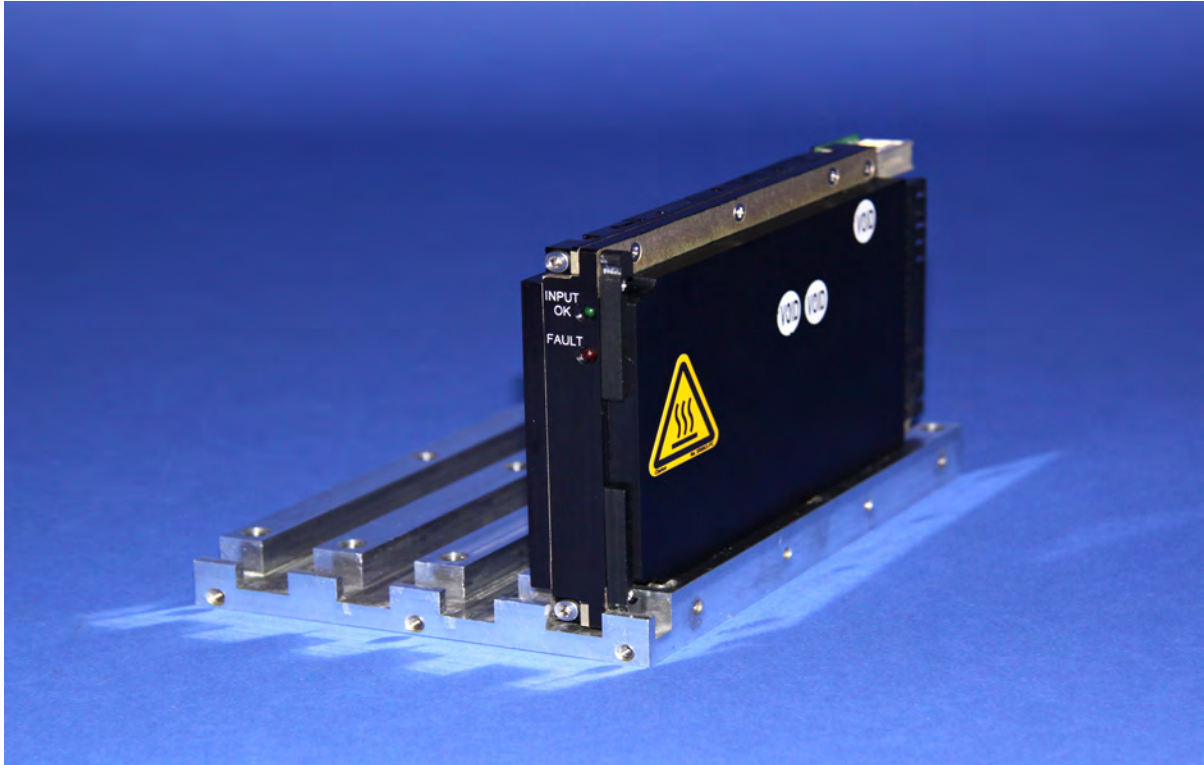


VPX-700S-P-50V

700 Watts

Conduction Cooled

OpenVPX VITA 62 Compliant

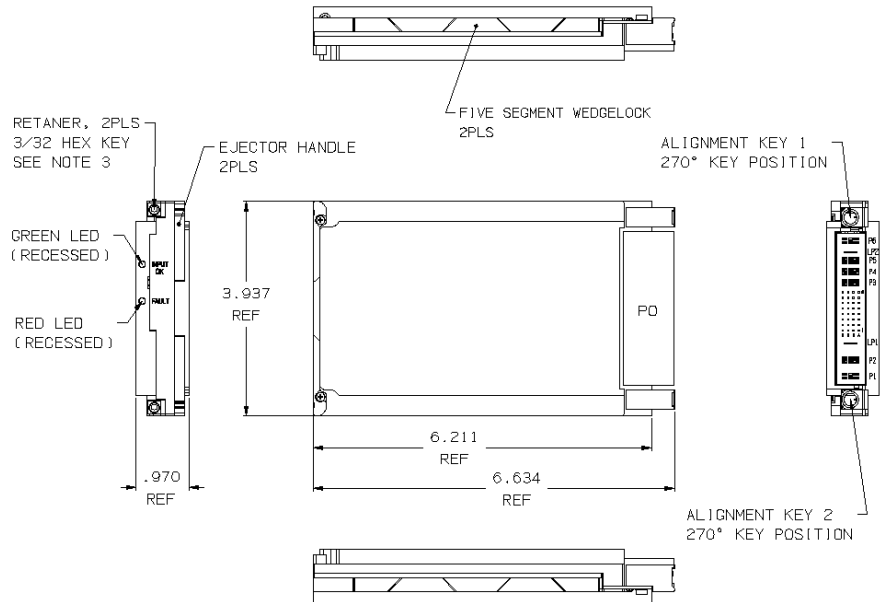


KEY FEATURES:

- 700 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- Wide Range AC Input with Active Power Factor Correction (>0.99)
- Input Current THD not Exceeding 4%
- Meets MIL-STD-1399, Section 300A (Type 1) for the Voltage Range Specified
- Meets MIL-STD-704 A with External Capacitance
- VITA 62 Outputs; +50V/14A, Aux_+3.3V/2A
- N+1 Redundant with Internal Oring FET's
- 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-700S-P-50V

PO - 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	C6	N/C	
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_RTN	
B2	FAIL*	A8	+50V SENSE	
C2	INHIBIT*	B8	N/C	
D2	ENABLE*	C8	N/C	
A3	N/C	D8	+50V SENSE RTN	
B3	N/C	P3	N/C	
C3	NED	P4	+50V RTN	
D3	NED_RETURN	P5	+50V RTN	
A4	3.3V_AUX	2A	LP2	+50V/14A
B4	3.3V_AUX		P6	+50V/14A
C4	3.3V_AUX			
D4	3.3V_AUX			
A5	GA0*			
B5	GA1*			
C5	SCLK			
D5	SDA			



Nominal Input Voltage	115/230 Vac, 7/4A max.
Frequency	47-63 Hz, 400Hz.
Operational Input Voltage Range	100-264 Vac, 700W output, derate to 600W at 90 Vac. Power factor is 0.99 typical at full load. Meets EN 61000-3-2.
Input Current THD	<4% at full load.
Inrush Current	Less than 4 msec. 40 amperes @ 115 Vac or 80 amperes @ 264 Vac.
Brownout Protection:	Holds Regulation to 85 Vac.
Fusing	16 Ampere, 250 Vac, Internal ceramic body fuse.
Hold up time	20msec minimum after loss of AC input at 500W load.
Efficiency	89-92%
Turn on time	1 sec max. from power up.
Line and Load Regulation	±2% over AC input range and 0 to 100% load change.
Minimum Load	No minimum load required.
Ripple & Noise	Through 20MHz less than 0.5% pk-pk.
Transient Response	Output maximum excursion of ± 5% for 25% load step. Recovery less than 500 µsec.
Overshoot	Less than 5% at turn-on.
Output Isolation	Isolated from chassis ground, 100Vdc.
Input/Output Isolation	2200 Vdc from input to both chassis/outputs. SELV construction.
Reverse Voltage	Protected against reverse voltage to supply current rating.
Overvoltage Protection	Shutdown at 130% of nominal Vout. Recycle input power to reset.
Overtemperature Protection	Unit shuts down if overheated. Recycle input.
Leakage Current	1.5mA max at 240Vac.
Current Limiting	All outputs protected with current limit. Automatic recovery when overload or short is removed.
Paralleling	Two or more supplies can be operated in parallel and will share load current within ±10% of each other.

Redundant	Full power N+1 redundant with integral Oring FET's.
Remote Sense	Compensates for up to 0.5V total distribution voltage drop on the +28V output.
Enable*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
INHIBIT*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
SYSRESET*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
FAIL*	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
NED	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
VBAT	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Geographical Addressing	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Protocol (I²C)	VITA 62 compliant. Reference SPI's VPX Signal data sheet for more details.
Indicators	Green LED indicating Input OK, Red LED indicating a power supply fault.
Cooling	Conduction cooled via wedge lock retainers.
Operating Temperature	-20°C to 71°C (at wedge lock edge) 700W. Up to 85°C at 650W.
Stability	All outputs 0.1% for 8 hrs. after 30 minute warm-up.
Humidity	Up to 95% non-condensing.
Storage Temperature	-40°C to 105°C.
Connectors	VITA 62 compliant
Size	3U x 5HP (1") x 160mm Weight: 1.75 lbs.
EMC	Designed to meet Mil-Std-461F with SPI's external filter, Top Assembly 25880, or equivalent.
Common Options	Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.