

## 3U Power Supply for Military Avionics and Vetrronics

# VPX28M

## Military Power Supply

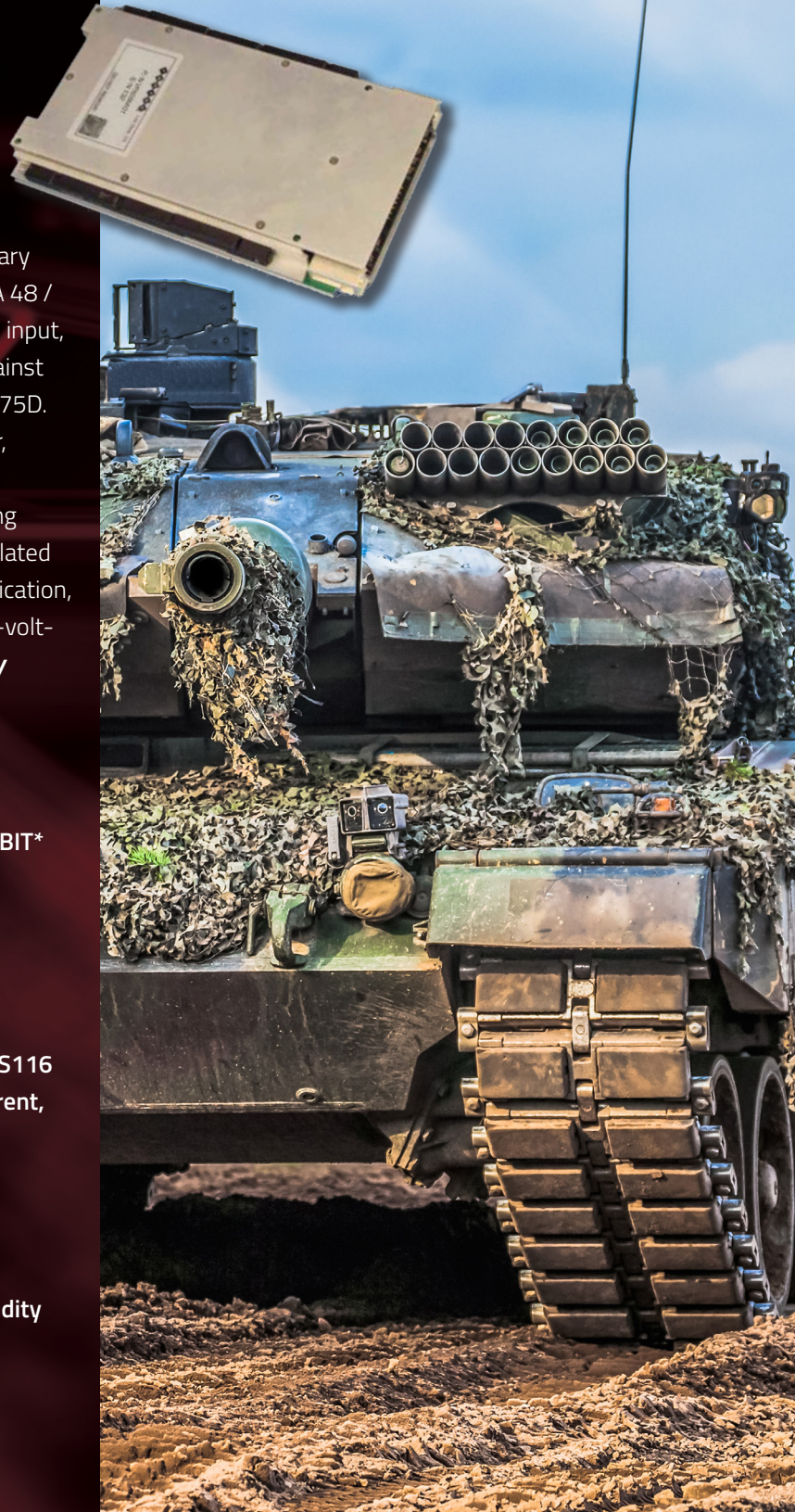
Rantec's VPX28M high performance, multiple output 3U military power supply addresses the needs of today's military for VITA 48 / VITA 62 plug-in applications. It operates from nominal 28VDC input, including transients from 12VDC-52VDC, and is protected against surges up to 100VDC and spikes to 250VDC, per MIL-STD-1275D. The VPX28M provides 6 outputs at up to 228W output power, complies with MIL-STD-461F (EMI) and MIL-STD-810G environments, and is designed using NAVSO P-3641A derating guidelines. The VPX28M features include, independently regulated outputs, input to output isolation, VPX Signals, IPMI Communication, and Input under/over/reverse voltage protection, output over-voltage, and output overload protection. **A RPS Holdings Company**

- **Input: 28VDC 14-32V operating (17V start-up)**
- **Outputs: 6 outputs up to 228W**
- **VITA 62.0 Signals: Geographical Addressing, System Management, SYSRESET\*, FAIL\*, ENABLE\*, INHIBIT\***
- **IPMI Communication Bus per VITA 46.11**
- **Temperature Monitor**
- **BIT (start-up and continuous)**
- **VITA 62.0 3U, 1" pitch**
- **Hold-up: 10 mS**
- **EMI per MIL-STD-461F: CE102, CS101, CS114, CS115, CS116**
- **Reverse Polarity, Output Over-voltage, Output Over-current, Over Temperature**
- **Output Ripple & Noise: <50mVp-p w/2µF min. external capacitance on all outputs**
- **Efficiency: Up to 90%**
- **MTBF: >140,000 hrs @ 60C GM.**
- **Environments: Temp: -40 to +85 C, MIL-STD-810G Humidity MIL-STD-810G Vibe and Shock**
- **Weight: <1.5 lbs.**

CONSULT RANTEC FOR YOUR CONFIGURATIONS

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## ELECTRICAL INPUT

Voltage	28 VDC
Voltage Range	14-32V operating (17V start-up)
Surges	Up to 100VDC per MIL-STD-1275D
Efficiency	Up to 90%
Loss of Input	Auto recovery after input returns

## ELECTRICAL OUTPUT

Output	3.3VDC	12A max
	5 VDC	15A max
	+12VDC	10.5A max
	-12VDC	0.5 A max
	+/- 15VDC	2.5A max (ea)
Max combined output power 228W		
Turn-on Time	<100mS	
Regulation	+- 1% line/load	
Temperature Coefficient	.02%/°C maximum	
Noise +Ripple	<50mVp-p w/2µF min. external capacitance on all outputs	
Hold-up	10 mS	
EMI	MIL-STD-461F: CE102, CS101, CS114, CS115, CS116	
Isolation	10Mohm / 100VDC	

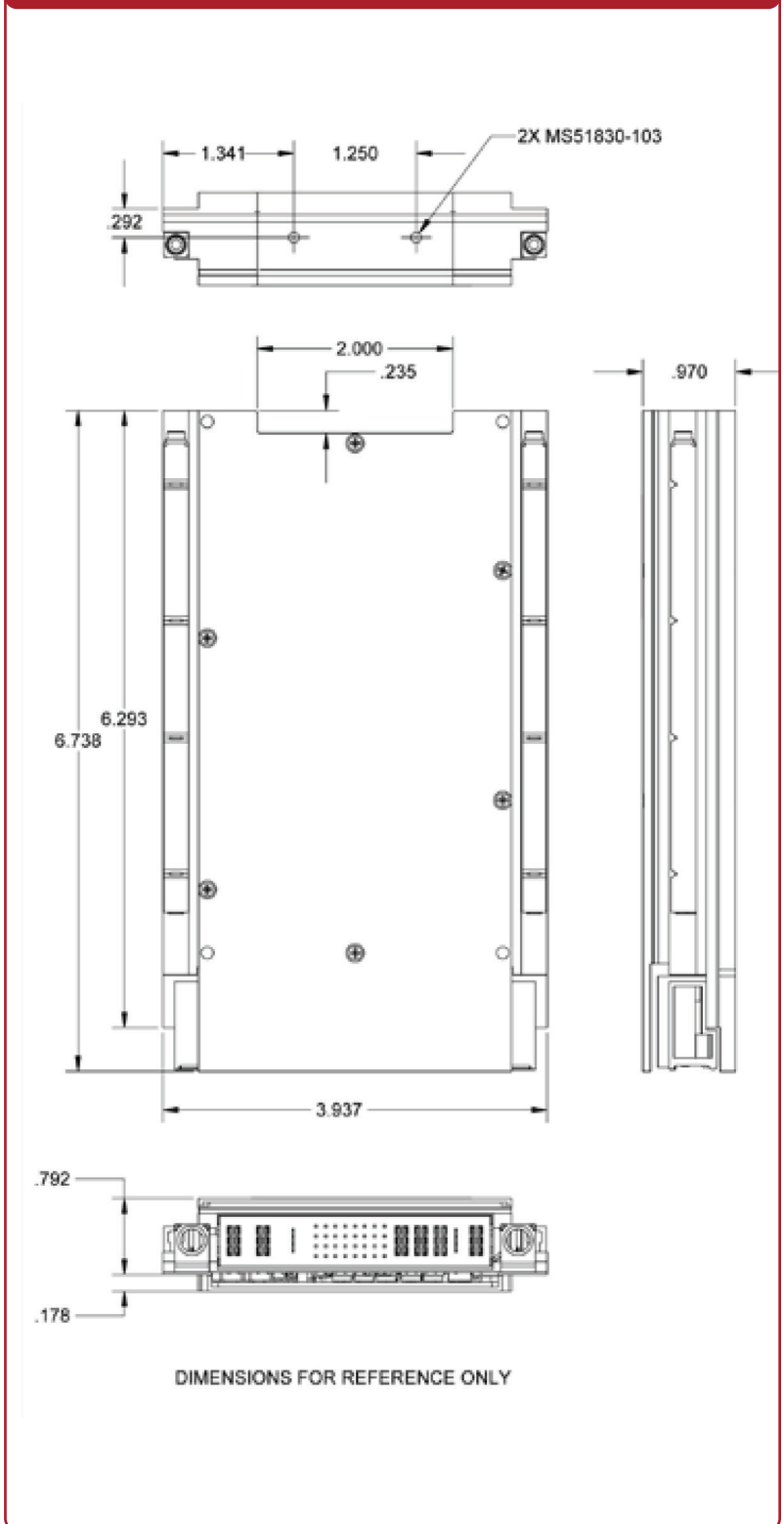
## MECHANICAL

Dimensions	6.72 x 3.94 x 0.97 inches
Weight	<1.5 lbs.
Format	VITA 62.0 3U, 1" Pitch
Connectors	6450849-7 (Mate 1-6450869-4)

## ENVIRONMENTAL

Operating Temperature	-40 - + 85 C
Cooling	Conduction cooled
Storage Temperature	-55°C to +125°C
Altitude	15,000 operational, 50,000 non-operational
Humidity	MIL-STD-810G, Method 507.5, Proc II, 15 cycles
Vibration	MIL-STD-810G, Method 514.6, Proc I, 12 grms, 10-2000Hz
Shock	MIL-STD-810G, Method 516.6, Proc I, 350G, 1ms half sine pulse
MTBF	>140,000 hrs 60C ground mobile

## OUTLINE & MOUNTING



For more information, contact your Rantec sales representative. Specifications subject to change without notice. © 2022 Rantec Power Systems Inc. All rights reserved. VPX28M Rev. 3-22-18

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