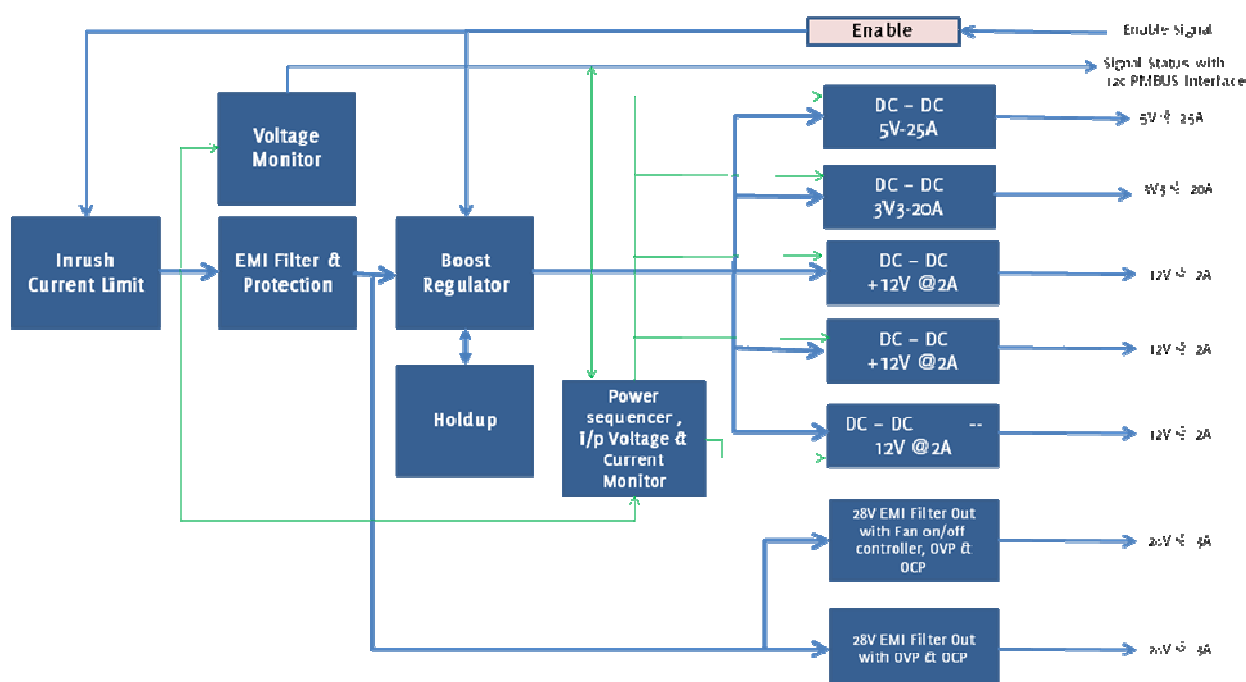


## VPX SERIES

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 backup power, these units can provide up to 3 outputs, generate up to 300 watts, and comply with MIL-STD-461E EMI requirements. Features include independently regulated, isolated outputs, with each output having an internal LED status indicator.

### Double-Slot 6U Conduction Cooled Military Power Supply

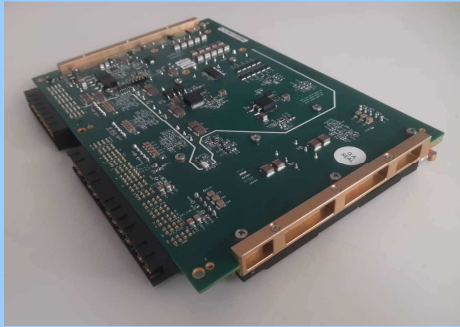
- Input 28VDC
- Multiple outputs/ configurations up to 300 watts
- Low Output ripple
- Compliant MIL STD 704D&F
- Rugged - MIL-STD-810 vibration, shock, humidity
- MIL-STD-461C&E compliant
- Operating Temperatures
  - Conduction Models: up to +85°C Card Edge Temperature



Block Diagram

# Double-Slot 6U Conduction Cooled Military Power Supply

## DATASHEET



## VPX SERIES

### ELECTRICAL INPUT

Input Voltage Range	Primary supply: 115V/400Hz 1AC, 115V/400Hz 3AC Redundant supply: 28 V DC ( min: 16 V, Max: 32 V)
Reverse Polarity Protection (DC Inputs)	Yes
Efficiency	Min 80% @ Full Load
Output Voltages	3.3 V DC, 5 V DC, 12 V DC,
Input Under Voltage Protection	DC voltage above 16Vswitch off
Input Over Voltage Protection	DC voltage above 32Vswitch off

### ELECTRICAL OUPUT

Output Currents	+12V @ 2A -12V @ 2A +12V Aux @ 1A +5V @ 24A +3.3V @ 20A +28V @ 3A, Filtered and fused, turned off when temperature <10 deg C +28V @ 6A, Filtered and short circuit protected
Ripple	3.3V DC < 50mV 5V DC < 50 mV 12V DC < 120mv -12V DC < 120mv
Line Regulation	< 1%
Load Regulation	< 1%
Hold-up Time	50 ms when operating at 200W

### MECHANICAL

Mechanical Dimensions	Standard 6U X160MM VPX board with VPX power connectors
Cooling	Conduction
Weight	1.9Kg
Maximum operating Ambient Temperature	85 °C on Card Edge

### COMPLIANCE

Operating Temperature	-55°C to +85°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. 0.1 g /Hz (maximum), 20 to 2K Hz
Shock	MIL-STD-810F, Meth 516.5, Procedure-I Shock pulse::40 g 11 ms sawtooth
EMI	RE101, RE102, RS101, RS103, CE101, CE102, CS101, CS114, CS115, CS116 as per MIL-STD-461G including CE07, CS06 of MIL -STD 461C & MIL-STD-464C