



THE MM-AE SERIES INVERTER/CHARGER

Cost Effective Inverter/Chargers



Modified
Sine
Wave



12, 24

Battery
Voltage
Options



600-
1500 VA

Continuous
Output
Options

Model Numbers

- MM612AE
- 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

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

Standard transfer relay:

The standard 20 amp transfer relay will pass AC power through the inverter when using grid or generator power.

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 auto-matically 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.

MM-AE SERIES INVERTER/CHARGER SPECIFICATIONS

| | MM612AE | MM1512AE | MM1524AE |
|--|---|--------------------|--------------------|
| INVERTER SPECIFICATIONS | | | |
| Input battery voltage range | 9 to 16 VDC | 9 to 16 VDC | 18 to 32 VDC |
| Nominal AC output voltage | 120 VAC \pm 5% | 120 VAC \pm 5% | 120 VAC \pm 5% |
| Output frequency and accuracy | 60 Hz \pm 0.1 Hz | 60 Hz \pm 0.1 Hz | 60 Hz \pm 0.1 Hz |
| 1 msec surge current (amps AC) | 27 | 42 | 45 |
| 100 msec surge current (amps AC) | 11 | 23 | 24 |
| 5 sec surge power (real watts) | 1100 | 2100 | 2650 |
| 30 sec surge power (real watts) | 1000 | 1750 | 2500 |
| 5 min surge power (real watts) | 950 | 1550 | 2350 |
| 30 min surge power (real watts) | 675 | 1525 | 1900 |
| Continuous power output at 25° C (with 1.0 PF) | 600 VA | 1500 VA | 1500VA |
| Continuous current output | 5 ACC | 10 ACC | 13 ACC |
| Maximum input battery current | 80 ADC | 200 ADC | 100 ADC |
| Inverter efficiency (peak) | 95% | 95% | 91% |
| Transfer time | 16 msec | 16 msec | 16 msec |
| Search mode (typical) | 3 watts | 6 watts | 4 watts |
| No load (120 VAC output, typical) | 10 watts | 18 watts | 9 watts |
| Waveform | Modified Sine Wave | Modified Sine Wave | Modified Sine Wave |
| CHARGER SPECIFICATIONS | | | |
| Continuous output at 25° C | 30 ADC | 70 ADC | 35 ADC |
| Charger efficiency | 85% | 88% | 88% |
| Power factor | > 0.95 | > 0.95 | > 0.95 |
| Input current at rated output (AC amps) | 4 | 9 | 9 |
| GENERAL FEATURES AND CAPABILITIES | | | |
| Transfer relay capability | 20 AAC (input current for charging and pass through) | | |
| Battery temperature compensation | Yes, 15 ft Battery Temp Sensor standard | | |
| Internal cooling | 0 to 59 cfm variable speed | | |
| Overcurrent protection | Yes, with two overlapping circuits | | |
| Overtemperature protection | Yes, on transformer and MOSFETS | | |
| On/Off with status indicator | Yes, front mounted and easily accessible | | |
| Low battery cutout | 10 or 20 VDC, adjustable on most models with the ME-RC remote | | |
| AC output/AC input | Hardwire | Hardwire | Hardwire |
| Output circuit breaker/Input circuit breaker | 7A / 8AAC | 15A / 20AAC | 15A / 20AAC |
| Listings | NA | | |
| 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) | 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 | 16 lb (7.3 kg) | 22 lb (10 kg) | 22 lb (10 kg) |
| Shipping weight | 18 lb (8.2 kg) | 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 | | |

