300VA Inverter with Sine Wave Output Rugged, Industrial Quality CSI 300 Series

- Rugged, field-proven design
- Sinusoidal output voltage
- Filtered input •
- Full electronic protection .
- Conduction/convection cooling



This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 300VA output power with pure sign wave output voltage. It is a mature design with a track record in numerous applications. The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output. The use of high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. Cooling is via baseplate to a heatsinking surface and by natural convection. The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

24V, 36V, 48V, 125Vdc +/-15% are standard Consult factory for other inputs

Input Protection

Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit

Isolation

Compliant to input and output voltages according to the corresponding standards

Standards

Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950

EMI EN 55022 Class A as a minimum

Output Voltage 115Vac/2.6A continuous at 60Hz or 400Hz; or 230Vac/1.3A continuous at 50Hz Isolated floating output. Consult factory for other output requirements

Output Wave Form Sinusoidal

Total Harmonic Distortion Less than 5% at full load

Line/Load Regulation Maximum $\pm 2\%$ from no load to full load.

Load Crest Factor Maximum 3.0 at 90% load

Output Noise High frequency ripple is better than 500mVrms (20MHz BW)

Output Overload Protection Current limiting with short circuit protection.

Output Overvoltage Protection Output voltage is limited by internal supply voltage

Efficiency Input voltage dependent Typically 80% at full load

Operating Temperature Range 0° C to +50° C for full specification without derating. Extended temperature ranges available

Temperature Drift 0.05% per °C over operating temperature range

Conduction to customer heatsink or chassis and natural convection

Environmental Protection Basic ruggedizing Full ruggedizing and conformal coating as option

Shock/Vibration IEC 61373 Cat 1 A&B

Humidity 5-95% non-condensing

MTBF 130,000 hours at 45°C Demonstrated MTBF is significantly higher

Indicators None

Control Input None

Alarm Output Optional output fail alarm (Form C)

Package/Dimensions (W x H x L) FX: 153 x 67 x 357 mm (6"x 2.7" x 14.1") including terminal block and flanges

Weight 2.2 kg (4.9 lb)

Connections Barrier-type terminal block with 3/8" spacing Consult factory for other connectors.

RoHS Compliance Fully compliant

Warrantv Two years subject to application within good engineering practice

Enhancements to these general specifications can be accommodated upon request. Specifications are subject to change

Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.



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Binder Section: DC/AC Inverters

Cooling