VPX-700S-DC-270-50V

700 Watts Conduction Cooled

OpenVPX VITA 62 Compliant



KEY FEATURES:

- 700 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- 270Vdc Input per Mil-Std-704 Versions E & F
- 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.







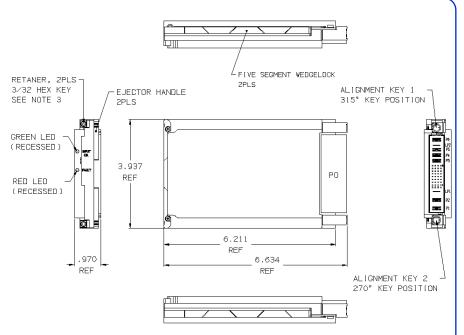


VPX-700S-DC-270-50V

Redundant

Common Options

PO - INPUT/OUTPUT CONNECTOR					
TE CONNECTIVITY P/N 6450849-7					
PIN NO.	SIGNAL		PIN NO.	SIGNAL	
P1	-DC_IN		A6	N/C	
P2	+DC_[N		B6	N/C	
LP1	CHASSIS GND		C6	N/C	
A1	GA2*		D6	SYSRESET*	
B1	N/C		A7	N/C	
C1	N/C		В7	N/C	
D1	N/C		C7	N/C	
A2	VBAT		70	SIGNAL_RTN	
B2	FAIL*		A8	+50V SENSE	
C2	INHIBIT*		B8	N/C	
D2	ENABLE*		C8	N/C	
A3	N/C		D8	+50V SENSE_RTN	
ВЗ	N/C		P3	N/C	
C3	NED		P4	+50V RTN	
D3	NED_RETURN		P5	+50V RTN	
A4	3.3V_AUX		LP2	+50V/14A	
B4	3.3V_AUX	2A	P6	+50V/14A	
C4	3.3V_AUX				
D4	3.3V_AUX				
A5	GAO*				
B5	GA1*				
C5	SCLK				
D5	SDA				



Nominal Input Voltage	270 Vdc, 2.9A.
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	6.3 Ampere, 400 Vdc, Internal ceramic body fuse.
Hold up time	20msec minimum after loss of DC input at 500W load.
Efficiency	90% 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 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 $\pm5\%$ for 25% load step. Recovery less than 500 $\mu sec.$
Overshoot	No turn-on or turn-off overshoot.
Output Isolation	Isolated from chassis ground, 100 Vdc.
Input/Output Isolation	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 load current within ±10% of each other.

Shutdown at 130% of nominal Vout.

All outputs protected with current limit.

Recycle input power to reset.

current rating.

Reverse Voltage

Overtemperature

Overvoltage

Protection

Protection
Current Limiting

Paralleling

	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 (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 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	-55°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.		

Conformal coating with Paylene & special output

tailored solution which meets your requirements.

configurations. Consult factory for more details on a

Full power N+1 redundant with integral Oring