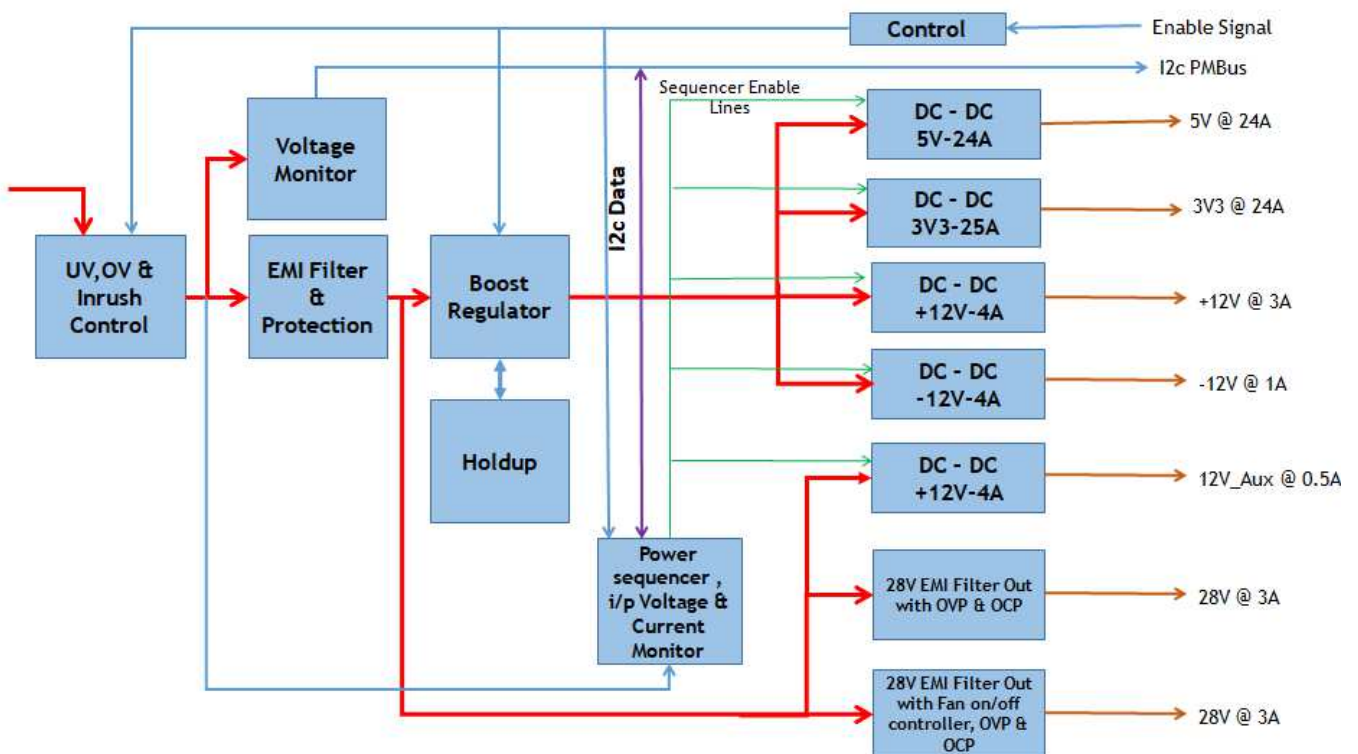


VPX SERIES

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 250 watts, and comply with MIL-STD-461E EMI requirements. Features include independently regulated, isolated outputs, with the outputs having an LED status indicator.

Double-Slot 6U  
Conduction Cooled  
Military Power Supply

- Input 28VDC
- Multiple outputs/ configurations up to 250 watts
- Low Output ripple
- Compliant MIL STD 704D & F
- Rugged - MIL-STD-810 vibration, shock, humidity
- MIL-STD-461C & E compliant
- Operating Temperatures
  - Conduction Models: -up to +85°C Card Edge Temperature



Block Diagram

# Double-Slot 6U Conduction Cooled Military Power Supply



## VPX SERIES

### ELECTRICAL INPUT

Input Voltage Range	Supply: 28 V DC ( min: 16 V, Max: 32 V)
Reverse Polarity Protection (DC Inputs)	Yes
Efficiency	Min 85% @ Full Load
Output Voltages	3.3 V DC, 5 V DC, 12 V DC, 28V

### ELECTRICAL OUPUT

Output Currents	+3.3V DC: 25A
	+5V DC: 24A
	+12V DC: 3A
	+3.3V DC (AUX): 1A
	+12VDC (AUX): 0.5A
	-12VDC (AUX): 1A
Ripple	28V Filtered 7 A
	3.3V DC < 50mV
	5V DC < 50 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%
Holdup	250W
	50msec (min.) for Nominal 180W
	Voltage range of 22V-29V DC.

### MECHANICAL

Mechanical Dimensions	Standard 6U X160MM VPX board with VPX power connectors
Cooling	Conduction
Weight	<1.5Kg
Maximum operating Ambient Temperature	85 °C on Card Edge

### COMPLIANCE

Operating Temperature	-40 °C to +71°C With conduction cooling
Storage Temperature	-55°C to +125°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-461E; CE01,CE03,CE07, CS01,CS02,CS06,Cs12, RE01,RE02 RS01,RS02,RS03,RS06
Isolation	Input-Case 10Mohms @ 500 VDC Input-Output 10Mohms @ 500 VDC Output-Case 10Mohms @ 500VDC