



## THE MM-E SERIES INVERTER/CHARGER







Battery Voltage Options



Continuous
Output
Options

Sensata Technologies now offers the MM-E Series Inverter/Charger for  $230\ VAC$  /  $50\ Hz$  installations. The MM-E Series comes with all of the features you've come to expect from a Magnum Energy brand 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  $0 - 50^{\circ}$  C.

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

#### **Model Numbers**

- MM1012E
- MM1324E

#### Available For

 Renewable Energy Systems Off-grid Power Back-up Power

#### **Available Accessories**

- Battery Monitor Kit
- Fuse Blocks
- Remotes MM-RC/ME-RC

# 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.

#### 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.

#### Versatile mounting:

Mount the MM-E Series on a shelf, wall, or even upside 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.

### MM-E SERIES INVERTER/CHARGER SPECIFICATIONS

|   | MM1012E   | MM1324E            |
|---|---|--------------------|
| NVERTER SPECIFICATIONS                  |   |                    |
| Input battery voltage range             | 9 - 16 VDC  | 18 - 32 VDC        |
| Nominal AC output voltage               | 230 VAC ± 5%  | 230 VAC ± 5%       |
| Output frequency and accuracy           | 50 Hz ± 0.4 Hz  | 50 Hz ± 0.4 Hz     |
| 1 msec surge current (amps AC)          | 21  | 42                 |
| 100 msec surge current (amps AC)        | 11  | 14                 |
| 5 sec surge power (real watts)          | 1750  | 2600               |
| 30 sec surge power (real watts)         | 1600  | 2100               |
| 5 min surge power (real watts)          | 1350  | 1850               |
| 30 min surge power (real watts)         | 1180  | 1650               |
| Continuous power output at 25° C        | 1000 VA   | 1300 VA            |
| Maximum continuous input current        | 133 ADC   | 87 ADC             |
| Inverter efficiency (peak)              | 87%   | 87%                |
| Transfer time                           | 30 ms   | 30 ms              |
| Search mode (typical)                   | < 6 watts   | < 8 watts          |
| No load (120 VAC output, typical)       | 16 watts  | 18 watts           |
| Waveform                                | Modified Sine Wave  | Modified Sine Wave |
| CHARGER SPECIFICATIONS                  |   |                    |
| Continuous output at 25° C              | 50 A  | 40 A               |
| Charger efficiency                      | 84%   | 83%                |
| Power factor                            | > .95   | > .95              |
| Input current at rated output (AC amps) | 3.5   | 5.5                |
| GENERAL FEATURES AND CAPABILITIES       |   |                    |
| Transfer relay capability               | 20 AAC  |                    |
| Five stage charging capability          | Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™                   |                    |
| 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, MOSFETS, and battery  |                    |
| Corrosion protection                    | Yes, PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners |                    |
| Low battery cutout                      | 10 VDC, adjustable with the ME-RC remote  |                    |
| Output circuit breaker                  | 7 AAC   |                    |
| Input circuit breaker                   | 8 AAC   |                    |
| Listings                                | None  |                    |
| 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 (I x w x h)                  | 15.0" x 6.5" x 5.0" (38.1 cm x 16.5 cm x 12.7 cm)                                     |                    |
| Mounting                                | Shelf (top or bottom up) or wall  |                    |
| Weight                                  | 23 lb (10.4 kg)   |                    |
| <u> </u>                                | 24 lb (10.9 kg)   |                    |
| Shipping weight                         | 24 lb (10.9 kg)   |                    |



#### OFFICES

2211 West Casino Road Everett, Washington 98204 USA

425-353-8833

4467 White Bear Pkwy St. Paul, MN 55110 USA

800-553-6418

Testing for specifications at  $25^{\circ}$  C. Specifications subject to change without notice.

www.SensataPower.com

February 2017 Rev F Part #64-0485