VPX-1000S-3P-50V

1000 Watts
Conduction Cooled
OpenVPX VITA 62 Compliant

KEY FEATURES:

- 1000 Watts in a 6U x 5 HP (1") x 160mm Modular Design
- 3-Phase 115Vac 60Hz Input with Active Power Factor Correction (>0.98)
- Input Current THD not Exceeding 4%
- Meets MIL-STD-1399, Section 300A (Type 1) Ungrounded for the Voltage Range Specified
- VITA 62 Outputs; +50V/20A, Aux_+3.3V/2A
- 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
- Specifically Designed for Submarine and Shipboard Applications in Compliance to MIL-STD-1399, MIL-STD-461F and MIL-STD-810G
- Ruggedized Mechanical Design
- One Year Warranty
- Greater than 150,000 Hrs MTBF

made in USA
self-certified

Switching Power, Inc.
Regulated Power

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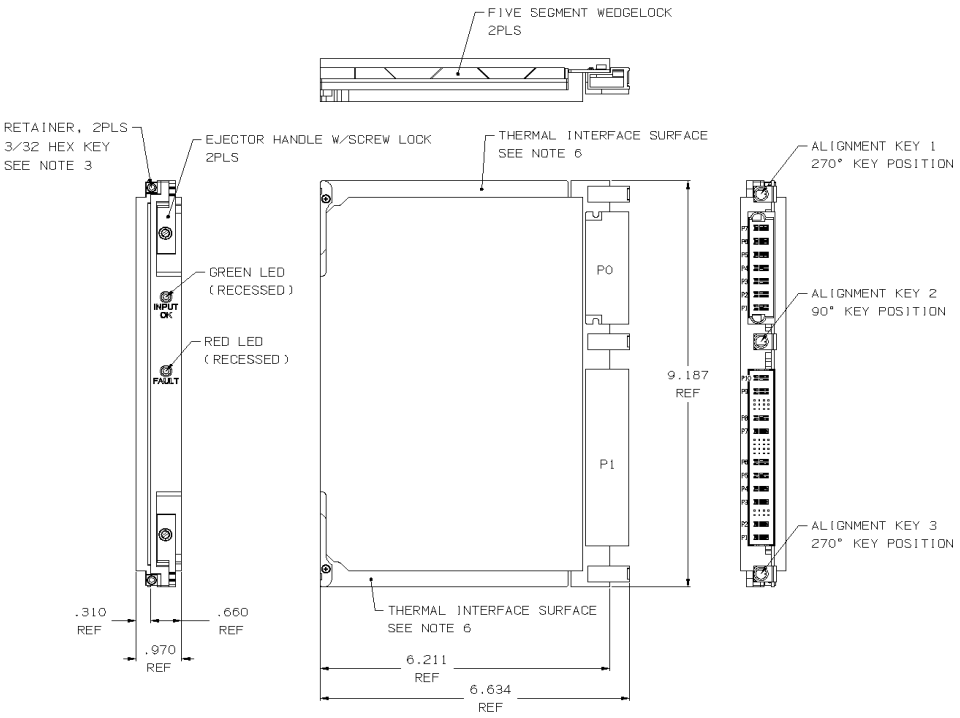
switchpwr.com

AS9100 ISO9001 REGISTERED

VPX-1000S-3P-50V

P0 – AC/DC INPUT CONNECTOR TE CONNECTIVITY P/N 6450843-6	
PIN NO.	SIGNAL
P7	ØA
P6	ØB
P5	ØC
P4	N/C
P3	N/C
P2	N/C
P1	CHASSIS GND

P1 – DC OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-6			
PIN NO.	SIGNAL	PIN NO.	SIGNAL
P10	+50V/20A	D5	SDA
P9	+50V/20A	A4	GA3*
A9	+50V SENSE	B4	GA2*
B9	+50V SENSE	C4	GA1*
C9	N/C	D4	GA0*
D9	N/C	A3	N/C
A8	+50V SENSE RTN	B3	N/C
B8	+50V SENSE RTN	C3	NED
C8	N/C	D3	NED_RTN
D8	N/C	P6	N/C
A7	N/C	P5	N/C
B7	N/C	P4	N/C
C7	N/C	P3	N/C
D7	SIGNAL_RTN	A2	VBAT
P8	POWER RTN	B2	FAIL*
P7	POWER RTN	C2	INHIBIT*
A6	N/C	D2	ENABLE*
B6	N/C	A1	N/C
C6	N/C	B1	N/C
D6	SYSRESET*	C1	N/C
A5	GAP*	D1	N/C
B5	GA4*	P2	+3.3V_AUX/2A
C5	SCLK	P1	POWER_RTN



Nominal Input Voltage Frequency	115 Vac 3-Phase, 6A nominal. 60Hz per MIL-STD-1399 Ungrounded.
Operational Input Voltage Range	+20%, -15% and transients ±25%. Input Power Factor exceeding 0.98 at full load.
Input Load Balance	Current loading for any phase does not exceed the average of the currents in all 3 phases by more than 5%.
Inrush Current	Less than 4 msec. 40 amperes @ 115 Vac.
Fusing	(3 X 8 Ampere)/250 Vac, Very fast acting. Internal ceramic body fuses.
Hold up time	20msec minimum after loss of AC Input at full load
Efficiency	88% typical.
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 0.5% max. or 50mv whichever is greater for both outputs, peak to peak, with coaxial probe and 0.1uF/10uF capacitors at the connector.
Transient Response	Output maximum excursion of ± 5% for 25% load step. Recovery less than 500 µsec.
Overshoot	No turn-on or turn-off overshoot.
Output Isolation	Isolated from chassis ground, 100Vdc.
Input/Output Isolation	1500Vdc from input to both chassis/outputs.
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	1mA max at 115Vac.
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/Diodes.
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 (I^2C)	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	-40°C to 71°C (at wedge lock edge) 1000W
Stability	All outputs 0.1% for 8 hrs. after 30 minute warm-up.
Humidity	Up to 95% non-condensing.
Storage Temperature	-55°C to 105°C.
Connectors	VITA 62 compliant
Size	6U x 5HP (1") x 160mm **Weight:** 3.5 lbs.
EMC	Designed to meet Mil-Std-461F with SPI's external filter, Top Assembly 25930, or equivalent.
Common Options	Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.