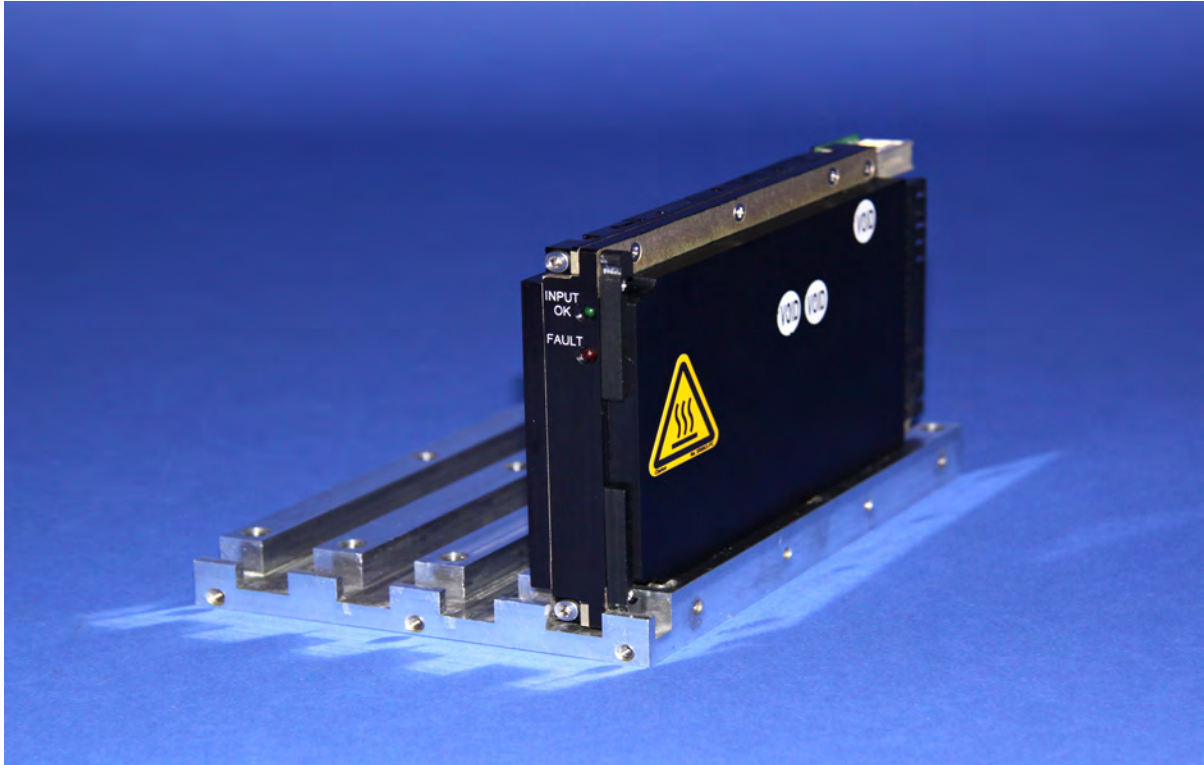# VPX-700S-DC-270-28V
700 Watts
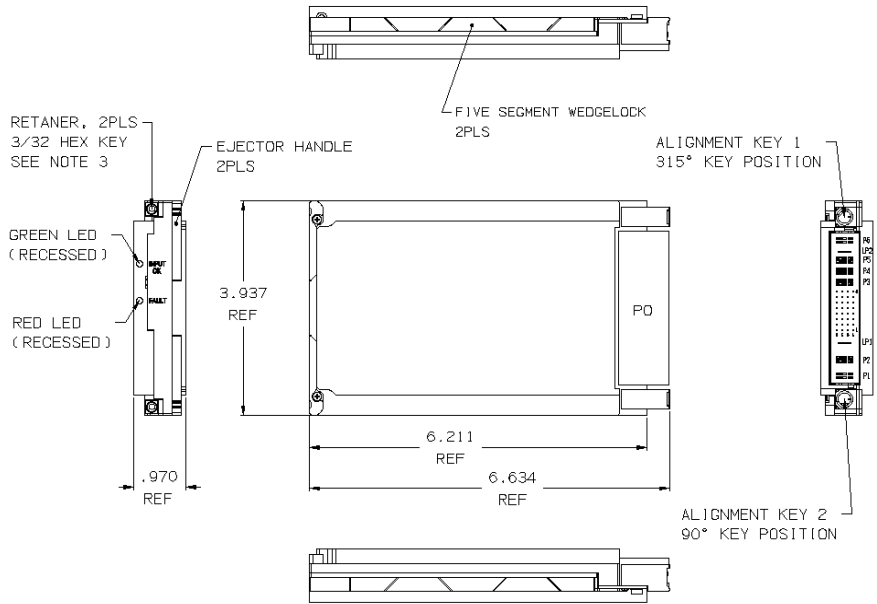## Conduction Cooled
OpenVPX VITA 62 Compliant

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; +28V/25A, 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-270-28V

```
PO - INPUT/OUTPUT CONNECTOR
     TE CONNECTIVITY P/N 6450849-7
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PIN NO.	SIGNAL	PIN NO.	SIGNAL
P1	-DC_IN	A6	N/C
P2	+DC_IN	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	+28V SENSE
C2	INHIBIT*	B8	N/C
D2	ENABLE*	C8	N/C
A3	N/C	D8	+28V SENSE_RTN
B3	N/C	P3	N/C
C3	NED	P4	N/C
D3	NED_RETURN	P5	+28V RTN
A4	3.3V_AUX	LP2	N/C
B4	3.3V_AUX	P6	+28V/25A
C4	3.3V_AUX 2A		
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 less than 1% pk-pk.
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, 100 Vdc.
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.
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.