

# 150VA Rugged, Industrial Quality DC/AC Sine Wave Inverter

## CSI 150 Series



- Sinusoidal output voltage
- Rugged, field-proven design
- Filtered input
- Conduction/convection cooling
- Full electronic protection
- Plug-in format (3U x 220mm x 10HP) available

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 150VA 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 input and output are filtered for low noise. Cooling is via baseplate to a heat-sinking surface and by natural convection. Full electronic protection, generous design headroom and the exclusive use of components with established reliability also contribute to high MTBF. The unit is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

24V, 36V, 48V, 125Vdc  
± 15% are standard  
Other inputs available on request

#### 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  
Floating output

#### Standards

Designed to meet  
C22.2 No. 107.1 - 01,  
UL 458 and EN 60950-1

#### EMI

EN 55022 Class A  
with margins

#### Output Voltage

115Vac/1.3Arms continuous at  
60Hz or 400Hz; or  
230Vac/0.65Arms continuous at  
50Hz

#### Output Wave Form

Isolated floating output  
Other output available on request

#### Output Wave Form

Sinusoidal

#### Total Harmonic Distortion

Less than 5% at full load

#### Line/Load Regulation

Better than ± 2% from no load  
to full load.

#### Load Crest Factor

Better than 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  
Extended temperature ranges  
available

#### Temperature Drift

0.05% per °C over operating  
temperature range

#### Cooling

Conduction to customer heat-sink  
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

None  
Optional output fail alarm (Form C)

#### Package/Dimensions

Stand-alone module (W x H x L)  
F2: 114 x 58 x 256 mm  
(4.5" x 2.3" x 10.1")  
Includes terminal block and flanges  
Mounting holes are clear

#### Weight

Approx. 1.2 kg (2.6 lb)

#### Connections

9-pole barrier type terminal block  
with 3/8" spacing

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application  
within good engineering practice.  
Contaminated related failures,  
fans and shipping costs excluded

#### Terminal Block pin-out

OUTPUT			DC INPUT					
NOT USED	L1	L2	NOT USED	NOT USED	NOT USED	GND	+	-
1	2	3	4	5	6	7	8	9

**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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For more information, please see:

[http://www.absopulse.com/Absopulse\\_SineWaveConverters.php](http://www.absopulse.com/Absopulse_SineWaveConverters.php)

August 30, 2013/TS/CL

Made in Canada