

### FEATURES

- Wide Input Range
- High power DC Outputs
- High Efficiency – 85% Typical
- Conduction Cooled at Card Edge
- Conformal Coating on PWA
- Load Sharing on +12V Main Output
- Remote Sense on +12V Main Output
- Redundancy on All Outputs



### 6U VPX High Power Multi-Output Power Supply

The Behlman VPXtra®1000HM1 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®1000HM1 is a 6U VPX power supply that accepts 270 VDC input IAW MIL-STD-704F and delivers up to 873W Watts of DC power via three outputs. All outputs may be paralleled for redundancy, with passive load sharing provided on the +12V main output for increased output power.

The VPXtra®1000HM1 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 makes the Behlman VPXtra®1000HM1 your best choice.

#### INPUT

**Voltage:** 240 to 290 VDC

#### OUTPUT

**Power:** 873 Watts †

#### Voltage/Current:

**PO1/PO2/PO3** +12 VDC @ 70 Amps

**3.3V\_AUX** 3.3 VDC @ 15 Amps

**5V\_AUX** 5.0 VDC @ 5.5 Amps

**Line Regulation:** 0.5% Max (All Outputs)

#### Load Regulation:

**PO1/PO2/PO3** +/- 2.5% Max

**3.3V\_AUX** +/- 2.0% Max

**5V\_AUX** +/- 3.0% Max

#### PARD-Ripple & Noise:

**PO1/PO2/PO3** 120mV p-p Max

**3.3V\_AUX** 50mV p-p Max

**5V\_AUX** 100mV p-p Max

20 MHz Bandwidth

**Efficiency:** 85% typical, 50-100% load

#### PROTECTIVE CIRCUITS

**Overvoltage:** 120% typical

**Overcurrent:** 120% typical

**Short Circuit:** Shutdown w/Auto Recovery

**Overtemperature:** Shutdown w/Auto Recovery

#### CONTROLS (IAW VITA 62.0)

**INHIBIT\*:** Output Off- active low

**ENABLE\*:** Input On- active low

#### INDICATORS

**OUTPUT OK:** Bi-Color LED (Red/Green)

**INPUT OK:** Green LED

**OVERTEMP:** Yellow LED

† Output power derated at -25W/°C from 70°C to 85°C

## GENERAL CHARACTERISTICS

### Isolation:

**Input to Output:** 1500 VDC  
**Input to Case:** 1500 VDC  
**Output to Case:** 500 VDC

## MECHANICAL (1.0 inch pitch)

See O&C drawing OC94103-2 for connector details and pin assignments

**Dimensions:** 9.19"L x 6.64"W x .97"H  
**Weight:** 4.0 lbs. maximum  
**Input Connector:** P0, TE P/N: 6450833-7  
**Output Connector:** P1, TE P/N: 6450839-6

## ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ECC4SL 1)

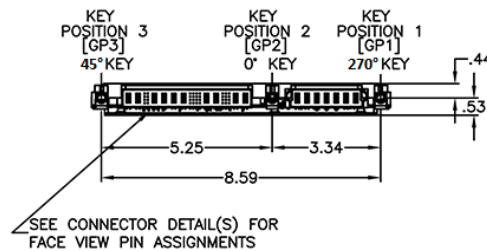
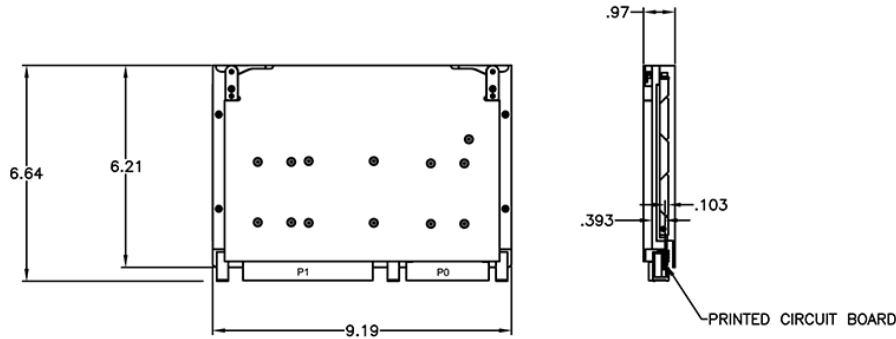
### Temperature

**Operating:** -40°C to +85°C  
**Storage:** -55°C to +105°C  
**Altitude:** -1,500 to +60,000 ft.

### Designed to meet the following:

**EMI:** CE102, CS101, CS114, CS115, CS116, RS101, RS103  
 IAW MIL-STD-461  
**Shock:** VITA 47 Class OS2  
**Vibration:** VITA 47 Class V3  
**Humidity:** VITA 47.1, up to 95% RH  
**Salt Fog:** VITA 47.1, Class SL1  
**MIL-STD-704F:** Including operation through normal transients

For more detail, see VPXtra®1000HM1 Data Sheet



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VITA Member

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