

FEATURES

- Wide Input Range
- High Power DC Outputs
- Efficiency of 87% typical
- Conduction Cooled at Card Edge
- Conformal Coating on PCB
- Remote Sensing on Main Outputs
- Load Sharing on Main Outputs
- Redundancy on Main Outputs



6U VITA 62 Compatible High Power Multi-Output Power Supply

The Behlman VPXtra®1000CM5 COTS DC to DC power supply is a rugged, highly reliable, conduction cooled, switchmode unit built for high-end industrial and military applications. The VPXtra®1000CM5 is a 6U power supply that operates from a 28 VDC input IAW MIL-STD-704E and delivers 1000 Watts of DC power via five outputs. The main outputs can be paralleled with those of other VPXtra®1000CM5 power supplies for higher power and redundancy.

The VPXtra®1000CM5 power supply has no minimum load requirement and has overvoltage and short circuit protection as well as over current and thermal protection. The power supply is designed to support the rigors of mission critical airborne, shipboard, vehicle and mobile applications.

Designed and manufactured with *Xtra-Cooling* technology, *Xtra-Reliable* design and *Xtra-Rugged* construction, Behlman's VPXtra®1000CM5 is the best choice for your power supply needs.

INPUT

Voltage: 18 to 36 VDC

OUTPUT

Power: 1000 Watts †

Voltage/Current:

PO1/PO2 +12 VDC +/- 1.5% @ 45 Amps

PO3 +5 VDC +/- 1.5% @ 80 Amps

Auxiliary: 3.3 VDC +/- 1.5% @ 15 Amps

Auxiliary: -12 VDC +/- 2% @ 1 Amp

Auxiliary: +12 VDC +/- 2% @ 1 Amp

Line Regulation: 0.25% max

Load Regulation: 0.25% max (PO1/PO2 and PO3)

1.5% max (Auxiliary outputs)

PARD-Ripple & Noise: 120mV p-p (12V Outputs)

50mV p-p (+5V Output)

33mV p-p (3.3V Aux Output)

0 - 20 MHz Bandwidth

Efficiency: 87% typical, 84% minimum

PROTECTIVE CIRCUITS

Over Voltage: 120% typical

Over Current: 120% typical

Short Circuit: Automatic recovery

Over Temperature: Shutdown w/ auto recovery

CONTROLS

INHIBIT*: (IAW VITA 62.0) Output Off - active low

ENABLE*: Input On - active low

INDICATORS

DC IN OK: Green

DC OUT: Green

OUT FAULT: Red

TEMP ALERT: Yellow

† Power derating may be required below 20VDC input at high rail Temperatures; consult product data sheet for details.

GENERAL CHARACTERISTICS

Isolation:

Input to Output: 500 VDC

Input to Case: 500 VDC

Output to Case: 500 VDC

MTBF: 208,185 hrs G_F @ 55°C,
IAW MIL HDBK-217F Notice 2

MECHANICAL (1.0 inch pitch)

See O&C drawing OC94079-10 for connector details
and pin assignment

Dimensions: 9.19"L x 6.64"W x .97"H

Weight: 3.5 lbs

Input Connector: P0, TE P/N: 6450833-7

Output Connector: P1, TE P/N: 6450839-6

ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ECC4SL1)

Temperature

Operating:

-40°C to +71°C @ 1050W

-40°C to +85°C @ 790W

Storage:

-55°C to +105°C

Designed to meet the following:

EMI:

MIL-STD-461G (Aircraft)

external filter required

Shock:

VITA 47.1 Class OS2

Vibration:

VITA 47.1 Class V3

Humidity:

VITA 47.1, up to 95% RH

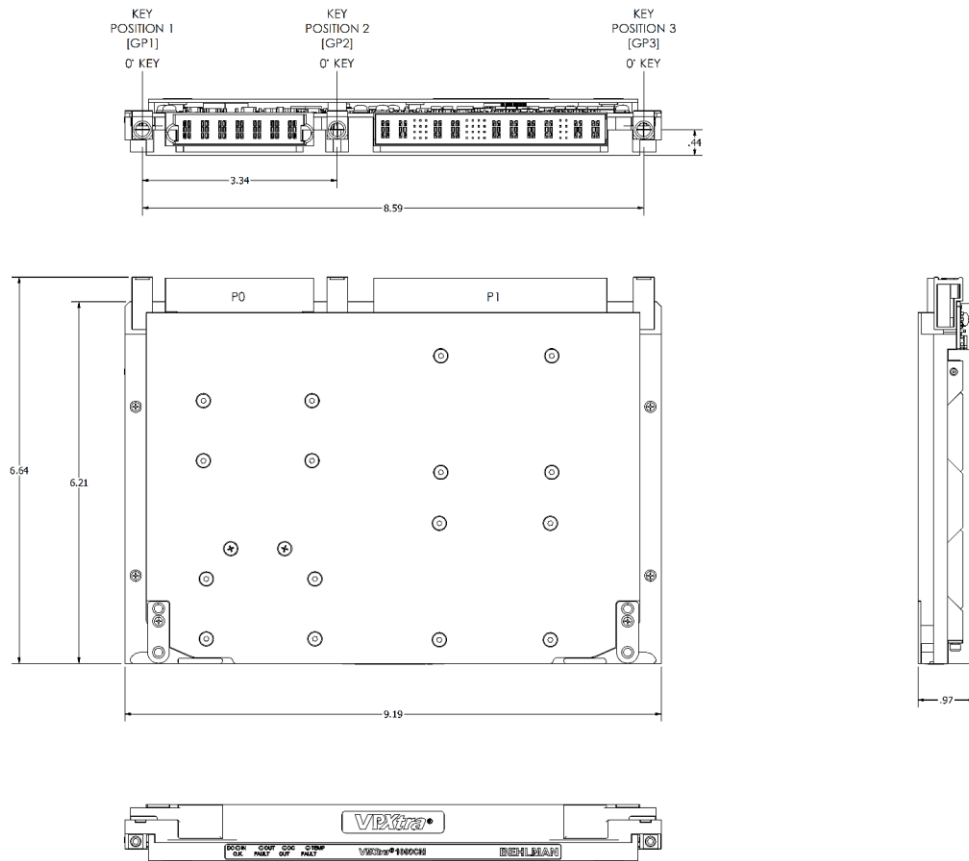
Altitude:

-1,500 to +60,000 ft.

Salt Fog:

VITA 47.1, Class SL1

For more detail, see VPXtra® 1000CM5 Data Sheet



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VPX is a trademark of VITA



VITA Member

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