

# 500VA Inverter with Sine Wave Output

## Rugged, Industrial Quality

### CSI 500-FT Series



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

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 500VA 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, 125V, 250Vdc  
+/-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/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/Load Regulation

Maximum  $\pm 6\%$  from no load to full load.  
 $\pm 2\%$  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.

### 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

Conduction to customer heatsink 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

120,000 hours at 45°C  
Demonstrated MTBF is significantly higher

### Indicators

None

### Control Input

None  
Remote shutdown as option

### Alarm Output

Optional output fail alarm (Form C)

### Dimensions (W x H x L)

F21: 254 x 66 x 361 mm  
(10" x 2.6" x 14.2") including terminal block and flanges

### 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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