CTP1K5 SERIES

DC / AC 3 Phase Sine Wave Inverters: 1500 VA

HELIOS POWER SOLUTIONS
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Photo: 3U7
Rack-mount

Photo: 3U7
Chassis-mount

Features

- 3 phase output
- Sinusoidal output waveform
- 1500VA output power
- Frequency options 50Hz / 60Hz / 400Hz
- Wide range of input options: 24 ~ 250VDC
- Optional output fail alarm on some models
- Rugged design for harsh environments
- Full electronic protection
- Non standard input voltage options

General Specifications

Input Voltage	24VDC, 36VDC, 48VDC, 120VDC, 250VDC • Other input voltage options on request
Input Range	±-15% of input, other options on request
Input Protection	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
Isolation	For input > 60vdc : Input – Output: 2250vdc For input <60vdc: Input – Output: 1500vdc • Other options on request
EMI	EN55011 Class A conducted
Immunity	EN 61000-4
Output voltage	See table: All neutrals are internally connected to chassis (GND) in "Y" configuration. (Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms)
Output Waveform	Sinusoidal
Harmonic Distortion	Less than 5% at 100% load.
Output Freq.	50Hz, 60Hz, 400Hz options
Load Crest Factor	Maximum 2.5% at 90% load
Output Power	1500VA
Regulation	Line / Load: ±6% from 10% to 100% load step. ±2% option.
Output Noise	High Frequency ripple is better than 500mVrms (20MHz BW)
Protection	Current limiting with short circuit protection Self re-setting thermostat for thermal protection
Output Over Voltage Protection	Output voltage is limited by internal supply voltage
Efficiency	Input voltage / model dependent typically 80% at 100% load
Operating Temp	0ºC to +50ºC at rated load. Other options on request
Cooling	On Board Fans
Shock & Vibration	Basic ruggedizing
Humidity	5-95% non-condensing
MTBF	>95,000 hrs at 45ºC
LED Indicator	Optional
Connector	Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal blocks
Dimensions	3U x 19" Rack Mount or 132 x 483 x 410mm Chassis mount
Weight	15kg

Description

The **CTP 1K5** Series is a rugged modular DC/AC inverter system that uses a microprocessor controlled, field-proven technology to deliver 3-Phase, 1500VA 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.

Options (may not be available on all combinations)

Alarms	Output Fail Alarm: voltage free relay contacts
Remote Inhibit	Remote ON / OFF
Ruggedized	Conformal coating and Ruggedization for use in harsh environments.
Slow Start	Slow start up option for powering fans
Connector	A variety of terminals / connectors available to suit special customer requirements

Model No Example:
CTP1K5-4E-xxxx (48VDC / 230VAC / 415VAC 50Hz

CTP	Power	Input Vdc	Output	Factory Allocated
CTP	1K5	**2** = 24V **3** = 36V **4** = 48V **7** = 72V **9** = 96V **108** = 108V **5** = 125V **6** = 250V	**A** = 115V / 208V 60Hz **E** = 230V / 415V 50Hz **M** = 115V/ 208V 400Hz	

1. Standard input / Output combinations are illustrated.
2. Non standard combinations are available on request
3. Final Part no will be allocated at time of order to reflect customer specifications and options.

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