

# 150VA Rugged, Industrial Quality DC-AC Inverter with Sine Wave Output

## CSI 150-F2 Series



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

This rugged DC-AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate the required output with pure sine wave output. The design is based on mature technology with a track record in numerous applications. The input and output are filtered for low noise. The use of high frequency conversion enables a compact construction, low weight and high efficiency. Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a 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 55032 Class A with margins

**Output Voltage**  
115Vac/1.3Arms/60Hz or 400Hz;  
230Vac/0.65Arms/50Hz  
150VA continuous  
Isolated floating output  
Other output available on request

**Output Wave Form**  
Sinusoidal

**Total Harmonic Distortion**  
Less than 5% at full load

**Line/Load Regulation**  
±2% from no load to full load

**Load Crest Factor**  
3 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 and natural convection  
The unit must be installed on heatsinking surface such as chassis or cabinet wall for full power

**Environmental Protection**  
Basic ruggedizing  
Conformal coating

**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 (W x H x L)**  
F2: 112 x 57 x 254 mm  
4.43" x 2.25" x 10"  
Includes flanges, excludes terminal block  
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**  
Compliant

**Warranty**  
Two years subject to application within good engineering practice.

#### 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

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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