

# 500VA SINE WAVE OUTPUT INVERTER

## RUGGED, INDUSTRIAL QUALITY

### CSI 500-FT SERIES

- Sinusoidal output voltage
- 500VA output power
- Filtered input
- Conduction/convection cooling
- Full electronic protection
- Field-proven design topology



CSI 500 Series rugged, compact DC/AC Inverter uses field proven topology to generate 500W output power. It is a mature design with a track record in hundreds of 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. Suitable for a wide range of applications, the CSI 500 features full electronic protection and low output noise. Cooling is by conduction to the customer chassis, and additional air convection. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high demonstrated MTBF. The CSI 500 is manufactured at our plant under strict quality control. Customized versions are also available. For the railway version see our RSI 500 series.

### SPECIFICATIONS

#### Input Voltage

24V, 36V, 48V, 125V, 250VDC  
+/-15% are standard  
Consult factory for other inputs, and ranges

#### Input Protection

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

#### Isolation

Input to chassis: min. 1000Vdc corresponding to the input voltage  
Output neutral is connected to the chassis, internally  
Floating output as option

#### 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/4.34A/60Hz or 400Hz;  
or 230VAC/2.17A/50Hz  
Output neutral is connected to the chassis internally.  
Isolated floating output optional  
Consult factory for other output requirements

#### Output Wave Form

Sinusoidal

#### Total Harmonic Distortion

Less than 5% at full load

#### Line Regulation

± 0.5% max.

#### Load Regulation

Maximum ± 6% from no load to full load. A ± 2% load regulation option is available.

#### 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.  
Thermal shutdown with automatic recovery in case of insufficient cooling

#### Output Overvoltage Protection

140/280V by internal supply voltage limiting

#### Efficiency

Typically 78% 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

Conduction via base plate to customer heatsink or chassis and natural convection

#### Environmental Protection

Basic ruggedizing

#### Humidity

5 - 95% non-condensing

#### MTBF

Min. 140,000 hours at 45° C

#### Indicators

None

#### Control Input

None  
Remote shutdown as option

#### Alarm Output

Output fail alarm (Form C)

#### Dimensions (W x H x L)

F21: 254 x 66 x 351 mm  
(10" x 2.6" x 13.8") including terminal block and flanges  
Mounting holes are clear

#### Weight

4.2 kg (9 lb)

#### Connections

Input/output: Compression-type terminals

#### 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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