300W

Power Conversion Solution



IPSi300W INTELLIGENT PURESINE INVERTER

The IPSi300W series Intelligent Pure Sinewave' Inverter is designed specifically for running computers and other sensitive AC loads in rugged, mobile, off-grid environments where exposure to dust and moisture is likely. The IPSi300W model is built to be water resistant to the IP66 rating and the IPSi300Y is tested and certified waterproof to the IP67 rating.

The IPSi300W is controlled by a sophisticated Digital Signal Processor for optimal control and operation. The unit's heavy-duty Toroidal Power Transformer steps up the low AC voltage produced by the MOSFET transistors to either 110 or 220 VAC at 50 or 60 Hz (frequency user-selectable). Additional filtering on the AC output reduces or eliminates noise that could potentially interfere with sensitive communications equipment.

Models are available to operate from 10-16, 20-45, or 40-80 VDC to cover all standard DC battery voltages from 12 to 64 volts including 72V Rail.

Safety features include current limiting, short circuit protection, over temperature warning with shutdown and low input voltage warning with shutdown (thresholds user-adjustable).

Using the free-to-download 'InverterWizard' software, the user can select and adjust the output frequency, output voltage, and low voltage shutdown parameters from any laptop through the standard USB interface.

3 YEAR WARRANTY



Available models

Input

12 VDC

24, 28, 32, or 36 VDC

48 or 72 (rail) VDC

Output

110 VAC, 50 or 60 Hz 220 VAC, 50 or 60 Hz

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INPUT	10	20	40
Nominal Voltage	12 VDC	24, 28, 32 or 36 VDC	48 or 72 Rail VDC
Actual Voltage	10.5 - 16 VDC	21 - 45 VDC	40 - 80 VDC
Input Amps	48 A	20 A	10 A
Input Fuse (Internal)	2 x ATC25	1 x ATC25	1 x ATC15

OUTPUT	110	220
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Nominal Voltage	110 VAC	220 VAC
Actual Voltage	110 ± 10 VAC (user adjustable)	220 ± 20 VAC (user adjustable)
Amps	2.5 (cont) / 3.6 A (peak)	1.4 A (cont) / 1.8 A (peak)
Frequency	50.00 or 60.00 Hz \pm 0.05 Hz (user selectable)	
Distortion	< 5% at 300 Watts into resistive load	
Regulation (Line & Load)	+/- 2.0%	
Duty Cycle	Continuous - 24 hours per day, Peak - 10 minutes per hour	
Efficiency	> 80% @ Maximum Output	

MECHANICAL

Dimensions	11.6 in \pm 0.1 in / 29.5 cm \pm 0.3 cm Long 8.7 in \pm 0.1 in / 22.1 cm \pm 0.3 cm Wide (including mounting flanges) 3.8 in \pm 0.1 in / 9.7 cm \pm 0.3 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	13.6 lb / 6.2 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
Mounting	Horizontal or Vertical Mount
Packaging	Sealed to IP66 rating (IP67 Optional)
Connections	Remote Connector – RJ45-8P8C c/w cover DC Input – CNLINKO YM-20-C04SX-01-001 c/w cover (CNLINKO YM-20-C02SX-01-001 for the -12 model) AC Output – CNLINKO YM-20-J03SX-01-001c/w cover AC Input – CNLINKO YM-20-C03SX-01-001 c/w cover

ENVIRONMENTAL AND SAFETY

Operating Temperature	-25°C to +40°C @ maximum output. Derates 2% per °C above maximum (Optional -40°C to +55°C wide temperature range available)
Humidity	0 - 95% Relative Humidity (non-condensing) with standard conformal coating
Audible Noise	Fan Speed Dependent (34.5 dB @ 3ft @ max fan speed)
Isolation	Input-Case, Input-Output:1500 VDC; Output-Case: 500 VDC
Warranty	Three years parts and labor
Safety	Built to CSA 22.2.107.1 & UL458 standards

OPTIONS

Option A — AC Detect and Auto-switch (Off-Line) UPS

Option C — COTS: Miltary Ruggedization with MIL461F and MIL810G testing

Option E — European RoHS compliant (Lead Free Manufactured)

Option M — Military Ruggedization (extra wide operating temperature with vibration protection) with MIL-Spec Connectors

Option U — Safety Special Inspection (CSA/UL)

DIMENSIONS

