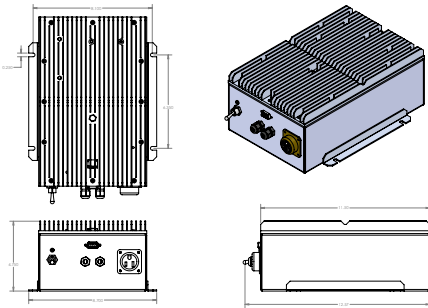


# ANALYTIC SYSTEMS

Power Conversion Solutions

## SEALED 300W PURESINE INVERTER

### MODEL SPS300 SERIES



Drawing of unit with military connectors

## 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 or 32 Volt battery systems. The SPS300 series of inverters carry a full three-year warranty for commercial version.

## Benefits

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

## Design Features

- Pure Sine Wave' 120 VAC / 60 Hz fully regulated output, exactly the same as household AC (or 220 VAC / 50 Hz)
- Fully sealed to IP67
- 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 circuitry to protect the batteries
- Transformer type output to protect computers and other sensitive equipment from surges and spikes
- Over voltage and over temperature warning and shutdown circuitry to protect the inverter
- One AC receptacle for easy connection of up to two devices
- Isolated input for positive or negative ground operation
- Diagnostic LEDs and Audible Alarm

## Applications

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

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

[www.analysystems.com](http://www.analysystems.com)

# SEALED 300W PURESINE INVERTER

# MODEL SPS300 SERIES

## Electrical (Input)

Nominal (ip)	12	24	32
Actual (Vdc)	10.5-16	20-30	30-40
Input Amps (max)	48	25	17
Input Fuse (MDA)	30A x 2	30A	20A

## Electrical (Output)

Output Nominal (op)	110	220
Output Volts (AC)	115 ± 5 rms	225 ± 5 rms
Charging Amps	2.50 cont. / 3.33 peak	1.36 cont. / 1.82 peak
Output Frequency (Crystal Controlled)	60.00 ± 0.01 Hz	50.00 ± 0.01 H
Output Type	Pure Sine Wave	
Output Distortion	< 5% at 300 Watts into 0.8 power factor load	
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Peak 20% for 10 min max Continuous 100% for 24 hours per day	
Efficiency	> 80% @ Maximum Output	
Ground Fault Current	Max 6 mA between Neutral and Ground	

## Environment Specification

Operating Temp. Range	-25° - +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C to 85°C (Optional -40°C to +55°C extra wide temp. operation avail.)
Humidity	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	Ø dB @ 3 ft (34.5 dB when fan operating)
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Output-Case & Input-Output 1500VDC Input-Case 500VDC

## Mechanical Specification

Length	11.5 in / 29.2 cm
Width	8.7 in / 22.1 cm
Height	4.75 in / 12.1 cm
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	13.0 lb / 5.9 kg (estimate)
Connections	Standard IEC Plugs for 220VAC
Warranty	3 years
Safety	Designed to meet CSA 22.2.107.1 & UL458

Note: Specifications are subject to change without notice.



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