

**POWER CONVERSION PRODUCTS**



**Shipboard Series**

**Part No.: VTA97014-02**

**330W VME Power Supply**

**FEATURES**

- ❑ Up to 330 Watts Output Power
- ❑ DOD-STD-1399, Section 300A compliant (115Vac, L-L, Type I, 3Ø)
- ❑ High Input/Output Isolation
- ❑ Low Output Ripple
- ❑ Continuous Short Circuit Protection
- ❑ Thermal Protection
- ❑ Output Status Signals

This Power Supply designed for low power shipborne applications, features a low profile package of 7.70” L x 8.80” W x 3.90” H or 0.86Watt/in<sup>3</sup>. It has excellent load regulation, input filtering, and low output ripple as well as current limiting/thermal shutdown.

**Input Specifications:**

Steady State Voltage .....	107 to 123 VAC
Surge Voltage .....	92 and 138 VAC for 0.1s
Frequency .....	58.2 to 61.8 Hz
Inrush Current.....	<10 A peak maximum per phase
Turn-on time .....	< 0.5 second
Spike Voltages.....	1000V any phase, 1 ms maximum
Isolation Resistance .....	10 MΩ L1 or L2 to chassis @ 500 Vdc

**Output Specifications:**

Nominal Voltage	Maximum Current	DC Load Regulation	Ripple & Noise	Maximum Power
+5VDC <sub>PRI</sub>	20.0 A	±5%	< 50 mVp-p	100W
+5VDC <sub>SEC</sub>	4.0 A	+5%, -2.5%	< 50 mVp-p	20W
+12VDC	0.1 A	±5%	< 50 mVp-p	1.2W
-12VDC	0.1 A	±5%	< 50 mVp-p	1.2W
+28VDC	6.0 A	±5%	< 840 mVp-p	168W
-5.2VDC	3.0 A	±5%	< 50 mVp-p	15.6W

**Output Specifications:**

Over-voltage Protection ..... < 125% of nominal voltage, any channel  
Remote Turn On/Off..... +24VDC On/Off signal O/P activation

Built-In Test (BIT):

SYSFAIL\* ..... Asserted LOW when any O/P are outside the specified limits.

ACFAIL\* ..... Asserted LOW when AC power is dropped more than 5 ms.

Output Status ..... Available on each channel. Provide "TTL signal status" when a DC voltage drops by >5% ± 2% of its specified limit.

Overtemperature Protection ..... Provide a TTL signal indicating an overtemperature situation.

**Physical Specifications:**

Weight ..... < 10 lbs or 4.5 kgs  
Case ..... Alluminum alloys  
Finish..... Chromate finish (MIL-C-55441)  
Mounting Position..... Any orientation  
Connectors..... J1 (AC I/P): DBMM9W4P  
..... P1 (DC O/P): DDMMY24W7P  
..... P2 (DC O/P): DDMMY24W7P  
Cooling..... Forced convection

**Environmental Specifications:**

Shock..... X-direction: 20g, sine pulse, 20ms  
..... Y-direction: 18g, half-sine pulse, 13ms  
..... Z-direction: 30g, half-sine pulse, 25ms

Vibration..... X-direction: 12 to 56m/s<sup>2</sup>, 4-50Hz  
..... Y-direction: 15 to 23m/s<sup>2</sup>, 4-50Hz  
..... Z-direction: 15 to 23m/s<sup>2</sup>, 4-50Hz

Air Temperature..... Operating: 0°C to +60°C  
..... Storage: -30°C to +71°C

Altitude/Low Pressure..... Between 57.2kPa and 110 kPa.

**Environmental Specifications:**

Humidity..... Operating: Up to 95% (non-condensing)  
Non-operating: Up to 95% (non-condensing)  
Storage: Up to 75% (non-condensing)

EMI/EMC..... CE01, power leads, 30Hz to 15kHz  
..... CE03, power leads, 15kHz to 50MHz  
..... CS01, power leads, 30Hz to 50kHz  
..... CS02, power leads, 50Hz to 400MHz  
..... CS06, spikes, power leads

Predicted Reliability (MIL-HDBK-217F)..... >75,000 hours NS @ 25°C

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