

MS-PE SERIES | INVERTER/CHARGER

Introduction

The MS-PE Series Inverter/Charger from Sensata Technologies is a 230 VAC / 50 Hz, pure sine wave inverter designed specifically for the most demanding renewable energy applications. The MS-PE Series is powerful, easy-to-use, and best of all, cost effective. Parallel stacking: You can parallel up to four inverter/chargers for up to 17.2kw of power at 230V. The ME-ARTR Router is required for parallel stacking the MS-PE 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-PE Series is listed to the stringent requirements of CE 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%.
- Versatile mounting – Mount the MS-PE Series on a shelf or wall.
- Lightweight – The lightweight aluminum base and cover also provides noise reduction and corrosion resistance.
- Multiple ports – The MS-PE 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-PE Series comes with an on/off inverter-mounted switch with an easy-to-read LED indicator.
- Buy with ease – The MS-PE Series is backed by a two-year (24-month) limited warranty.

Model Numbers

- MS4124PE
- MS4348PE

Available For

- Renewable Energy Systems
 - Off-grid Power
 - Back-up Power
- Marine Systems
- Caravan Systems
- Truck Systems

Available Accessories

- MMP-E
- AGS – ME-AGS-N
- Battery Monitor Kit – ME-BMK
- MPSL-PE
- MPDH-PE
- Conduit Box
- Fuse Blocks
- MagWeb
- Remote - ME-ARC
- Remote - ME-RC
- Router – ME-ARTR



Pure Sine Wave



Battery Voltage Options



Continuous Output Options



SPECIFICATIONS

	MS4124PE	MS4348PE
INVERTER SPECIFICATIONS		
Input battery voltage range	18 - 34 VDC	36 - 64 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
Total Harmonic Distortion (THD)	< 5%	< 5%
1 msec surge current (amps AC)	65	75
100 msec surge current (amps AC)	30	37
5 sec surge power (real watts)	6300	7500
30 sec surge power (real watts)	5300	7100
5 min surge power (real watts)	4750	6600
30 min surge power (real watts)	4600	5000
Continuous power output at 25° C	4100 VA	4300 VA
Maximum continuous input current	273 ADC	143 ADC
Inverter efficiency (peak)	90%	91%
Transfer time	~ 20 ms	~ 20 ms
Search mode (typical)	9 watts	10 watts
No load (230 VAC output, typical)	30 watts	28 watts
Waveform	Pure Sine Wave	Pure Sine Wave
CHARGER SPECIFICATIONS		
Continuous output at 25° C	105 ADC	55 ADC
Charger efficiency	88%	91%
Power factor	> .95	> .95
Input current at rated output (AC amps)	14	16
GENERAL FEATURES AND CAPABILITIES		
Transfer relay capability	30 amps AC	
Five stage charging capability	Bulk, Absorb, Float, Equalize (requires remote), and Battery Saver™	
Battery temperature compensation	Yes, 4.6 m (15') 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	CE	
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)	34.9 cm x 32.1 cm x 20.3 cm (13.75" x 12.65" x 8.0")	38.1 cm x 16.5 cm x 12.7 cm (15.0" x 6.5" x 5.0")
Mounting	Shelf (top or bottom up) or wall	Shelf (top or bottom up) or wall
Weight	25.0 kg (55 lb)	25.0 kg (55 lb)
Shipping weight	28.6 kg (63 lb)	28.6 kg (63 lb)
Max operating altitude	4570 m (15,000')	4570 m (15,000')



GENERAL NOTES

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



AGENCY APPROVALS & CERTIFICATIONS

- CE

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Regional head offices: United States of America

Sensata Technologies
Attleboro, MA
Phone: 508-236-3800
E-mail: support@sensata.com

Netherlands

Sensata Technologies Holland B.V.
Hengelo
Phone: +31 74 357 8000
E-mail: support@sensata.com

China

Sensata Technologies China Co., Ltd.
Shanghai
Phone: +8621 2306 1500
E-mail: support@sensata.com