

# 1500VA Rugged, Industrial Quality Inverter with Sine Wave Output

## CSI 1K5 Series

- Sinusoidal output voltage
- Filtered input
- Cooling by internal fans
- Full electronic protection
- Field-proven design topology

**3U3:**  
3U(5.2") x 7.4" x 16"  
chassis-mount only



**3U7:**  
3U(5.2") x 19" x 16"  
rack-mount.



These photos show two of a range of package options available. Mechanical size depends on input/output configuration. Chassis-mount and 19" rack-mount versions available on most designs

This rugged, modular, DC/AC inverter system uses a microprocessor controlled field proven design to generate 1500VA output power. It is a mature product 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 ensures a compact construction and low weight. The configuration of modules for the system depends on the input/output required. Each interconnection between modules is made with a single pair of wires. Full electronic protection eliminates the possibility of failure due to abnormal operating conditions, including application errors. Low component count and the use of components with established reliability results in high MTBF. Cooling is by built-in fans, which draw air into the unit. The system is manufactured at our plant under strict quality control. Customized versions are also available.

### SPECIFICATIONS

#### Input Voltage

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

#### Input Protection

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

#### Isolation

According to the input voltage required by the standard  
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 @ 60Hz or  
400Hz/13A rms continuous;  
or 230Vac @ 50Hz/6.5A rms  
continuous.

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 2.5 at 90% load

#### Output Noise

High frequency ripple is less 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

140Vac (for 115Vac output) or  
280Vac (for 230Vac output) by  
internal supply voltage limiting

#### Efficiency

Depends on input and output voltage combination.  
Typically 76% 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

Built-in fans drawing air into the unit

#### Environmental Protection

Basic ruggedizing  
Full ruggedizing and conformal coating as option

#### Humidity

5 - 95% non-condensing

#### MTBF

Min. 95,000 hours at 45°C  
Demonstrated MTBF is significantly higher  
Fans excluded

#### Indicators

None  
Available as an option

#### Control Input

None  
Available as an option

#### Alarm Output

None  
Available as an option

#### Package/Dimensions (H x W x D)

Package size varies from 3U x 7.4" x 16" to a 3U x 19" x 16" modular configuration, depending on the input/output combination required. Chassis-mount and 19" rack-mount versions available at the same price

#### Weight

From 6kg (14lb) to 8kg (18 lb) approx., depending on the modular configuration

#### Connections

Input: Terminal-block or threaded studs  
Outputs:  
Standard AC receptacle, IEC receptacle or terminal block

#### 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.

