

<b>POWER CONVERSION PRODUCTS</b>	<b>Airborne Series</b>
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**Part No.: VTA98021-00**

**1200W AC/DC Power Supply**

**FEATURES**

- ❑ High Peak Current Capability
- ❑ MIL-STD-704A, (115Vac, 3Ø, 400Hz Input Power)
- ❑ Supervision Circuits
- ❑ High Input/Output Isolation
- ❑ High Efficiency
- ❑ Continuous Short Circuit Protection
- ❑ Input Overvoltage Protection
- ❑ Conduction Cooled
- ❑ Thermal Protection

This Power Supply designed for high power, airborne applications, features a low profile package of 15.88” L x 6.35” W x 3.55” H or 3.35Watt/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 ..... 100 to 125 Vac, 3Ø  
 Surge Voltage ..... 88 VAC and 160 VAC for 0.1s  
 Steady State Frequency ..... 380 to 420 Hz  
 Inrush Current ..... 20 A peak max per line, 20 ms max.  
 Isolation (input/output to chassis) ..... > 10 Megohm @ 500 Vdc  
 Power Factor ..... > 0.98

**Output Specifications:**

<u>Nominal Voltage</u>	<u>Nominal Current</u>	<u>Maximum Current</u>	<u>DC Load Regulation</u>	<u>Ripple &amp; Noise</u>	<u>Maximum Power</u>
+28 VDC	5.5 A	7.1 A	± 3%	< 500 mVp-p	199W
+48 VDC	10 A	20.8 A	± 3%	< 1.0 Vp-p	998W

**Output Specifications:**

Over-voltage Protection .....	Any channel @ 115% of nominal output
Current Limiting .....	Between 105 and 125% @ full load
Efficiency (full load) .....	> 83%
Load Regulation.....	±5% from 0% to 100% and
.....	100% to 0% Load variations
Thermal Protection.....	At baseplate temperature of 80 ± 2°C
Over-Temperature Indication .....	Open-collector TTL-compatible.

**Physical Specifications:**

Weight.....	< 3.6 kg / 7.9 lbs
Case.....	Alluminum alloys
Finish.....	Allodyne chemical film
Mounting .....	Eight Ø.28” mounting holes on baseplate
Connectors.....	Input: (J1) MS27474E14B5P
	Output: (J2) MS27474E16B8S
	Test Acc: (J3) MS27474E14B15S

**Environmental Specifications:**

Shock (MIL-STD-810).....	Method 516.4, Procedure IV.
Vibration (MIL-STD-810) .....	Method 514.4, Cat 3 & Cat 8
Temperature, Operating .....	-40°C to +70°C @ baseplate
Temperature, Storage .....	-50°C to +85°C @ baseplate
Cooling Method.....	Conduction cooling via 15.9” x 6.6”
.....	mounting surface.
Thermal Protection.....	Shutdown @ +85°C at base-plate
Humidity (MIL-STD-810) .....	Method 507.3, Procedure III.
EMI (MIL-STD-461C, part 2).....	RE02, RS02, RS03.

Predicted Reliability (MIL-HDBK-217F).....>25,000 Hours @ 50°C.

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