



SINEWAVE INVERTER

SERIES PSW1000

The model PSW1000 pure sine wave inverter supplies a 230VAC output voltage either from a 12 V, 24 V, or 48 VDC power source.

The shape of the output voltage is pure sine wave - 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.



Pure
Sinewave



High
frequency
technology



Light weight,
compact size



Digital display



Transfer switch
Inverter priority



Extended
temperature
range



Multiple
electronic
protection



Remote
control port



Output fail
alarm

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)
- Tropical climates
- Demanding environments

FEATURES

- Pure sine wave output
- No derating of output power up to +50°C
- By pass function 4-6ms (Inverter priority)
- Isolated Alarm Contact
- Output voltage / frequency selectable
- Remote control port
- 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

SPECIFICATIONS

Electrical Input				
Nominal DC-Input Voltage	VDC	12	24	48
DC-Input Range	VDC	10 - 16	20 - 32	42 - 62
Amps @ Pnom	A	95	46	22.5
Idle current 230V ON	A	0.7	0.35	0.25
Efficiency max.	%	91	93	95
Efficiency @ full load	%	87	90	92
Bypass AC Input	VAC	180 - 260		
Bypass Frequency	Hz	50 - 60		
Bypass Amps	A	10		
Bypass switching time	ms	4 - 6		
Interface Control Port		RS-232C With Baud Rate 2400,4800, 9600, 19200 (Switch Selectable)		
Electrical Output				
AC-Output Voltage	VAC	200 - 220 - 230 - 240 (selectable) +/- 3%		
AC-Output Frequency	Hz	50 - 60 (selectable) +/- 0.05%		
Continuous Power	W	850 (1000VA)		
Power for 1 min.	W	900		
Power for 3 sec.	W	950		
Power for 1 sec.	W	1000		
Output Waveform		Pure Sinewave <3% THD (R Load)		

Other Specifications	
Cooling	Load and temperature controlled fan
Operating temperature range	-30°C to +60°C @ maximum output > 50°C derating 2% per °C Thermal Shutdown @ +90°C
Relative Humidity Rating	0 - 95% Relative Humidity (non-condensing)
Audible Noise	Scarcely audible @ 1m (Fan OFF)
Isolation	Input-Output 1100VDC Input-Case 1100VDC Output-Case 500VDC
Indicators/Display	VDC, VAC, AMP, WATT, Hz (selectable)
Alarm Indicators	OVP, UVP, OTP, OLP
Isolated Alarm Contact	Switching capacity 120VAC/5A, 30VDC/2A
Protection	Short circuit, Overload, Overtemperature, Overvoltage, Low voltage
Connectons	DC-clamps, AC-connector IEC60320-1 (Connector supplied with Inverter)
Dimensons (LxWxH)	45cm x 19"x 4.4cm (1U)
Weight	7.3kg
Standards	Approval to CE
Finish	Black Anodize / Powder Epoxy Coat
RoHS Compliant	Yes
Warranty	2 Years

BLOCK DIAGRAM

