

## 3000VA, 3-Phase Sine Wave Output Inverter Rugged, Industrial Quality CTP 3K Series



**6U x 19" chassis  
(4 x 3U3)**

- 3-Phase sinewave output voltage
- Filtered input
- Cooling by internal fan
- Full electronic protection
- Field-proven design topology

The CTP 3K Series is a rugged modular DC/AC inverter system that uses a microprocessor controlled, field-proven technology to deliver 3-Phase, 3000VA continuous output power. It is a mature design with a track record in numerous applications. The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L). Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms. All output neutrals are internally connected to chassis (GND) in "Y" configuration. The number of modules depends on the input/output combination. (The unit in the photograph is a typical example of one configuration). Input modules convert the input voltage to an internal DC voltage, which feeds the DC/AC output module. The 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. The use of components with established reliability results in high MTBF. Cooling is by built-in fans, which draw air into the unit. The unit is manufactured at our plant under strict quality control. The system can be customized for exact requirements.

### SPECIFICATIONS

#### Input Voltage

24V, 36V, 48V, 125V or 250Vdc  
+/-15% 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 EN60950

#### EMI

EN 55022 Class A  
Consult factory for 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.  
All neutrals are internally connected to chassis (GND) in "Y" configuration (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  $\pm$  6% from no load to full load.

#### Load Crest Factor

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

Output voltage is limited by internal supply voltage

#### Efficiency

Depends on input and output voltage combination.  
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

Built-in fans drawing 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°C  
Demonstrated MTBF is significantly higher  
Fans excluded

#### Indicators

None

#### Control Input

None  
Remote shutdown as option

#### Alarm Output

None  
Option: output fail alarm (Form C)

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

19" rack-mount or chassis mount assembly.  
Size varies from 3U x 19" to 6U x 19" depending on input/output combination

#### Weight

For 6U x 19" chassis: 28 kg (62 lb.)

#### Connections

Input: Terminal block or threaded studs depending on input voltage  
Output: Terminal block  
Interconnections: Terminal blocks

#### 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.*



**ABOPULSE ELECTRONICS LTD**  
110 Walgreen Road  
Ottawa, Ontario. K0A 1L0. CANADA  
Tel: (613) 836-3511 Fax: (613) 836-7488  
E-mail: [absopulse@absopulse.com](mailto:absopulse@absopulse.com)  
[www.absopulse.com](http://www.absopulse.com)