

VPX-400-DC-28

400 Watts

Conduction Cooled

OpenVPX VITA 62 Compliant

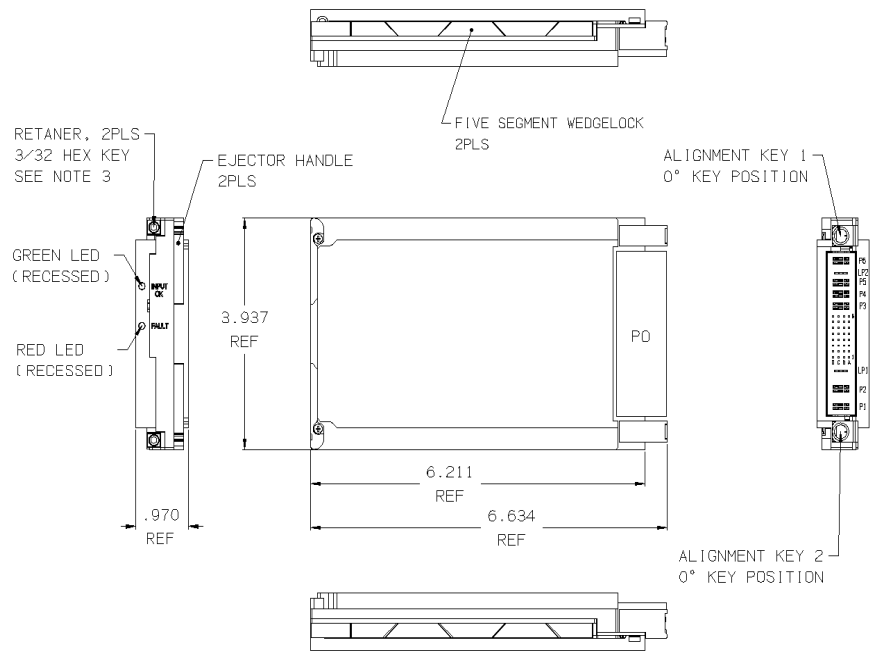


KEY FEATURES:

- 400 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- 28Vdc 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-28

PO - INPUT/OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-7				
PIN NO.	SIGNAL	PIN NO.	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	D7	SIGNAL_RETURN	
B2	FAIL*	A8	+12V_SENSE	
C2	INHIBIT*	B8	+3.3V_SENSE	
D2	ENABLE*	C8	+5V_SENSE	
A3	N/C	D8	SENSE_RETURN	
B3	+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	GA0*			
B5	GA1*			
C5	SCLK			
D5	SDA			



Nominal Input Voltage	28 Vdc, 17A.
Operational Input Voltage Range	22-29 Vdc, with input transient protection to 18 & 50 Vdc for 50 ms exceeding limits per MIL-STD-704E/F.
Inrush Current	Less than 4 msec, 30 amperes @ 28 Vdc.
Reverse Input Protection:	Reverse input protection to rated DC voltage.
Fusing	30 Ampere, 58 Vdc, internal body fuse.
Hold up time	1msec minimum after loss of DC Input at full load and at any 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 ± 5% for 25% load step. Recovery less than 500 µsec.
Overshoot	Less than 5%.
Output Isolation	Isolated from chassis ground, 100 Vdc.
Input/Output Isolation	1500 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 +12V/+3.3V/+5V current to 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 +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 (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	-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 an external filter.
Common Options	Conformal coating with Paylene & special output configurations. Consult factory for more details on a tailored solution which meets your requirements.