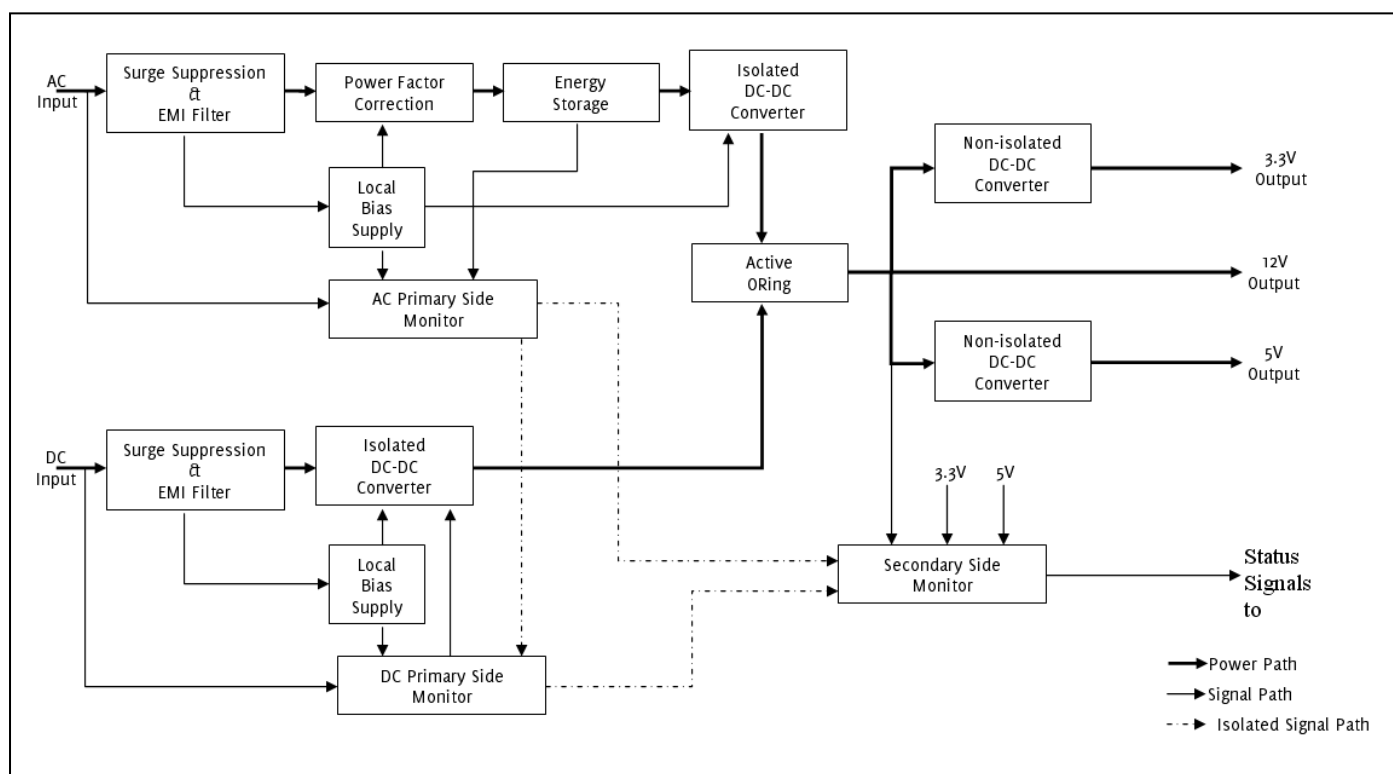


VPX SERIES

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 115VAC 400Hz aircraft power & 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 115vac 400Hz & 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: 115 V AC, 400 Hz (100 to 125 V RMS) Redundant 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,
Input Under Voltage Protection	Primary supply is below 108 V AC, 400 Hz, switch over to 28 V DC supply. If DC voltage is also below 16 V or above 32 V, switch off
Input Over Voltage Protection	Primary supply is above 118 V AC, 400 Hz, switch over to 28 V DC supply If DC voltage is also below 16V or above 32 V, switch off

ELECTRICAL OUTPUT

Output Currents	3.3V DC (AUX): 5A 5V DC: 20A 12V DC: 25A
Ripple	3.3V DC < 50mV 5V DC < 50 mV 12V DC < 200 mV
Line Regulation	3.3V DC < 20mV 5V DC < 20 mV 12V DC < 100 mV
Load Regulation	3.3V DC < 50mV 5V DC < 50 mV 12V DC < 200 mV
Hold-up Time	50 ms when operating at 210W

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 +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-461C; 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 @ 50 VDC

TACTICAL SYSTEMS PVT LTD
#12, 2ND FLOOR, 13TH MAIN,
VASANTHAGAR,
BANGALORE 560 052
Phone 91 80 4112 0887



Ordering Information
Part Number 3020-0001-00, Rev1

Specifications subject to change without notice.
© 2009-2014 Tactical Systems Pvt. Ltd.
All rights reserved

4000-0002-01