



Medium Power / Flexible Configuration – VITA 62 VPX Power Supply

- Conduction-cooled COTS VPX power supply, VITA 62.0 compliant
- Fits standard VPX chassis per VITA 46.0 (3U x 4HP)
- High-efficiency single-stage converter with wide input voltage range
- Flexible power distribution across VS1, VS2, and VS3 due to oversized converters
- MIL-STD 461, 704, 1275 tested; I²C and USB monitoring via onboard microcontroller

Form Factor	3U VPX CC
Pitch	4 HP / 0.8 inch
Weight	0.6 kg / 1.3 Lbs
Operating Temperature (at wedge lock)	-40 °C to 85 °C [derate max power from 400 W to 200 W (linear) for 60 °C to 85 °C operation]
Storage Temperature	-55 °C to 105 °C
Input to Output Isolation	1500 V
Input to Case Ground Isolation	500 V
Output to Case Ground Isolation	500 V
Case Ground to Safety Ground Resistance	< 10 mΩ
Maximum Output Power	360 W
Maximum Input Power	~400W
Maximum Dissipated Power @ max. Power	~40 W
Nominal Input Voltage	28 V DC (optional 48V DC)
Minimum Turn ON Voltage	14 V
Minimum Turn OFF Voltage	11 V
Maximum Continuous/Peak Input Voltage	40 V / ± 250 V (<1 ms spike)
Input Overvoltage Protection:	Outputs disable if input voltage exceeds 42 VDC for > 600 ms (10 second auto-restart)
Maximum Internal Working Temperatures	125 °C
Temperature Protection Sensing Point (internal)	125 °C (Outputs disable when internal PCB temperature exceeds threshold)

Main Power VS1 / VS2 / VS3

Maximum Currents 12V / 3V3 / 5V	see tables in "variants" for different power configurations
Fixed Switching Frequencies 12V / 3V3 / 5V	300 kHz / 220 kHz / 410 kHz
Peak Efficiencies 12V / 3V3 / 5V	90% / 90% / 90%
Max. Output Ripple and Noise: 12V / 3V3 / 5V (0-20 MHz Bandwidth)	40 mVrms / 10 mVrms / 20 mVrms < 120 mVpp / < 50 mVpp / < 50 mVpp
Line Regulation: 12V / 3V3 / 5V.	10 mV / 10 mV / 50 mV
Vin=Vin,min to Vin,max, Io and Tc fixed	< 0.1%
Load Regulation: 12V / 3V3 / 5V	10 mV / 10 mV / 10 mV
Overvoltage Protection +/- 12V / 3V3 / 5V: Maximum Output Voltage (Sense Lines Open)	12.1 V / 3.4 V / 5.2 V
Load Transient Recovery Time (no load to full load change condition)	1 ms

Auxiliary Power Vaux-12V / Vaux+12V, Vaux+3.3V

Maximum Current	1 A / 1 A / 4 A
Load Dependent Switching Frequency	600 Hz ... 130 kHz
Efficiency	80%
Max. Output Ripple and Noise (0-20 MHz Bandwidth)	< 120 mVpp / < 50 mVpp / < 50 mVpp
Load Transient Recovery Time (no load to full load change condition)	1 ms
MIL Standard Compliance	as per VITA 62 specification
MIL-STD-461F (EMI) Compliance	Designed (to be tested) in compliance with sections CE102, CS101, CS114, CS115, CS116. See user manual for more details.
MIL-STD-704F Compliance	Designed (to be tested) in compliance for normal transients (LDC105), abnormal transients (LDC302) and distortion spectrum (LDC103). External hold-up circuit optional. See user manual for more details.
MIL-STD-1275D Compliance	Designed (to be tested) in compliance for MIL-STD-1275D 5.3.2.2 Exported Voltage Spikes, MIL-STD-1275D 5.3.2.3 Imported Voltage Spikes (Normal Mode & Generator Mode), MIL-STD-1275D 5.3.2.4 Imported Voltage Surges (Normal Mode & Generator Mode) and MIL-STD-1275D 5.3.2.5 Imported Ripple Voltage. See user manual for more details.
Compatibility / Environmental	VDE 0805, IEC 950

Environmental	With standard acrylic conformal coating to withstand sand, dust and salt atmosphere.
Communication / Firmware Features	
Communication interface	I2C communication interface via SM0 (C5) and SM1 (D5). Additional I2C connection at UD0 (A1) and UD1 (B1) is set by internal jumper (can be removed by factory). USB port (Micro B USB 2.0 connector)
Communication Features (as per FW revision 3.0.6843.0 and higher)	• Remote On / Off • DC-IN status and measured voltage and current • Global status, Temperatures • Voltage, current and status of individual output power modules • Programmable Limits and trip conditions / actions • Optional Battle Short Mode (trip disabled)

W-IE-NE-R VPX I2C TOOL

File Calibration Trace Commissioning Settings Info

USB Device connected

USBConnection
☒ Disconnect USB 1 USB Device(s) Available
W-IE-NE-R VPX, USB S/N: 4380138, PID: 0018, V
0 W-IE-NE-R VPX 4380138

USB Read Errors: 0 USB Checksum Errors: 0
USB Write Errors: 0 USB Global Errors: 0

I2C Connection
☐ Connect I2C
I2C Unavailable
No Informations available

Options
☒ Data logging

12V Main (PO1)	Switch 12V Main (PO1)	U[V]	11.993	I[A]	6.727	T[°C]	44.000	Running
5V Main (PO3)	Switch 5V Main (PO3)	U[V]	5.001	I[A]	19.414	T[°C]	42.000	Running
3V3 Main (PO2)	Switch 3V3 Main (PO2)	U[V]	3.282	I[A]	9.746	T[°C]	41.000	Running
VIN	Switch VIN Off	U[V]	27.383	I[A]	9.592	T[°C]	0.000	Running
-12V AUX	Switch -12V AUX Off	U[V]	-11.994	I[A]	0.487	T[°C]	0.000	Running
3.3V AUX	Switch 3.3V AUX Off	U[V]	3.344	I[A]	1.935	T[°C]	0.000	Running
+12V AUX	Switch +12V AUX Off	U[V]	11.971	I[A]	0.494	T[°C]	0.000	Running

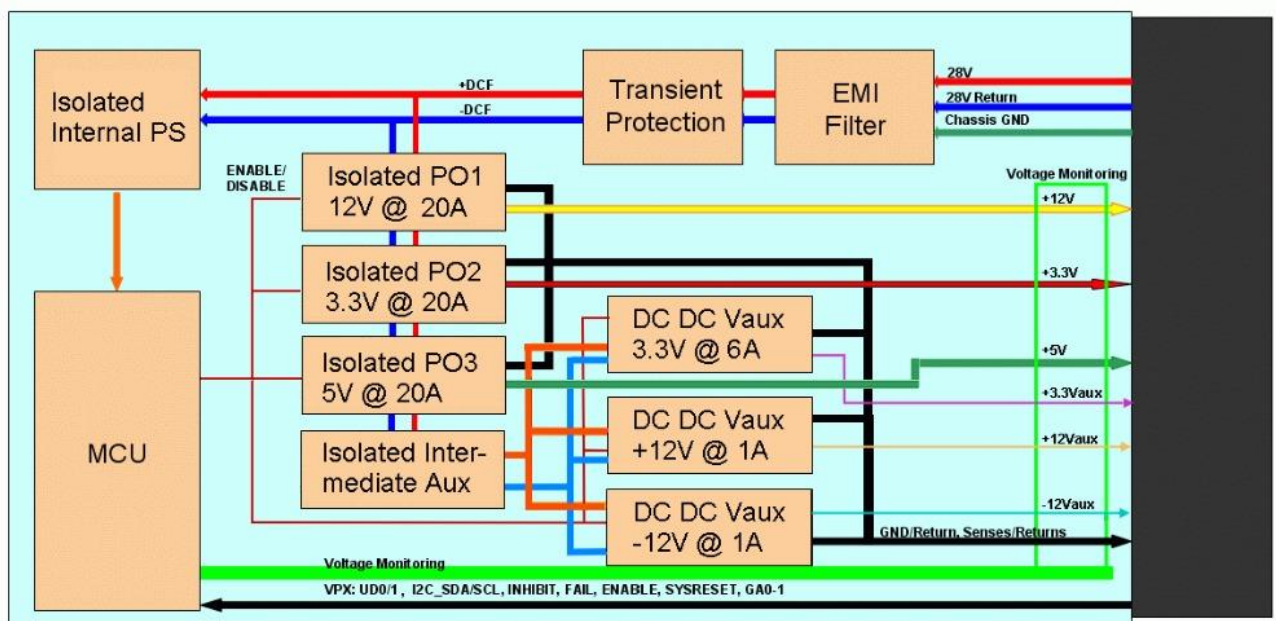
Global Error Counter: 0 Efficiency 86.796%

PO On AUX On No Failure

Turn Main OFF Turn Aux Off

USB Write + Read Success

Start Read Stop Read



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