



Pure
Sine
Wave



Battery
Voltage
Options



Continuous
Output
Options

THE MSH-RE SERIES INVERTER / CHARGER

The MSH-RE Series Inverter / Charger from Sensata Technologies – a pure sine wave inverter that combines the tried and tested engineering of Sensata’s MS line with hybrid technology to make it an optimal choice for your renewable and backup power needs.

Hybrid technology: Most inverters only use one source of energy to power loads, either from incoming AC power – utility or AC generator – or from the batteries. The MSH-RE Series combines the energy from both sources to power loads. This allows the inverter to recharge the batteries when there is surplus power or deliver more power to the loads if they require more than the AC input can supply by itself.

Load support: Load support parallels the inverter output with incoming AC sources allowing it to run larger loads from smaller generators.

Model Number

- MSH4024RE

Available For

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

Available Accessories

- Auto Generator Start - ME-AGS-N
- Battery Monitor Kit
- Conduit Box
- DC Load Disconnect
- Fuse Blocks
- MagWeb
- MMP Panels
- Remote - ME-ARC*
- Remote - ME-RC*
- Remote Switch Adapter
- Smart Battery Combiner

New Warranty

- Three-year warranty standard.
- Five-year warranty if installed on an MMP panel.

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%.

Easy-to-install:

Install the MSH-RE 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.

Dual AC inputs:

The MSH-RE Series comes with two 60 amp AC inputs – a grid input at 60A and a generator input at 60A.

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.

Interchangeable:

The MSH-RE is interchangeable with the Magnum MS Series and uses the same accessories as the MS Series.

Lightweight:

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

Multiple ports:

The MSH-RE Series provides multiple ports, including an RS485 communication port for network expansion, and a remote port.

Convenient switches:

The MSH-RE Series comes with an on/off inverter-mounted switch with an easy-to-read LED indicator.

Buy with ease: The MSH-RE Series is backed by a three-year (36-month) limited warranty, and a five-year limited warranty when installed on an MMP system.

* New status displays require ME-RC v2.7 or ME-ARC v3.0 or higher.

MSH-RE SERIES SPECIFICATIONS

| MSH4024RE | |
|--|---|
| INVERTER SPECIFICATIONS | |
| Input battery voltage range | 18 - 34 VDC |
| Nominal AC output voltage | 120 VAC \pm 3% |
| Output frequency and accuracy | 60 Hz \pm 0.05 Hz |
| Total Harmonic Distortion (THD) | < 5% |
| 1 msec surge current (amps AC) | 120 |
| 100 msec surge current (amps AC) | 82 |
| 5 sec surge power (real watts) | 5800 |
| 30 sec surge power (real watts) | 5400 |
| 5 min surge power (real watts) | 4900 |
| 30 min surge power (real watts) | 4500 |
| Continuous power output at 25° C | 4000 VA |
| Maximum continuous input current | 267 ADC |
| Inverter efficiency (peak) | 93.7% |
| Transfer time | < 16 msec |
| Search mode (typical) | < 7 watts |
| No load (120 VAC output, typical) | 25 watts |
| Waveform | Pure Sine Wave |
| CHARGER SPECIFICATIONS | |
| Continuous output at 25° C | 110 ADC |
| Charger efficiency | 85% |
| Power factor | > .95 |
| Input current at rated output (AC amps) | 29 |
| GENERAL FEATURES AND CAPABILITIES | |
| Transfer relay capability | 60 AAC maximum each input |
| Five stage charging capability | Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™ |
| Battery temperature compensation | Standard with available temp sensor connected (battery temp 0 - 50 °C) |
| 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 |
| Corrosion protection | Yes, PCB's conformal coated, powder coated chassis/top, and stainless steel fasteners |
| Dual AC branch rated output breakers | No |
| Listings | ETL listed to UL/cUL 1741, CSA C22.2 No. 107.1-01 |
| Warranty | Three years parts and labor |
| 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) | 13.75" x 12.65" x 8.0" (34.9 cm x 32.1 cm x 20.3 cm) |
| Shipping dimensions (l x w x h) | 19" x 17" x 13" (48.3 cm x 43.2 cm x 33 cm) |
| Mounting | Shelf or wall (vents not allowed to face downward unless ME-CB or MMP is installed) |
| Weight | 58 lb (26.3 kg) |
| Shipping weight | 60 lb (27.2 kg) |
| Max operating altitude | 15,000' (4570 m) |

