VPX-400-DC-270

400 Watts Conduction Cooled

OpenVPX VITA 62 Compliant



KEY FEATURES:

- · 400 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- 270Vdc Input per MIL-STD-704 Versions E & F
- VITA 62 Outputs; +12V/17A, +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.



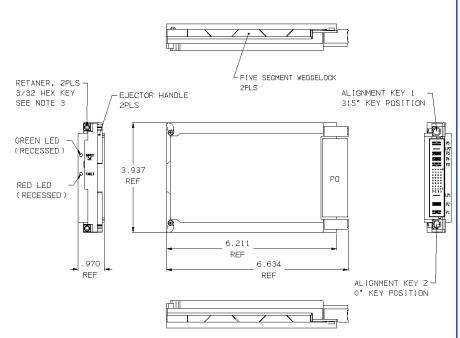






VPX-400-DC-270

PO - INPUT/OUTPUT CONNECTOR							
TE CONNECTIVITY P/N 6450849-7 PIN NO. SIGNAL PIN NO. SIGNAL							
PIN NO.	SIGNAL	SIGNAL		SIGNAL			
P1	-DC_IN		A6	N/C			
P2	+DC_IN		B6	N/C			
LP1	CHASSIS GND		C6	-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		07	SIGNAL_RETURN			
B2	FAIL*		A8	+12V SENSE			
C2	INHIBIT*		В8	+3.3V SENSE			
D2	ENABLE*		C8	+5V SENSE			
АЗ	N/C		D8	SENSE_RETURN			
ВЗ	+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/17A			
C4	3.3V_AUX						
D4	3.3V_AUX						
A5	GAO*						
B5	GA1*						
C5	SCLK						
D5	SDA						



Nominal Input Voltage	270 Vdc, 1.75A.
Operational Input Voltage Range	240-290 Vdc, with input transient protection to 200 $\&$ 370 Vdc for 50 ms exceeding limits per MIL-STD-704E/F.
Inrush Current	Less than 4 msec, 60 amperes @ 270 Vdc.
Reverse Input Protection:	Reverse input protection to rated DC voltage.
Fusing	3.15 Ampere, 400 Vdc, Internal ceramic body fuse.
Hold up time	20msec minimum after loss of DC Input at full load and nominal input.
Efficiency	85% typical
Turn on time	1 sec max. from power up.
Line and Load Regulation	±2% over DC 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 $\pm5\%$ for 25% load step. Recovery less than 500 µsec.
Overshoot	Less than 5%.
Output Isolation	Isolated from chassis ground, 100 Vdc.

1500Vdc from input to both chassis/outputs.

Protected against reverse voltage to supply

Unit shuts down if overheated. Recycle input.

Automatic recovery when overload or short is removed.

Two or more supplies can be operated in parallel and

will share +12V/+3.3V/+5V current to within ±10% of

Shutdown at 130% of nominal Vout.

All outputs protected with current limit.

Recycle input power to reset.

current rating.

each other.

Input/Output Isolation

Reverse Voltage

Overtemperature

Current Limiting

Overvoltage

Protection

Protection

Paralleling

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 +12V, +3.3V 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 ² C)	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 85°C (at wedge lock edge) 400W		
Stability	All outputs 0.1% for 8 hrs. after 30 minute warm-up.		
Humidity	Up to 95% non-condensing.		
Storage Temperature	-55°C to 85°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.

solution which meets your requirements.

Common Options

Conformal coating with Paylene & special output

configurations. Consult factory for more details on a tailored