# 1000VA, Rugged, Compact 3-Phase Industrial Quality DC-AC Sine Wave Inverter CTP 1000-F7W Series

- 3-Phase sinusoidal output voltage
- Filtered input/output
- Cooling by built-in fans
- Compact construction
- Full electronic protection
- Rugged, field-proven design



This rugged industrial quality DC-AC inverter uses field-proven, microprocessor controlled high frequency PWM technology to generate the required output power with 3-phase sine wave output voltage. The use of 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 and by additional conduction via the baseplate. The fans draw air into the unit. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. 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**

48V, 110V, 125Vdc ±15% are standard Consult factory for other inputs

#### **Input Protection**

Inrush current limiting
Varistors
Reverse polarity protection
Internal safety fuses
Lower voltage than the specified
minimum input will not damage
the unit

## Isolation

According to input/output as minimum 700Vdc input to chassis 2250Vdc input to output 1500Vdc output to chassis Floating output Neutral can be grounded if required

## Standards

Designed to meet C22.2 No. 107.1 - 01, UL458 and EN60950-1

## EMI

EN55022 Class A with margins

## **Output Voltage**

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 Consult factory for other voltages, frequencies and options

208Vrms (L-L)/3-phase continuous

## **Output Wave Form**

Sinusoidal

## **Total Harmonic Distortion**

Less than 5% at full load

## **Line/Load Regulation**

± 6% from no load to full load

## **Load Crest Factor**

2 at 90% load

# **Output Noise**

High frequency ripple is better than 500mVrms (20MHz BW)

## **Output Overload Protection**

Current limiting with short circuit protection

## **Output Overvoltage Protection**

By internal supply voltage limiting

## Efficiency

Typically 90% at full load

## **Operating Temperature Range**

0°C to +50°C for full specification Extended temperature ranges available

#### **Temperature Drift**

0.05% per C over operating temperature range

## Cooling

By high quality built-in fans and by additional conduction via the baseplate

## **Environmental Protection**

Basic ruggedizing Conformal coating Full ruggedizing available as option

# Shock/Vibration

IEC 61373 Cat 1 A&B

## Humidity

5 - 95% non-condensing

## **MTBF**

Min. 110,000 hours at 45°C Demonstrated MTBF is significantly higher

## Indicators

None

## **Control Input**

None

Remote shutdown or enable as an option

#### **Alarm Output**

None

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

F7W: 280 x 67 x 356mm (11" x 2.6" x 14") Mounting holes are clear

## Weight

Approx. 4kg (9 lbs)

## Connections

Input: 6-pole terminal block, 3/8" spacing
Output: 12-pole terminal block, 3/8" spacing

## **RoHS Compliance**

Compliant

# Warranty

Two years subject to application within good engineering practice.

## TB pin-out

3-PHASE OUTPUT													DC INPUT					
GND ÷		NOT USED		NOT USED	PH 2	NOT USED	NOT USED	NOT USED	PH 3 ∼	NOT USED	GND 누	Α̈́В	il B	ı	ı	+	+	
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	

Enhancements to these general specifications and customizing 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, and complete rack mount systems in 19" or 23" racks. Custom or standard. ABSOPULSE is a BABT-approved Facility.

March 31, 2018/TS/CL



## ABSOPULSE ELECTRONICS LTD

110 Walgreen Road, Ottawa. Ontario. KOA 1LO. CANADA

Tel: +1-613-836-3511 | Fax: +1-613-836-7488

E-mail: <a href="mailto:absopulse@absopulse.com">absopulse@absopulse.com</a> | <a href="http://www.absopulse.com">http://www.absopulse.com</a> |