## 150VA Inverter with Sine Wave Output Rugged, Industrial Quality CSI 150 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)

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 150VA 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/1.3A continuous at 60Hz or 400Hz; or 230Vac/0.65A continuous at 50Hz with isolated floating output. Consult factory for other output

## **Output Wave Form**

Sinusoidal

requirements

## **Total Harmonic Distortion**

Less than 5% at full load

## Line/Load Regulation

 $\label{eq:maximum} \begin{aligned} \text{Maximum} &\pm 2\% \text{ from no load} \\ \text{to full load.} \end{aligned}$ 

## **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

F2: 114 x 57 x 256 mm (4.5"x 2.3" x 10.1") including terminal blocks and flanges Plug-in: 3U x 220mm x 10HP (2")

#### Weight

1.2 kg (2.6 lb) enclosed package

#### 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.



## ABOPULSE ELECTRONICS LTD

110 Walgreen Road
Ottawa, Ontario. K0A 1L0. CANADA
Tel: (613) 836-3511 Fax: (613) 836-7488
E-mail: absopulse@absopulse.com
www.absopulse.com

Binder Section: DC/AC Inverters September 21, 2009/TS/CL Made in Canada