# 1000VA, Rugged, Compact 3-Phase Industrial Quality DC/AC Sine Wave Inverter
## CTP 1K Series

- 3-Phase sinusoidal output voltage
- Filtered input/output
- Cooling by high quality internal fan
- Compact construction
- Full electronic protection
- Rugged, field-proven design
- Cost-effective design

This rugged modular DC/AC inverter system uses microprocessor controlled, field-proven technology to deliver 3-Phase, 1000VA continuous output power with pure sine wave output voltage. A new design topology simplifies the circuitry and enables a significantly more compact construction, lower weight, lower cost and higher MTBF than earlier designs. The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L) at the required frequency. Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms. The input and output are filtered for low noise. Cooling is by high quality built-in fans, which draw air into the unit and the exhaust exits at the rear of the unit. 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, 48V, 110V, 125Vdc
are standard
Consult factory for other inputs

**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**
Compliant to input and output voltages according to the corresponding standards

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

**EMI**
EN 55022 Class A.
Consult factory for a higher level of filtering

**Output Voltage**
208Vrms (L-L)/3-phase continuous at 60 or 400Hz or
380Vrms or 400Vrms (L-L)/ 3-phase continuous at 50 or 60Hz
(Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms)
Consult factory for other voltages, frequencies and options

**Output Wave Form**
Sinusoidal

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

**Line/Load Regulation**
Maximum ± 6% from no load to full load.

**Load Crest Factor**
2 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**
Output voltage is limited by internal supply voltage

**Efficiency**
Depends on input and output voltage combination.
Typically 80% at full load

**Operating Temperature Range**
0° C to +50° C for full specification without de-rating
Extended temperature ranges available

**Temperature Drift**
0.05% per °C over operating temperature range

**Cooling**
High quality built-in fans draw air into the unit

**Environmental Protection**
Basic ruggedizing
Full ruggedizing and conformal coating available as option

**Shock/Vibration**
IEC 61373 Cat 1 A&B

**Humidity**
5 - 95% non-condensing

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

**Indicators**
None

**Control Input**
None
Remote shutdown or enable as an option

**Alarm Output**
None
Output fail alarm (Form C) as option

**Package/Dimensions (H x W x D)**
U5712: 127 x 191 x 345 mm
(5" x 7.5" x 13.6") including terminal blocks and fans

**Weight**
6.5 kg (14 lb)

**Connections**
Input: Terminal block
Output: Terminal block

**RoHS Compliance**
Fully compliant

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

Please note that the above specifications set only generic guidelines for the design. Customizing and enhancements are possible. Please contact us with your specific requirements.

*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.*

ABSOPULSE ELECTRONICS LTD.

**Binder Section: DC/AC Inverters** **February 28, 2014/TS/CL** **Made in Canada**