

3000VA, 3-Phase Sine Wave Output Inverter Rugged, Industrial Quality ITP 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 ITP 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 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°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



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