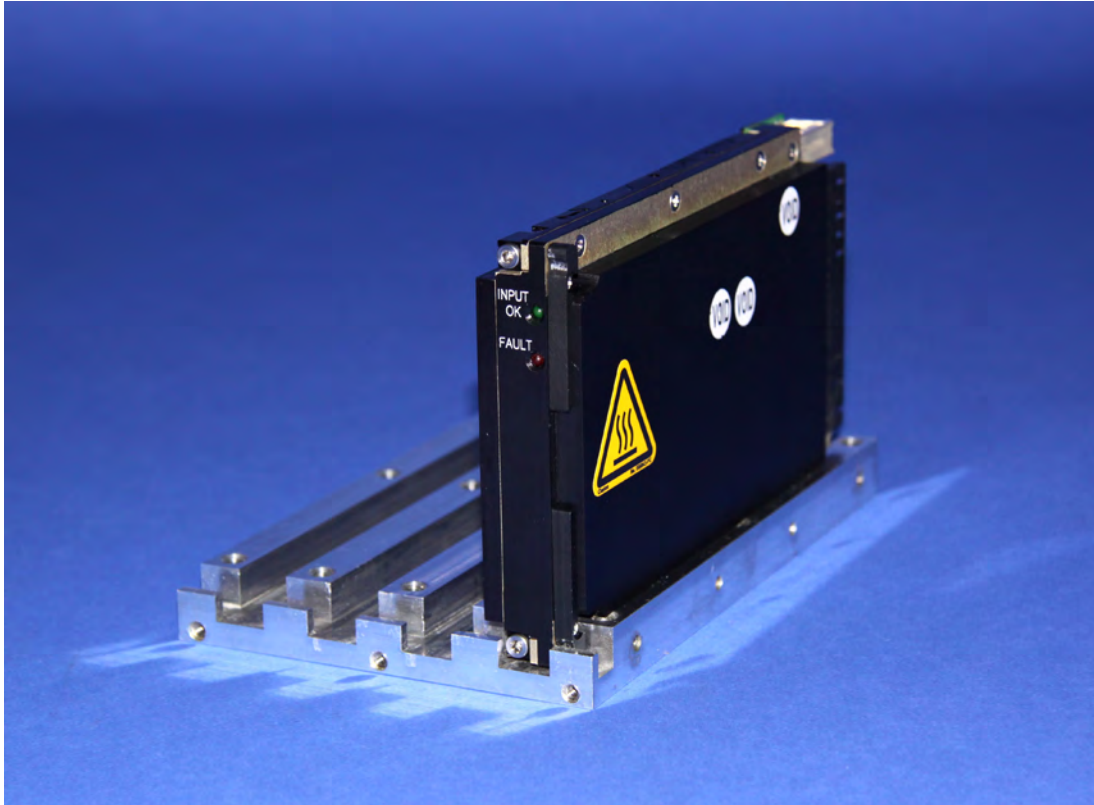


# VPX-300-P

300 Watts

Conduction Cooled

OpenVPX VITA 62 Compliant

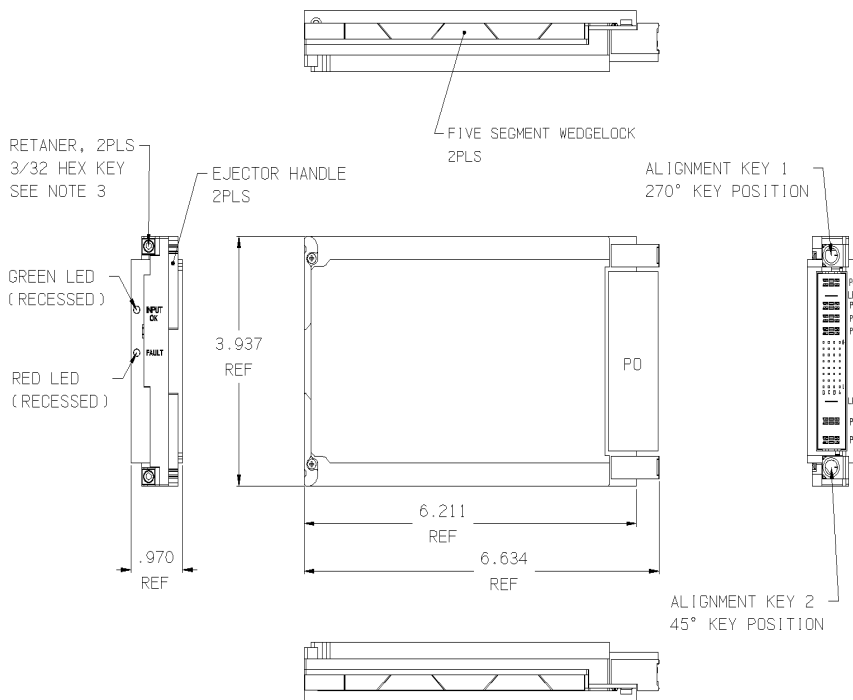


## KEY FEATURES:

- 300 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- Wide Range AC Input with Active Power Factor Correction
- Meets MIL-STD-1399, Section 300A (Type 1) for the Voltage Range Specified
- VITA 62 Outputs; +12V/10A, +3.3V/20A, +5V/20A, Aux\_+12V/1A, Aux\_-12V/.75A, Aux\_+3.3V/2A
- No Minimum Load Required
- Custom Input/Output Configurations Available
- N+1 Redundant with Internal Oring FET's/Diodes
- VITA 62 Card Guide Style Conduction Cooled
- 1 Inch Pitch Form Factor with Wedge Lock Retainers
- Side Covers Support Two-Level Military Maintenance Requirements
- Ruggedized Mechanical Design
- One Year Warranty
- Greater than 150,000 Hrs MTBF
- Proudly Made in U.S.A.

# VPX-300-P

P0 - INPUT/OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-7				
PIN NO.	SIGNAL	PIN NO.	SIGNAL	
P1	ACN	A6	N/C	
P2	ACL	B6	N/C	
LP1	CHASSIS GND	D6	-12V_AUX/0.75A	
A1	GA2*	D6	SYSRESET*	
B1	N/C	A7	N/C	
C1	N/C	B7	N/C	
D1	N/C	C7	N/C	
A2	VBAT	D7	SIGNAL_RETURN	
B2	FAIL*	A8	+12V_SENSE	
C2	INHIBIT*	B8	+3.3V_SENSE	
D2	ENABLE*	C8	+5V_SENSE	
A3	N/C	D8	SENSE_RETURN	
B3	+12V_AUX/1A	P3	+5V/20A	
C3	NED	P4	POWER_RETURN	
D3	NED_RETURN	P5	POWER_RETURN	
A4	3.3V_AUX	2A	LP2	+3.3V/20A
B4	3.3V_AUX		P6	+12V/10A
C4	3.3V_AUX			
D4	3.3V_AUX			
A5	GA0*			
B5	GA1*			
C5	SCLK			
D5	SDA			



<b>Nominal Input Voltage Frequency</b>	115/230 Vac, 3.0/1.5A max. 47-63 Hz, 400Hz.
<b>Operational Input Voltage Range</b>	90-264 VAC. Power factor is 0.99 typical at full load. Meets EN 61000-3-2.
<b>Inrush Current</b>	Less than 4 msec. 30 amperes @ 115 Vac or 60 amperes @ 264 Vac.
<b>Brownout Protection:</b>	Holds Regulation to 85 Vac.
<b>Fusing</b>	6.3 Ampere, 250 Vac, Internal ceramic body fuse.
<b>Hold up time</b>	20msec minimum after loss of AC input at full load and any input.
<b>Efficiency</b>	81% typical
<b>Turn on time</b>	1 sec max. from power up.
<b>Line and Load Regulation</b>	±2% over AC input range and 0 to 100% load change.
<b>Minimum Load</b>	No minimum load required.
<b>Ripple &amp; Noise</b>	Through 20MHz 1% max. or 50mv whichever is greater for all outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.
<b>Transient Response</b>	Output maximum excursion of ± 5% for 25% load step. Recovery less than 500 µsec.
<b>Overshoot</b>	Less than 5%.
<b>Output Isolation</b>	Isolated from chassis ground, 100Vdc.
<b>Input/Output Isolation</b>	1500 Vdc from input to both chassis/outputs.
<b>Reverse Voltage</b>	Protected against reverse voltage to supply current rating.
<b>Overvoltage Protection</b>	Shutdown at 130% of nominal Vout. Recycle input power to reset.
<b>Overtemperature Protection</b>	Unit shuts down if overheated. Recycle input.
<b>Leakage Current</b>	1.5mA max at 240Vac.
<b>Current Limiting</b>	All outputs protected with current limit. Automatic recovery when overload or short is removed.
<b>Redundant</b>	Full power N+1 redundant with integral Oring FET's/Diodes.

<b>Paralleling</b>	Two or more supplies can be operated in parallel and will share +12V/+3.3V/+5V current to within ±10% of each other.
<b>Remote Sense</b>	Compensates for up to 0.5V total distribution voltage drop on the +12V, +3.3V and +5V outputs.
<b>Enable*</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>INHIBIT*</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>SYSRESET*</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>FAIL*</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>NED</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>VBAT</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>Geographical Addressing Protocol (I²C)</b>	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
<b>Indicators</b>	Green LED indicating Input OK, Red LED indicating a power supply fault.
<b>Cooling</b>	Conduction cooled via wedge lock retainers.
<b>Operating Temperature Stability</b>	-40°C to 85°C (at wedge lock edge) 300W All outputs 0.1% for 8 hrs. after 30 minute warm-up.
<b>Humidity</b>	Up to 95% non-condensing.
<b>Storage Temperature</b>	-55°C to 105°C.
<b>Connectors</b>	VITA 62 compliant
<b>Size</b>	3U x 5HP (1") x 160mm <b>Weight:</b> 1.75 lbs.
<b>EMC</b>	Designed to meet Mil-Std-461F with SPI's external filter, Top Assembly 25880, or equivalent.
<b>Common Options</b>	Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.