

Export Inverter/Chargers



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

MODEL NUMBERS

- RD4024E
- MM1012E

AVAILABLE FOR

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

AVAILABLE ACCESSORIES

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

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.

Lightweight: The lightweight aluminum base and cover also provides noise reduction and corrosion resistance.

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.

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.



Export Inverter/Charger Specifications

	MM1012E	RD4024E
Inverter Specifications		
Input battery voltage range	10 - 15.5 VDC	18 - 31 VDC
Nominal AC output voltage	230 VAC ± 5%	230 VAC ± 5%
Output frequency and accuracy	50 Hz ± 0.05%	50 Hz ± 0.05%
1 msec surge current (amps AC)	21	100
100 msec surge current (amps AC)	11	40
5 sec surge power (real watts)	1750	7500
30 sec surge power (real watts)	1600	6750
5 min surge power (real watts)	1350	6000
30 min surge power (real watts)	1180	5500
Continuous power output at 25° C	1000 VA	4000 VA
Rated input battery current	111 A	222A
Inverter efficiency (peak)	87%	89%
Transfer time	30 ms	20 ms
Search mode (typical)	< 6 watts	< 8 watts
No load (230 VAC output, typical)	16 watts	32 watts
Waveform	Modified Sine Wave	Modified Sine Wave

Charger Specifications		
Continuous output at 25° C	50 A	105 A
Charger efficiency	84%	85%
Power factor	> 0.95	> 0.95
Input current at rated output (AC amps)	3.5	16

General Features and Capabilities		
Transfer relay capability	Standard 30 A	
Five stage charging capability	Bulk, Absorb, Float, Equalize, and Battery Saver™	
Battery temperature compensation	With available temp sensor (battery temp 0 – 50° C)	
Remote available	Port available, requires MM-RC	Port available, requires ME-RC
Internal cooling	0 to 59 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	
Listings	None	
Warranty	Two years	

Environmental Specifications		
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	

Physical Specifications		
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)	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	20 lb (9.1 kg)	45 lb (20 kg)
Shipping weight	25 lb (11.3 kg)	58 lb (26 kg)
Max operating altitude	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

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

April 2008, Rev A

Part #64-0485

Authorized Magnum Dealer

The Powerful Difference