

# 10kVA, Rugged, 3-Phase Industrial Quality DC/AC Sine Wave Inverter

## CTP 10K Series



- 3-Phase sinusoidal output voltage
- Filtered input/output
- Cooling by high quality internal fans
- 19" rack or chassis-mount
- 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, 10kVA continuous output power with pure sine wave output voltage. The standard 3-phase outputs are 380Vrms or 400Vrms (L-L). Phase-to-neutral voltages of 220Vrms or 240Vrms can also be used. All output neutrals are internally connected to chassis (GND) in "Y" 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 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

<p><b>Input Voltage</b> 48V, 125V or 250Vdc <math>\pm 15\%</math> Consult factory for other inputs</p> <p><b>Input Protection</b> Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p><b>Isolation</b> 2250Vdc input to chassis Output neutrals are connected to the chassis internally</p> <p><b>Standards</b> Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950-1</p> <p><b>EMI</b> EN 55022 Class A with margins Consult factory for higher level of filtering</p>	<p><b>Output Voltage</b> 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: 220Vrms or 240Vrms) Consult factory for other voltages, frequencies and options</p> <p><b>Output Wave Form</b> Sinusoidal</p> <p><b>Total Harmonic Distortion</b> Less than 5% at full load</p> <p><b>Line/Load Regulation</b> <math>\pm 6\%</math> from no load to full load</p> <p><b>Load Crest Factor</b> 2.5 at 90% load</p> <p><b>Output Noise</b> High frequency ripple is less than 500mVrms (20MHz BW)</p> <p><b>Output Overload Protection</b> Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling</p>	<p><b>Output Overvoltage Protection</b> Output voltage is limited by internal supply voltage</p> <p><b>Efficiency</b> Depends on input and output voltage combination. Typically 80% at full load</p> <p><b>Operating Temperature Range</b> 0°C to +50°C for full specification Extended temperature ranges available</p> <p><b>Temperature Drift</b> 0.05% per °C over operating temperature range</p> <p><b>Cooling</b> High quality built-in fans draw air into the unit</p> <p><b>Environmental Protection</b> Basic ruggedizing Full ruggedizing and conformal coating available as option</p> <p><b>Shock/Vibration</b> IEC 61373 Cat 1 A&amp;B</p> <p><b>Humidity</b> 5 - 95% non-condensing</p> <p><b>MTBF</b> Min. 85,000 hours at 45°C Demonstrated MTBF is significantly higher Fans excluded</p>	<p><b>Indicators</b> None</p> <p><b>Control Input</b> None Remote shutdown or enable as option</p> <p><b>Alarm Output</b> None Option: output fail alarm (Form C)</p> <p><b>Package/Dimensions (H x W x D)</b> 19" rack-mount or chassis mount assembly. 9U x 19" x 16" (H x W x D) total size, including one 3U7 size module case and three 3U4 size module cases Chassis mount versions available</p> <p><b>Weight</b> Approx. 39kg (86 lbs)</p> <p><b>Connections</b> Inputs: Terminal block on each input module Output: Terminal block Interconnections: Terminal block</p> <p><b>RoHS Compliance</b> Fully compliant</p> <p><b>Warranty</b> Two years subject to application within good engineering practice. Contamination related failures and shipping cost excluded.</p>
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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.*



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