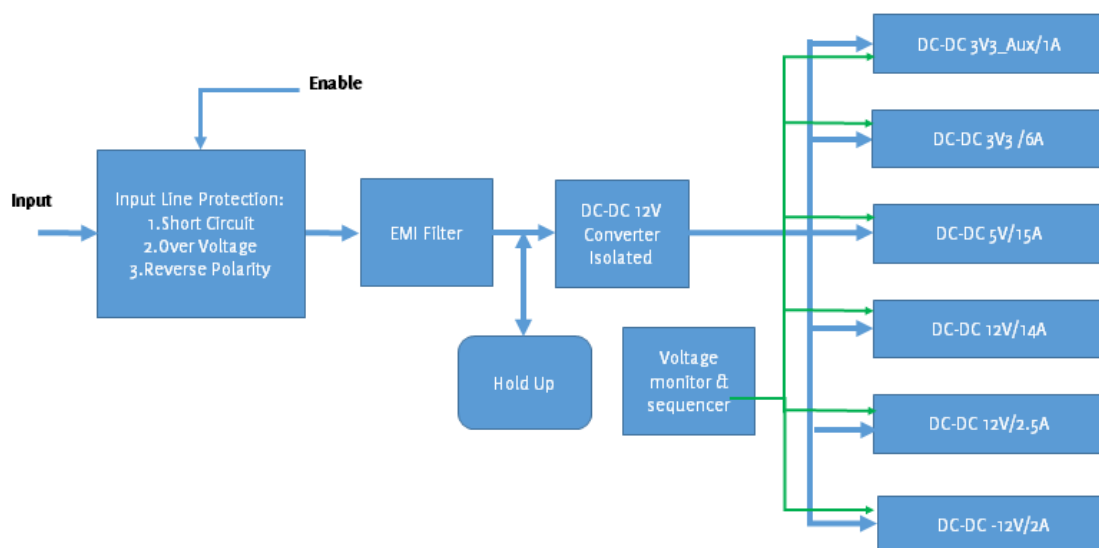


VPX SERIES

The VPX ATR Series of high-power, multiple-output power supplies addresses the needs of today's military for plug-in applications. Our multiple output power supplies are proven COTS products for the most demanding military airborne VPX system applications. Operating on 28VDC aircraft power, these units can provide up to 6 outputs, generate up to 320 watts, and comply with MIL-STD-461F EMI requirements. Features include independently regulated, isolated outputs, with an internal LED status indicator.

3U Conduction Cooled Military Power Supply

- Input 28VDC
- Multiple outputs/ configurations up to 320 watts
- Low Output ripple
- Compliant MIL STD 704F
- Rugged – MIL-STD-810 vibration, shock, humidity
- MIL-STD-461F compliant
- Operating Temperatures
 - Conduction Models: up to +75°C Card Edge Temperature



Block Diagram

3U Conduction Cooled Military Power Supply

DATASHEET



VPX SERIES

ELECTRICAL INPUT

| | |
|---|---|
| Input Voltage Range | Supply: 28 V DC (min: 16 V, Max: 48 V) |
| Reverse Polarity Protection (DC Inputs) | Yes |
| Efficiency | Max85% @ Full Load |
| Output Voltages | 3.3 V DC, 5 V DC, 12 V DC, |

ELECTRICAL OUTPUT

| | |
|------------------------|--------------------------------|
| Output Currents | +3.3V DC: 6A |
| | +5V DC: 15A |
| | +12V DC: 14A |
| | +3.3V DC (AUX): 1A |
| | +12VDC (AUX): 2.5A |
| Ripple | -12VDC (AUX): 2A |
| | 3.3V DC < 30mV |
| | 5V DC < 50 mV |
| | 12V DC < 120 mV |
| | 12V_Aux < 120 mV |
| Line Regulation | -12V DC < 120 mV |
| | 3.3V DC < 1% |
| | 5V DC < 1% |
| Load Regulation | 12V DC < 1% |
| | 3.3V DC < 1% |
| | 5V DC < 1% |
| Max Total Output Power | 12V DC < 1% |
| | 320W |
| Holdup | 50msec (min.) for Nominal 320W |
| | Voltage range of 22V-29V DC. |

MECHANICAL

| | |
|---------------------------------------|---|
| Mechanical Dimensions | Standard 3U X160MMx25MM VPX board with VPX power connectors |
| Cooling | Conduction |
| Weight | 0.8 kg |
| Maximum operating Ambient Temperature | 75 °C on Card Edge |

COMPLIANCE

| | |
|-----------------------|---|
| Operating Temperature | -40°C to +71°C With conduction cooling |
| Storage Temperature | -40°C to +85°C |
| Altitude | Up to 70,000 feet |
| Humidity | MIL-STD-810F, Meth 507 (5cycles/48 hrs, 60°C, 95% RH) |
| Vibration | According to MIL-STD-810F, Meth 514.5 0.04g2/Hz PSD for 60mins / axis. |
| Shock | MIL-STD-810F, Meth 516.5, Procedure-I Shock pulse: Half sine: 15g Pulse durations: 11ms, Total 18 shocks. |
| EMI | MIL-STD-461F; CE101,CE102, CS101,CS109,CS114,CS115,CS116 RE101,RE102 RS101, RS03,RS105 |
| Isolation | Input-Case @ 500 VDC Input-Output@ 500 VDC Output-Case @ 500VDC |