



Pure
Sine
Wave



Battery
Voltage
Options



Continuous
Output
Options

Model Numbers

- MS4024PAE
- MS4448PAE

Available For

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

Available Accessories

- Auto Generator Start - ME-AGS-N
- Battery Monitor Kit
- Conduit Box
- Fuse Blocks
- Remote - ME-ARC
- Remote - ME-RC
- Router - ME-RTR
- MP and MMP Panels

New Warranty!

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

MS-PAE 120/240V SERIES INVERTER / CHARGER

The MS-PAE 120/240V Series Inverter / Charger from Sensata Technologies is a pure sine wave inverter designed specifically for the most demanding renewable energy applications. The MS-PAE Series is powerful, easy-to-use, and best of all, cost effective.

No series stacking required: The unique design of the MS-PAE Series can provide 120 and 240 volts output in one unit, eliminating the need to stack two units together to get 240 volts.

Parallel stacking: You can parallel up to four inverter / chargers for up to 17.6kw of power at 120/240V. The MP panels and router are required for parallel stacking the MS-PAE Series.

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.

Safe and reliable: The MS-PAE Series is ETL Listed to the stringent requirements of UL 1741, 1st edition, and CSA C22.2 #107.1-01 for renewable energy installations.

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%.

Choices:

The MS-PAE Series comes in 24 and 48 volt configurations, allowing you to choose the model that is right for you.

Versatile mounting:

Mount the MS-PAE Series on a shelf or wall.

Lightweight:

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

Multiple ports:

The MS-PAE 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 more accessible when it needs to be.

Convenient switches:

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

Buy with ease:

The MS-PAE Series is backed by a three-year (36-month) limited warranty, and a five-year limited warranty when installed on an MMP or MP system.

MS-PAE 120/240V SERIES SPECIFICATIONS

| | MS4024PAE | MS4448PAE |
|--|---|--|
| INVERTER SPECIFICATIONS | | |
| Input battery voltage range | 18 - 34 VDC | 36 - 64 VDC |
| Nominal AC output voltage | 120/240 VAC split phase ($\pm 5\%$) | 120/240 VAC split phase ($\pm 5\%$) |
| Output frequency and accuracy | 60 Hz ± 0.1 Hz | 60 Hz ± 0.1 Hz |
| Total Harmonic Distortion (THD) | < 5% | < 5% |
| 1 msec surge current (amps AC) | Line-Neutral: 120, Line-Line: 70 | Line-Neutral: 120, Line-Line: 80 |
| 100 msec surge current (amps AC) | Line-Neutral: 72, Line-Line: 40 | Line-Neutral: 75, Line-Line: 40 |
| 5 sec surge power (real watts) | 5800 | 8500 |
| 30 sec surge power (real watts) | 5200 | 6000 |
| 5 min surge power (real watts) | 4800 | 5400 |
| 30 min surge power (real watts) | 4500 | 4800 |
| Continuous power output at 25° C | 4000 VA (L-L) | 4400 VA (L-L) |
| Maximum continuous input current | 266 A | 144 ADC |
| Inverter efficiency (peak) | 93% | 94% |
| Transfer time | 16 msec | 16 msec |
| Search mode (typical) | < 6 watts | < 6 watts |
| No load (120 VAC output, typical) | 27 watts | 25 watts |
| Waveform | Pure Sine Wave | Pure Sine Wave |
| CHARGER SPECIFICATIONS | | |
| Continuous output at 25° C | 105 ADC | 60 ADC |
| Charger efficiency | 85% | 85% |
| Power factor | > .95 | > .95 |
| Input current at rated output (AC amps) | 15 AAC per leg at 120/240 VAC split phase | 17.5 AAC per leg at 120/240 VAC split phase |
| GENERAL FEATURES AND CAPABILITIES | | |
| Transfer relay capability | 2 legs at 30A per leg transfer standard on all models | |
| 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 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 | |
| Listings | ETL Listed to ANSI / UL1741, 1 st edition, and CSA STD C22.2 No.107.1-01 | |
| Warranty | Three years parts and labor (five years when installed on MMP or MP system) | |
| 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) | |
| Mounting | Shelf, wall (no vents on bottom), MP or MMP panels | |
| Weight | 55 lb (24.9 kg) | 55 lb (24.9 kg) |
| Shipping weight | 62 lb (28.2 kg) | 63 lb (29.6 kg) |
| Max operating altitude | 15,000' (4570 m) | |



OFFICES
 2211 West Casino Road
 Everett, Washington 98204 USA
 425-353-8833

4467 White Bear Pkwy
 St. Paul, MN 55110 USA

800-553-6418

www.SensataPower.com

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

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