0" (38.1 cm x 16.5 cm x 12.7 cm)	13.75" x 12.65" x 8.0" (34.9 cm x 32.1 cm x 20.3 cm)
Mounting	Shelf (top or bottom up) or wall (vents up)		
Weight	23 lb (10.4 kg)	42 lb (19 kg)	55 lb (25 kg)
Shipping weight	25 lb (11.3 kg)	47 lb (21.3 kg)	60 lb (27.2 kg)
Max operating altitude	15,000' (4570 m)	15,000' (4570 m)	15,000' (4570 m)

**Magnum Energy, Inc.**  
1111 80th Street SW, Suite 250  
Everett, Washington 98203 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.

April 2008, Rev A

Part #64-0485



(800) 967-6917  
[www.dcpower-systems.com](http://www.dcpower-systems.com)

**The Powerful Difference**