

NP SERIES | INVERTER/CHARGER

12 VOLT PURE SINE WAVE POWER

Introduction

Built to withstand high output surge demands of motors, pumps, and tools, while providing pure sine wave power for your sensitive electronic devices. The NP Series inverter/charger provides choices to fit your specific mobile needs. The 12 VDC models have output power options ranging from 1800 to 3000 watts and have an external chassis in various sizes. There truly is a model that will work where you need it.



Features

- Battery Profile Presets Using the included Seven Segment display or the optional remote LCD, easily choose from and set standard battery profiles, including Lithium Iron Phosphate (LFP), Gel, Flooded, and AGM.
- Wide operating temperature range from -40 °F to 149 °F.
- Programmable charger AC input current maximum with automatic load management regulation.
- Built-in AC bypass relay.
- Dead battery charging with a 0 volt minimum start.
- Thermally controlled cooling fan.
- GFCI outlet protection.
- LED indication of external power, inverter power, low input voltage, high temperature, and overload.
- Battery temperature sensor with 40 ft cable included with every unit.

Options

- H option AC hardwired output only, no GFCI.
- R option RJ45 remote jack, no unit mounted Seven Segment Display.

Model Numbers

- 12NP18
- 12NP20
- 12NP20HR
- 12NP20R
- 12NP24
- 12NP30
- 12NP30R

Available For

- Marine Systems
- Military Vehicles
- RV Systems
- Trucks
- Utility Vehicles

Available Accessories

- LCD Remote
- Seven Segment Remote
- Battery Temp Sensor (additional lengths)
- Battery Cable Kits
- DC Terminal Kits
- CAN Configuration Tools
- Covers
- GFCI



Pure Sine Wave



Battery Voltage Options



Continuous Output Options

Page 1











	12NP18	12NP20, 12NP20HR, 12NP20R	12NP24	12NP30, 12NP30R
INVERTER SPECIFICATIONS		<u>'</u>	·	
Continuous power output at 25° C	1800 watts	2000 watts	2400 watts	3000 watts
Continuous current (amps AC)	15 AAC	16.7 AAC	20 AAC	25 AAC
Input current (amps DC)	Up to 188 ADC	Up to 214 ADC	Up to 269 ADC	Up to 315 ADC
Peak power (watts)	3000	4500	5500	8000
Peak current (amps AC)	58 AAC	68 AAC	74 AAC	80 AAC
Motor starting rating (hp)	3/4 hp	3/4 hp	1 hp	2 hp
Nominal AC output voltage	120 VAC ± 3%	120 VAC ± 3%	120 VAC ± 3%	120 VAC ± 3%
Output frequency and accuracy	60 Hz ± 0.05%	60 Hz ± 0.05%	60 Hz ± 0.05%	60 Hz ± 0.05%
Input battery voltage range	10.5 - 17 VDC	10.5 - 17 VDC	10.5 - 17 VDC	10.5 - 17 VDC
Inverter efficiency (peak)	88%	88%	88%	88%
Total Harmonic Distortion (THD)	< 5%	< 5%	< 5%	< 5%
Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
DC Input Capacitance	Up to 160,000uF	Up to 160,000uF	Up to 160,000uF	Up to 160,000uF
CHARGER SPECIFICATIONS				
AC input voltage range	95 - 135 VAC	95 - 135 VAC	95 - 135 VAC	95 - 135 VAC
Input current (amps AC)	Up to 13.5 AAC	Up to 17.7 AAC	Up to 23 AAC	Up to 25 AAC
Output (amps DC)	Up to 95 ADC	Up to 115 ADC	Up to 130 ADC	Up to 150 ADC
BYPASS SPECIFICATIONS				
Transfer relay (amps AC)	30 AAC	30 AAC	30 AAC	30 AAC
ENVIRONMENTAL SPECIFICATIONS				
Operating temperature	-40° C to +65° C (-40° F to 149° F)			
PHYSICAL SPECIFICATIONS				
Dimensions (I x w x h)	12.2" x 14.6" x 5.8 " (30.5 x 37.1 x 14.7 cm)	12.2" x 14.6" x 5.8 " (30.5 x 37.1 x 14.7 cm)	13.5"x 14.6" x 5.8" (34.3 x 37.1 x 14.7 cm)	14.8" x 17.1"x 8" (37.6 x 43.4 x 20.3 cm)
Weight	40 lb (18.2 kg)	40 lb (18.2 kg)	40 lb (18.2 kg)	68 lb (30.9 kg)
GENERAL SPECIFICATIONS				
Listings	Listed to UL/cUL 458 UL File Number E100666			
Warranty	Five years			



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



AGENCY APPROVALS & CERTIFICATIONS

• Listed to UL/cUL 458 UL File Number E100666

Page 3

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, evaluation 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 data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, 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 DATA SHEETS 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

651-653-7000 800-553-6418 InverterInfo@sensata.com

Power Conversion www.magnum-dimensions.com

Copyright © 2021 Sensata Technologies, Inc.

Rev: 10/20/2021 Part#131340 vD