

VPX-1000-DC-28

1000 Watts

Conduction Cooled

OpenVPX VITA 62 Compliant



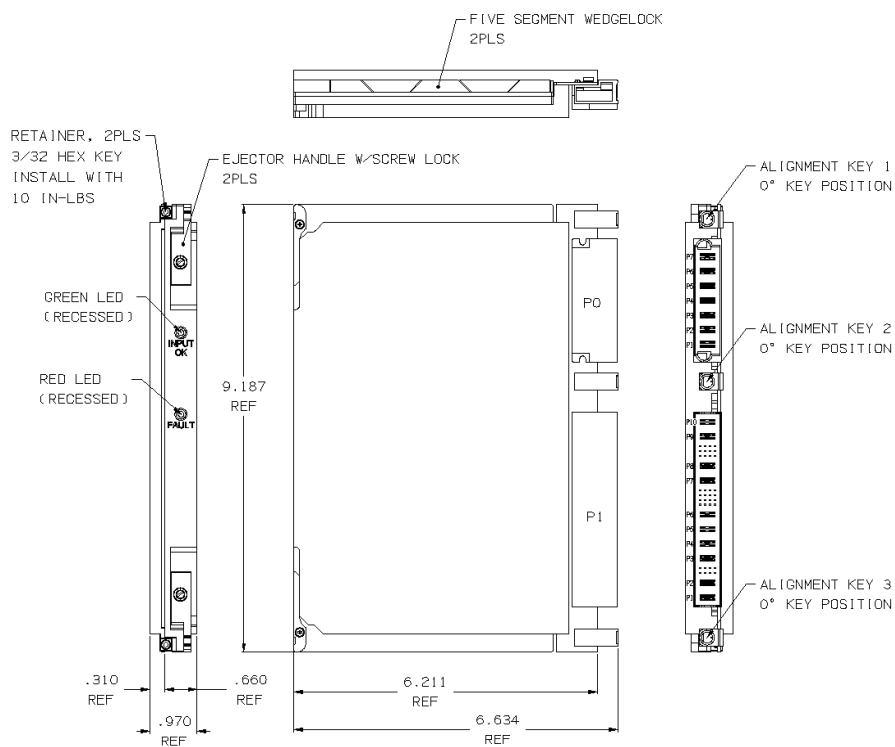
KEY FEATURES:

- 1000 Watts in a 6U x 5 HP (1") x 160mm Modular Design
- 28Vdc Input per MIL-STD-704 Versions E & F
- VITA 62 Outputs; +12V/80A, +5V/40A, Aux_+3.3V/20A, 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 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-1000-DC-28

P0 - AC/DC INPUT CONNECTOR TE CONNECTIVITY P/N 6450843-6	
PIN NO.	SIGNAL
P7	+DC_IN
P6	+DC_IN
P5	-DC_IN
P4	-DC_IN
P3	N/C
P2	N/C
P1	CHASSIS_GND

P1 - DC OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-6			
PIN NO.	SIGNAL	PIN NO.	SIGNAL
P10	+12V/80A	D5	SDA
P9	+12V/80A	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	28 Vdc, 42A.
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, 60 amperes @ 28 Vdc.
Reverse Input Protection:	Reverse input protection to rated DC voltage.
Fusing	60 Ampere, 58 Vdc, Internal fuse.
Hold up time	1msec minimum after loss of DC 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 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 and +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 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 +70°C (at wedge lock edge) 1000W Up to 85°C at 800W.
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	6U x 5HP (1") x 160mm Weight: 3.5 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 for a tailored solution which meets your requirements.