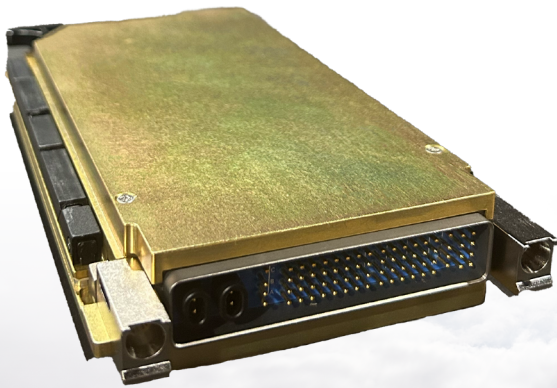


# 3U Power Supply for Defense Applications

## 270V 3U 500W Defense Power Supply

Consult Rantec for your specific configuration requirements

Rantec's VITA 86 conforming 270V-3U high performance power supply addresses the needs of today's military for VITA 86 plug-in applications. It operates from nominal 270VDC input and 6 outputs at up to 505W output over full temperature range. The power supply complies with MIL-STD-461E (EMI) and MIL-STD-704 and is designed using NAVSO P-3641A derating guidelines. The 270V-3U-500W features include independently regulated outputs, input to output isolation, VPX Signals, IPMI Communication, Input under/over/reverse voltage protection, output over-voltage, and output overload protection.



- Input: 270VDC per MIL-STD-704
- Outputs: 6 outputs up to 505W steady state
- Output Ripple & Noise per VITA 62.0
- VITA 86.0 3U, 1" pitch
- Weight: 1.4 lbs max
- Operating Temperature: -40°C to +55°C
- Non-operating temp: -54°C to +105°C
- Efficiency: up to 90%
- MTBF: 60,000 hrs @ 85°C AUF
- EMI per MIL-STD-461: CE102, CS101, CS114, CS115, CS116, RE102, RS103
- Compliant to VITA 47.3 ECC2SL2
- Signals: Geographical Addressing, System Management, SYSRESET\*, FAIL\*, ENABLE\*, INHIBIT\*
- IPMI Communication Bus per VITA 46.11
- BIT (start-up and continuous)
- Protection: Input Reverse Polarity, Output Over-voltage, Output Over-current, Over-temperature, Short Circuit
- Paralleling: Up to 3 units per VITA 62.0
- Memory Sanitization
- Inrush Current Limiting at 6A



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# 3U Power Supply for Defense Applications

## ELECTRICAL INPUT

Nominal Voltage	270VDC
Steady State Voltage Range	250-280 VDC
Input Transients	Up to 350V per MIL-STD-704
Efficiency	90% at full load

## ELECTRICAL OUTPUT

Output	12V DC	40A
	5V DC	40A
	3.3V DC	20A
	3.3V AUX	6A
	12V AUX	2A
	-12V AUX	1A
Max combined output power: 505W		
Turn-on Time	<500 ms	
Regulation (incl. ripple)	+/-5% line/load	
Noise and Ripple	per VITA 62.0	
EMI	MIL-STD-461: CE102, CS101, CS114, CS115, CS116, RE102, RS103	
Input to Output/Chassis	> 1MΩ / 500 VDC	

## MECHANICAL

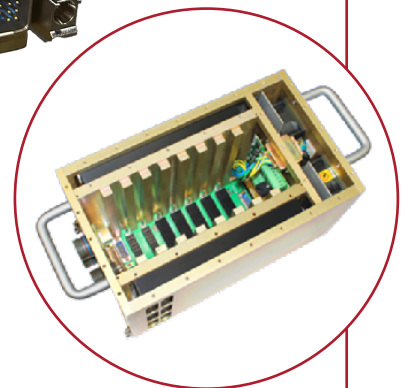
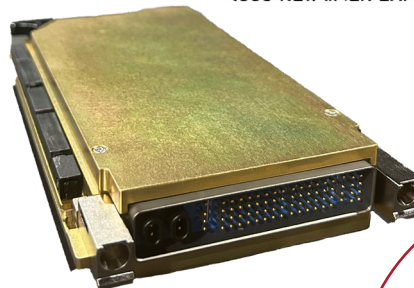
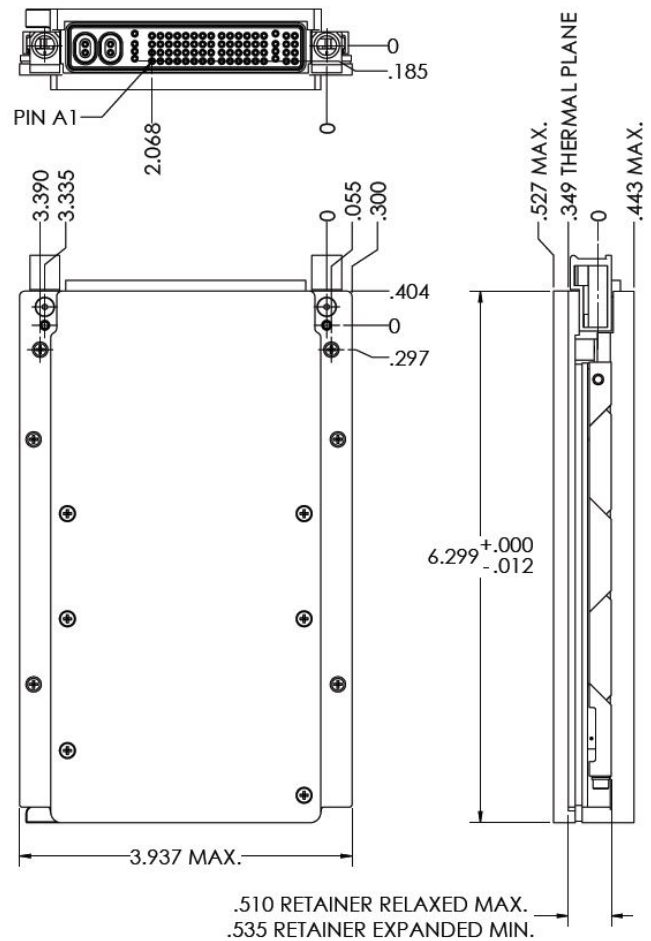
Dimensions	6.63" x 3.94" x 0.97"
Weight	1.4 lbs max
Format	VITA 86.0, 3U, 1" Pitch
Connectors	Rantec 37174 & Mates with Rantec 37133

## ENVIRONMENTAL

Requirements	Per VITA 47.3 ECC2SL2
Operating Temperature	-40°C to +55°C
Cooling	Conduction Cooled
Altitude	60,000 ft
Humidity	MIL-STD-810H, Method 507.6, Proc II, 100% condensing
Vibration	MIL-STD-810H, Method 514.8, Proc I, 12.8 grms, 5-2000Hz
Shock	MIL-STD-810H, Method 516.8, Proc I, 40G, 11ms half sine pulse
Sand and Dust	MIL-STD-810H, Method 510.7, Procedure I and II
Salt Fog	MIL-STD-810H, Method 509.7, 500 hours
MTBF	60,000 hrs 85°C Airborne Uninhabited Fighter

For more information, contact your Rantec sales representative.

## OUTLINE & MOUNTING



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