

VPX-700S-P

700 Watts

Conduction Cooled

OpenVPX VITA 62 Compliant

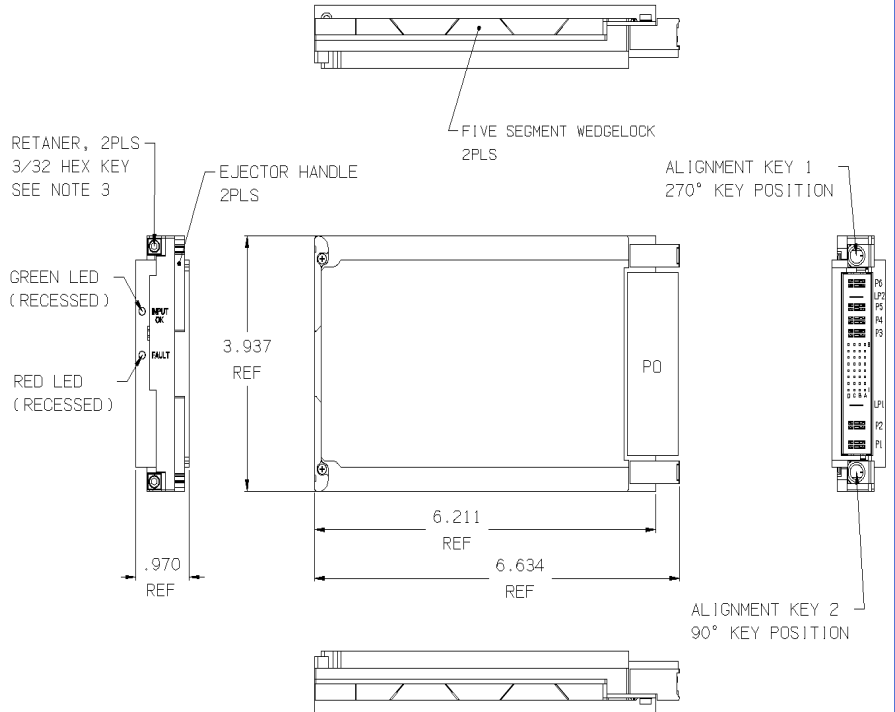


KEY FEATURES:

- 700 Watts in a 3U x 5 HP (1") x 160mm Modular Design
- Wide Range AC Input with Active Power Factor Correction (>0.99)
- Input Current THD not Exceeding 4%
- Meets MIL-STD-1399, Section 300A (Type 1) for the Voltage Range Specified
- Meets MIL-STD-704 A with External Capacitance
- VITA 62 Outputs; +28V/25A, Aux_+3.3V/2A
- 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-700S-P

| PO - INPUT/OUTPUT CONNECTOR TE CONNECTIVITY P/N 6450849-7 | | | |
|--|-------------|---------|----------------|
| PIN NO. | SIGNAL | PIN NO. | SIGNAL |
| P1 | ACN | A6 | N/C |
| P2 | ACL | 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 | | |
| D4 | 3.3V_AUX | | |
| A5 | GA0* | | |
| B5 | GA1* | | |
| C5 | SCLK | | |
| D5 | SDA | | |



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| Nominal Input Voltage | 115/230 Vac, 7/4A max. |
| Frequency | 47-63 Hz, 400Hz. |
| Operational Input Voltage Range | 100-264 Vac, 700W output, derate to 600W at 90 Vac. Power factor is 0.99 typical at full load. Meets EN 61000-3-2. |
| Input Current THD | <4% at full load. |
| Inrush Current | Less than 4 msec. 40 amperes @ 115 Vac or 80 amperes @ 264 Vac. |
| Brownout Protection: | Holds Regulation to 85 Vac. |
| Fusing | 16 Ampere, 250 Vac, Internal ceramic body fuse. |
| Hold up time | 20msec minimum after loss of AC input at full load. |
| Efficiency | 88% typical |
| Turn on time | 1 sec max. from power up. |
| Line and Load Regulation | ±2% over AC 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, 100Vdc. |
| 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. |
| Leakage Current | 1.5mA max at 240Vac. |
| 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. |

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|--------------------------------|--|
| 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 +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. |