

# Pure Sinewave Inverter 1000VA



Pure sinewave



Digital display



Transfer switch



Remote control port



High frequency technology



Extended temperature range



Multiple electronic protection

## Applications

- Telecom Power Plants
- Marine & other rugged environments
- Electric Utilities and Substations
- Base Station Power
- Industrial Controls
- Solar Home Systems
- Fuel Cell Applications
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Pleasure and holidays
- Development aid

# Sinewave Inverter

Series PSW1000

## Description

The model PSW1000 pure sinewave inverter supplies a 230VAC output voltage either from a 12V, 24V, or 48 VDC power source. The shape of the output voltage is pure sinewave - as from the grid.

All new High Frequency Switching Design offers high power and reliability in a compact package and light weight. Extra input and output filtering reduce EMI to extremely low levels. Reliability features include an input fuse, thermal shutdown, current limiting and output short circuit shutdown with automatic recovery.

The input and output is fully isolated.

The superb overload capability supplies short time peak power to start heavy equipment such as pumps and compressors.

The unit is equipped with an automatic bypass function < 6ms.

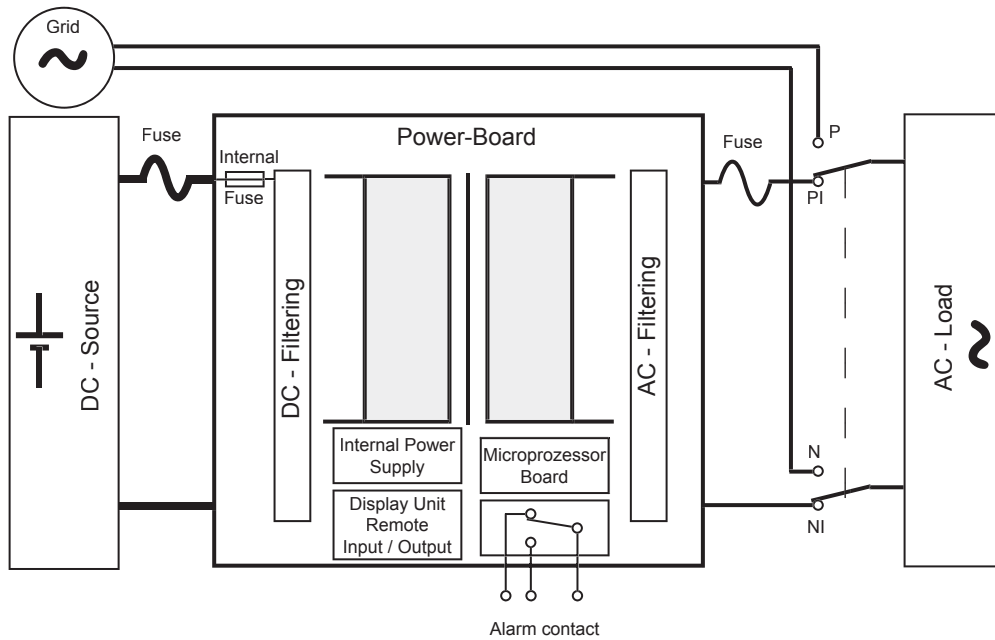
Optional: Remote Control

Ruggedizing (against shock and vibration)

## Features

- Pure sine wave output (THD < 3%) R Load
- No derating of output power up to +50°C
- By pass function 4-6ms
- Isolated Alarm Contact
- Output voltage / frequency selectable
- RS-232C interface / remote controls port / Wire connection to PC
- Compact design, low profile
- Temperature and load controlled cooling fan
- Advanced microprocessor
- Protection: Input low voltage, Input over voltage, Short circuit, Overload, Over temperature
- Low battery alarm
- Digital display: VAC, VDC, AAC, Watts, Temp, Frequency
- Low ripple on the DC-Input to save battery life time
- 24 month parts and labour warranty

## Block Diagram



## Specifications (Specifications Subject to Change Without Notice)

### Electrical (output)

<b>Nominal VAC</b>	200 - 220 - 230 - 240 (selectable) +/- 3%
<b>Output Frequency</b>	50Hz - 60Hz (selectable) +/- 0.05%
<b>Nominal power</b>	850W (1000VA) continuous
<b>Power for 1 min.</b>	900W
<b>Power for 3 sec.</b>	950W
<b>Power for 1 sec.</b>	1000W
<b>Output Waveform</b>	Pure Sinewave <3% THD (R Load)

### Environmental Specifications

<b>Operating Temp. Range</b>	-30° to +60°C @ maximum output > 50°C derating 2% per °C Thermal Shutdown @ +90°C
<b>Humidity</b>	0 - 95% Relative Humidity (non-condensing)
<b>Audible Noise</b>	Scarcely audible @ 1m (Fan OFF)
<b>Fan</b>	Load and temperature controlled
<b>Isolation</b>	Input-Output 1100VDC, Input-Case 1100VDC Output-Case 500VDC
<b>Indicators/Display</b>	VDC, VAC, AMP, WATT, Hz (selectable)
<b>Alarm Indicators</b>	OVP, UVP, OTP, OLP
<b>Isolated Alarm Contact</b>	Switching capacity 120VAC/5A , 30VDC/2A
<b>Protection</b>	Short circuit, Overload, Overtemperature, Overvoltage, Low voltage

### Electrical (input)

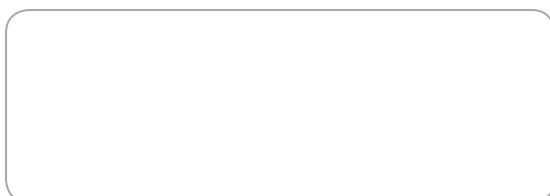
<b>Nominal voltage (VDC)</b>	12	24	48
<b>Voltage range (VDC)</b>	10 - 16	20 - 32	42 - 62
<b>Amps @ Pnom (A)</b>	95	46	22.5
<b>Idle current 230V ON (A)</b>	0.7	0.35	0.25
<b>Efficiency max.</b>	91%	93%	95%
<b>Efficiency @full load</b>	87%	90%	92%
<b>Bypass AC Input (VAC)</b>	180 - 260		
<b>Bypass Frequency (Hz)</b>	50 - 60		
<b>Bypass Amps (A)</b>	10		
<b>Bypass (ms)</b>	4 - 6		
<b>Interface Control Port</b>	RS-232C With Baud Rate 2400,4800, 9600, 19200 (Switch Selectable)		

### Mechanical Specifications

<b>Length</b>	45 cm
<b>Width</b>	19"
<b>Height</b>	1U (4.4 cm)
<b>Finish</b>	Black Anodize / Powder Epoxy Coat
<b>Weight</b>	7.3 Kg
<b>Connections</b>	DC-clamps, AC-connector IEC60320-1 (Connector supplied with Inverter)
<b>Warranty</b>	2 years
<b>Standards</b>	Approval to CE

**RoHS Compliant**  
Directive 2002/95/EC

Available from:



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