

100VA Inverter with Sine Wave Output

Rugged, Industrial Quality

CSI 100 Series

- Rugged, field-proven design
- Sinusoidal output voltage
- Filtered input
- Full electronic protection
- Conduction/convection cooling
- Plug-in or stand-alone package



Plug-in version (EH)

Stand-alone version (FT)

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 100VA output power with pure sine 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/0.86A continuous at
60Hz or 400Hz; or
230Vac/0.43A 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

Cooling

Stand alone version: conduction via base plate and convection
Plug-in version: convection only

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

F1: 114 x 51 x 201 mm
(4.5" x 2" x 7.9") including terminal block and flanges
Plug-in: 3U x 160mm x 10HP (2")

Weight

Approx. 0.8kg (1.8 lb)

Connections

Plug-in module: H15
Stand-alone: barrier-type terminal block with 3/8" spacing
Consult factory for other connectors.

RoHS Compliance

Fully compliant

Warranty

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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