

# IPS1000 Series DC/AC True-Sine Inverter



A product of:



## Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

## Applications

- Marine & other rugged environments
- Military Vehicles
- Telecommunications Power
- Mobile Offices (TV and Radio Vans)
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio)
- OEM Applications
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Musical Recording Equipment
- Forklift Mountable

## DC/AC Inverters

### IPS1000 Series True-Sine

## Description

Computers are moving into non-traditional work areas at an ever increasing rate as more and more specialty software packages become available. However there is a major problem. Computers require clean, pure AC power to work reliably. If you power one from the same Genset that runs your heavy loads, you could damage it from surges and spikes generated by switching those loads.

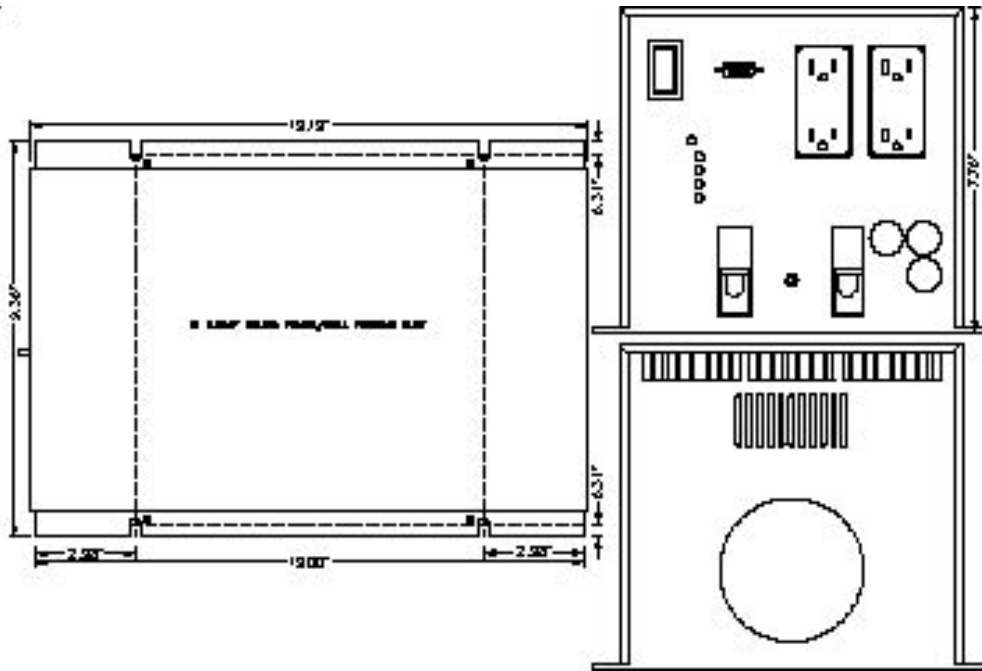
If you power it from the same Inverter that runs a microwave and other electrical devices, similar problems occur, plus voltage dropouts from excessive loads on the inverter add to the problem. Also, most inverters produce 'Quasi-Sine Wave' AC, which often doesn't run computers very well. Complaints of noisy displays, cursors that move by themselves and more abound.

The IPS Series of 'True Sine Wave' Inverters are designed specifically for running computers and other electronics in mobile and other off-grid locations. One standard AC receptacle provides for easy connection. Versions are available to operate from 12V, 24V, 32V, 48V, or 72 volt battery systems. The IPS1000 series of inverters carry a full three-year warranty.

## Features

- Pure Sine Wave 230 VAC / 50 Hz fully regulated output, exactly the same as household AC
- Ultra-quiet low EMI design
- Extra heavy input filtering to eliminate interference with other equipment sharing the same batteries
- Crystal controlled for precise frequency ( $\pm 0.01$  Hz)
- State-of-the-art MosFet technology and unique „Soft-Start“ circuitry for reliable operation
- Short Circuit Protection
- Current Limiting
- Overload Protected
- Illuminated ON-OFF switch for positive indication of proper operation
- Over-temperature protected
- Low voltage warning and shutdown

## Mechanical Diagram



## Specifications (Specifications Subject to Change Without Notice)

### Electrical (Input)

<b>Nominal (ip)</b>	12	20	40
<b>Actual (Vdc)</b>	10.5-16	20 - 40	40 - 80
<b>Input Amps (max)</b>	179	94	47
<b>Input Fuse (ATC)</b>	40A x 5	25A x 4	25A x 2

### Environmental Specifications

<b>Operating Temp. Range</b>	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)
<b>Humidity</b>	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
<b>Audible Noise</b>	34.5 db @ 3 ft
<b>Typical Service Life</b>	> 10 yrs. (87,600 hrs)
<b>Isolation</b>	Input-Case & Input-Output 1500VDC Output-Case 500VDC

### Electrical (Output)

<b>Output Nominal (op)</b>	110	230
<b>Output Volts (AC)</b>	115 ± 5 rms	220 ± 10 rms
<b>Output Amps</b>	8.7 cont. / 13.0 peak	4.5 cont. / 6.8 peak
<b>Output Frequency</b>	60.00 ± 0.01 Hz	OR 50.00 ± 0.01 Hz
<b>Output Type</b>	Pure Sine Wave	
<b>Output Distortion</b>	< 5% at 1000 Watts into 0.8 power factor load	
<b>Regulation (Line &amp; Load)</b>	< +/- 0.5%	
<b>Duty Cycle</b>	Peak 20% for 10 min max Continuous 100% for 24 hours per day	
<b>Efficiency</b>	> 80% @ Maximum Output	

### Mechanical Specifications

<b>Length</b>	13.0 in / 33.0 cm
<b>Width</b>	9.0 in / 22.9 cm
<b>Height</b>	7.8 in / 19.8 cm
<b>Clearance</b>	1 inch (2.5 cm) all around
<b>Material</b>	Marine Grade Aluminium
<b>Finish</b>	Black Anodize / Powder Epoxy Coat
<b>Fastenings</b>	All 18-8 Stainless Steel
<b>Weight</b>	30 lb / 13.6 kg
<b>Connections</b>	Dual Decora Style Receptacles OR Standard IEC Plugs for 230VAC
<b>Warranty</b>	3 years

Available from:



# RIPEnergy

The power conversion company

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