

#### FEATURES

- Open VPX VITA 62 compliant
- Wide input range
- High power DC output
- Efficiency of 90% typical
- Conduction cooled at card edge
- Conformal coating on PWA



#### 3U Open VPX VITA 62 High Power Multi-Output Power Supply

The Behlman VPXtra®500M COTS DC to DC power supply is a rugged, highly reliable, conduction cooled, switch mode unit built for high-end industrial and military applications. The VPXtra®500M is a VITA 62, Open VPX compliant, 3U power supply that delivers 560 Watts of DC power via six outputs. The 12V, 3.3V, and 5V main outputs can be paralleled for higher power. The VPXtra®500M can accept a 28 VDC input, IAW MIL-STD-704, and can supply a high power DC output at various power levels.

The VPXtra®500M 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*, *Xtra-Reliable Design* and *Xtra-Rugged* construction makes the Behlman VPXtra®500M your best choice.

#### INPUT

**Voltage:** 18 to 36 VDC  
Operates below 22 VDC  
with de-rating

#### OUTPUT

**Power:** 560 Watts

**Voltage/Current:**

- VS1** 12 VDC +/- 1% @ 25 Amps
- VS2** 3.3 VDC +/- 1% @ 15 Amps
- VS3** 5 VDC +/- 1% @ 40 Amps
- Auxiliary:** 3.3 VDC +/- 1% @ 1 Amp
- Auxiliary:** -12 VDC +/- 1% @ 0.375Amps
- Auxiliary:** +12 VDC +/- 1% @ 0.375 Amps

**Line Regulation:** 0.5% maximum

**Load Regulation:** 2.0% maximum (0-100%)

**PARD-Ripple & Noise:** 50mV p-p (0-20 MHz) for 3.3V and 5V outputs.  
120mV p-p for 12V and +12/-12V auxiliary outputs.

**Efficiency:** 90% typical, 50-100% load

#### PROTECTIVE CIRCUITS

**Over Voltage:** 120% typical

**Over Current:** 120% typical

**Short Circuit:** Automatic recovery

**Over Temp:** Shutdown

#### CONTROLS (IAW VITA 62)

**Inhibit:** Output Off- active low

**Enable:** Input On- active low

#### INDICATOR

**DC STATUS LED:** Bi-color LED (Red/Green)

### GENERAL CHARACTERISTICS

#### Isolation:

Input to Output: 500 VDC

Input to Case: 500 VDC

Output to Case: 500 VDC

MTBF: 1,100,000hrs G<sub>b</sub> @ 50°C,  
IAW MIL HDBK-217F Notice 2

### ENVIRONMENTAL

#### Temperature at card edge (IAW VITA 47)

Operating: -40°C to +85°C

Storage: -55°C to +105°C

### MECHANICAL (1.0 inch pitch)

See O&C drawing 24163 for connector details and pin assignment

Dimensions: 3.94"W x 6.63"L x .97"H

Weight: 1.8 lbs.

Connector: TE P/N: 6450839-7

### COMPLIANCE

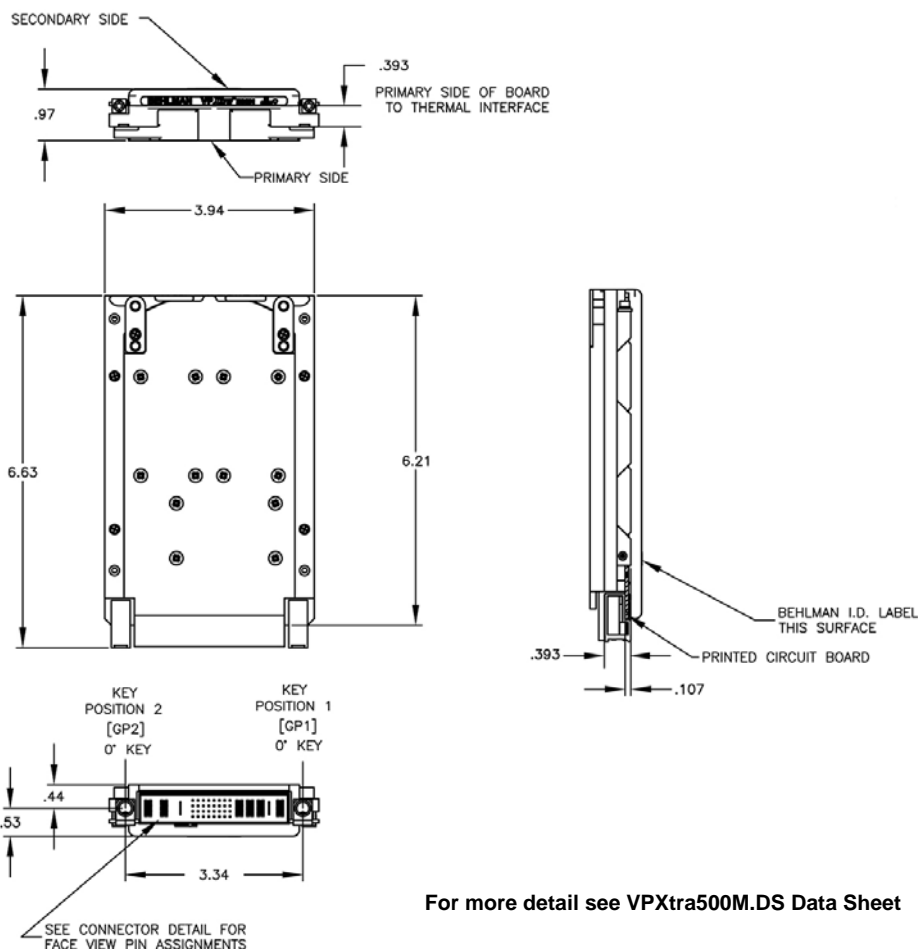
EMI (MIL-STD-461): CE102

Designed to meet the following:

Shock: VITA 47 Class OS2

Vibration: VITA 47 Class V3

Humidity: VITA 47



For more detail see VPXtra500M.DS Data Sheet



VITA Member

[www.behlman.com](http://www.behlman.com)

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