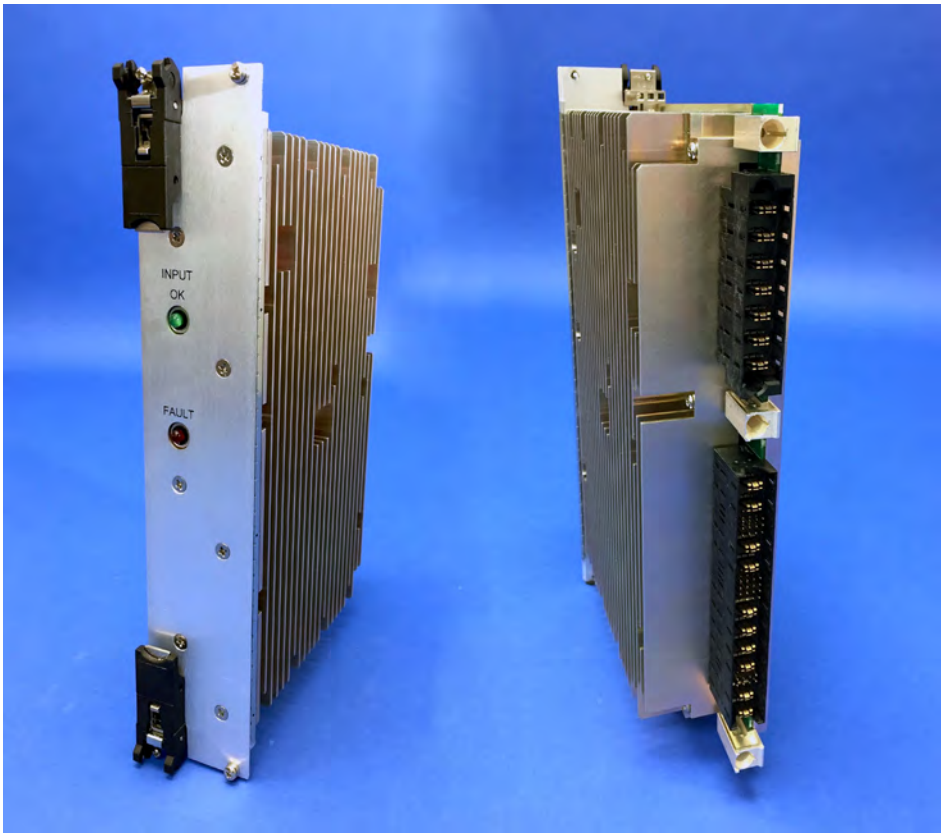
VPX-700P-CONV-10HP

700 Watts
Convection Cooled
OpenVPX VITA 62 Compliant



KEY FEATURES:

- 700 Watts in a 6U x 10HP 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/30A, +5V/40A, Aux_+3.3V/40A, Aux_+12V/1A, Aux_-12V/1A
- No Minimum Load Required
- Custom Input/Output Configurations Available
- N+1 Redundant with Internal Oring FET's/Diodes
- VITA 62 Convection Cooled Style
- 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.

Switching Power, Inc.
Regulated Power

3601 Veterans Highway
Ronkonkoma, New York 11779
Tel: 631-981-7231 Fax: 631-981-7266

visit us at:
switchpwr.com

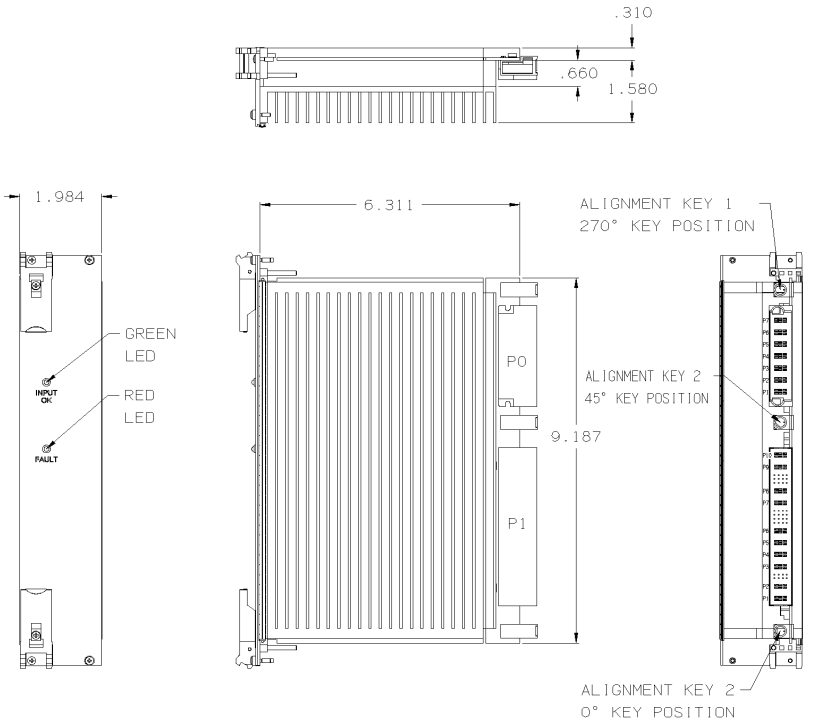
VPX-700P-CONV-10HP

P0 – AC/DC INPUT CONNECTOR
TE CONNECTIVITY P/N 6450843-6

PIN NO.	SIGNAL
P7	AC-L
P6	N/C
P5	N/C
P4	AC-N
P3	+360VDC OPTION
P2	-360VDC OPTION
P1	CHASSIS GND

P1 – DC OUTPUT CONNECTOR
TE CONNECTIVITY P/N 6450849-6

PIN NO.	SIGNAL	PIN NO.	SIGNAL
P10	+12V/30A	D5	SDA
P9	+12V/30A	A4	GA3*
A9	+12V_SENSE	B4	GA2*
B9	+12V_SENSE	C4	GA1*
C9	+5V SENSE	D4	GA0*
D9	N/C	A3	N/C
A8	+12V_SENSE_RTN	B3	+12V_AUX/1A
B8	+12V_SENSE_RTN	C3	NED
C8	+5V_SENSE_RTN	D3	NED_RTN
D8	N/C	P6	+5V/40A
A7	N/C	P5	+5V/40A
B7	N/C	P4	POWER_RTN
C7	N/C	P3	POWER_RTN
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	-12V_AUX/1A	B1	N/C
D6	SYSRESET*	C1	N/C
A5	GAP*	D1	N/C
B5	GA4*	P2	+3.3V_AUX/40A
C5	SCLK	P1	POWER_RTN



Nominal Input Voltage Frequency 115/230 Vac, 7/4A max. 47-63 Hz , 400Hz.

Operational Input Voltage Range 100-264 VAC, 700W output, derate to 600W at 90VAC. Power factor is 0.99 typical at full load. Meets EN 61000-3-2.

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 full load and any input

Efficiency 85% 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 1% max. or 50mv whichever is greater for all 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 Less than 5%.

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 1.5mA max at 240Vac.

Current Limiting All outputs protected with current limit. Automatic recovery when overload or short is removed.

Redundant Full power N+1 redundant with integral Oring FET's/Diodes.

Paralleling Two or more supplies can be operated in parallel and will share +12V and +5V current to within ±10% of each other.

Remote Sense Compensates for up to 0.5V total distribution voltage drop on the +12V and +5V outputs.

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 400 Lfpm of forced air required through heat exchanger.

Operating Temperature -40°C to 65°C operating temperature with specified air flow.

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 10HP x 160mm **Weight:** 6 lbs.

EMC Designed to meet Mil-Std-461F with SPI's external filter, Top Assembly 25860, or equivalent.

Common Options Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.