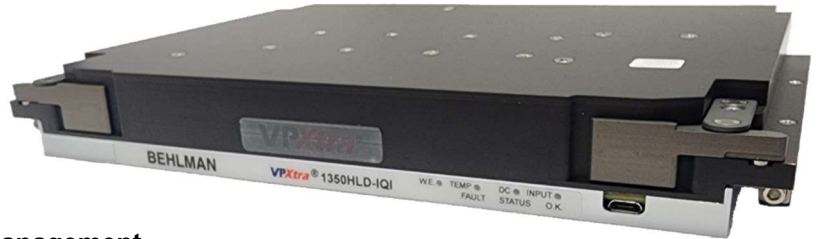


FEATURES

- Developed in Alignment with the SOSA™ Technical Standard
- Three-Phase AC Input or 270VDC Input
- High power DC outputs
 - +12V / 110A
 - 3.3V_AUX / 10A
- High Efficiency
- Liquid Flow-Through Cooling
- Conformal Coating on PCB
- Remote Error Sensing on All Outputs
- Redundancy on All Outputs
- VITA 46.11 Compatible IPMC for System Management



6U VPX High Power Dual-Output Power Supply

The Behlman VPXtra®1350HLD1-IQI COTS DC to DC power supply is a rugged, highly reliable, switchmode unit developed in alignment with the SOSA™ Technical Standard for high-end industrial and military applications. The VPXtra®1350HLD1-IQI is a 6U VPX power supply that accepts either 115/200 VAC, 3-phase or 270VDC input IAW MIL-STD-704F and employs liquid flow-through cooling IAW VITA 48.4 to deliver up to 1350 Watts of total DC power via the +12V main and 3.3V_AUX outputs. Both outputs may be paralleled with those from similar VPXtra models with load sharing provided to facilitate two or more units paralleled for higher output power and/or redundancy. The VPXtra®1350HLD1-IQI also contains a VITA 46.11 compatible IPMC for integration with system management functions.

The VPXtra®1350HLD1-IQI 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®1350HLD1-IQI your best choice.

INPUT AC

Voltage: 100-125VAC, L-N, 3-phase
Frequency: 360-800 Hz

INPUT DC 240-290VDC

OUTPUT

Power: 1353 Watts
Voltage/Current:
 PO1/PO2/PO3 +12 VDC @ 110 Amps
 3.3V_AUX: +3.3 VDC @ 10 Amps
Line Regulation: 0.5% max
Load Regulation: ±2.5% max (+12V output)
 ±0.5% max (3.3V_AUX output)
PARD-Ripple & Noise: 120 mV p-p (+12V output)
 50 mV p-p (3.3V_AUX output)
 20 MHz Bandwidth
Sharing: +12V: Droop Sharing
 3.3V_AUX: Active Sharing
Efficiency: 87% typical, 85% minimum
 50-100% of rated load power

PROTECTIVE CIRCUITS

Overvoltage: 120-130% typical
Overcurrent: 115 - 190% typical
Short Circuit: Automatic Recovery
Overtemperature: Shutdown w/Auto Recovery

CONTROLS (IAW VITA 62.0)

INHIBIT*: Output Off - active low
ENABLE*: Input On - active low

INDICATOR

DC STATUS LED: Bi-Color LED (Red/Green)

SYSTEM MANAGEMENT

VITA 46.11: IPMC
I2C Reporting: Dual Bus (IPMB-A, IPMB-B)
Reports: Input and Output Voltages
 Input and Output Currents
 Internal Temperature (3 places)

Consult product data sheet for details

GENERAL CHARACTERISTICS

Isolation:

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

MTBF: *t*bd hrs G_F @ 55°C,
 IAW MIL HDBK-217F Notice 2

MECHANICAL (1.2 inch pitch)

See O&C drawing OC94120 for connector details and pin assignment

Dimensions: 9.18"L x 6.74"W x 1.17"H

Weight: 5.0 lbs MAX

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

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

ENVIRONMENTAL COMPLIANCE

(IAW VITA 47.1 Class ELC4SL1)

Inlet Coolant Temperature

Operating: -40°C to +50°C @ full power
 (up to 70°C with power derating)
 -55°C to +85°C air ambient
 (*presumes glycol/water coolant, DOWCAL 100 or similar*)

Storage: -55°C to +105°C

Altitude: -1,500 to +60,000 ft.

Shock: VITA 47.1 Class OS2

Vibration: VITA 47.1 Class V3

EMI: MIL-STD-461G: CE102,
 CS101, CS114, CS115, CS116

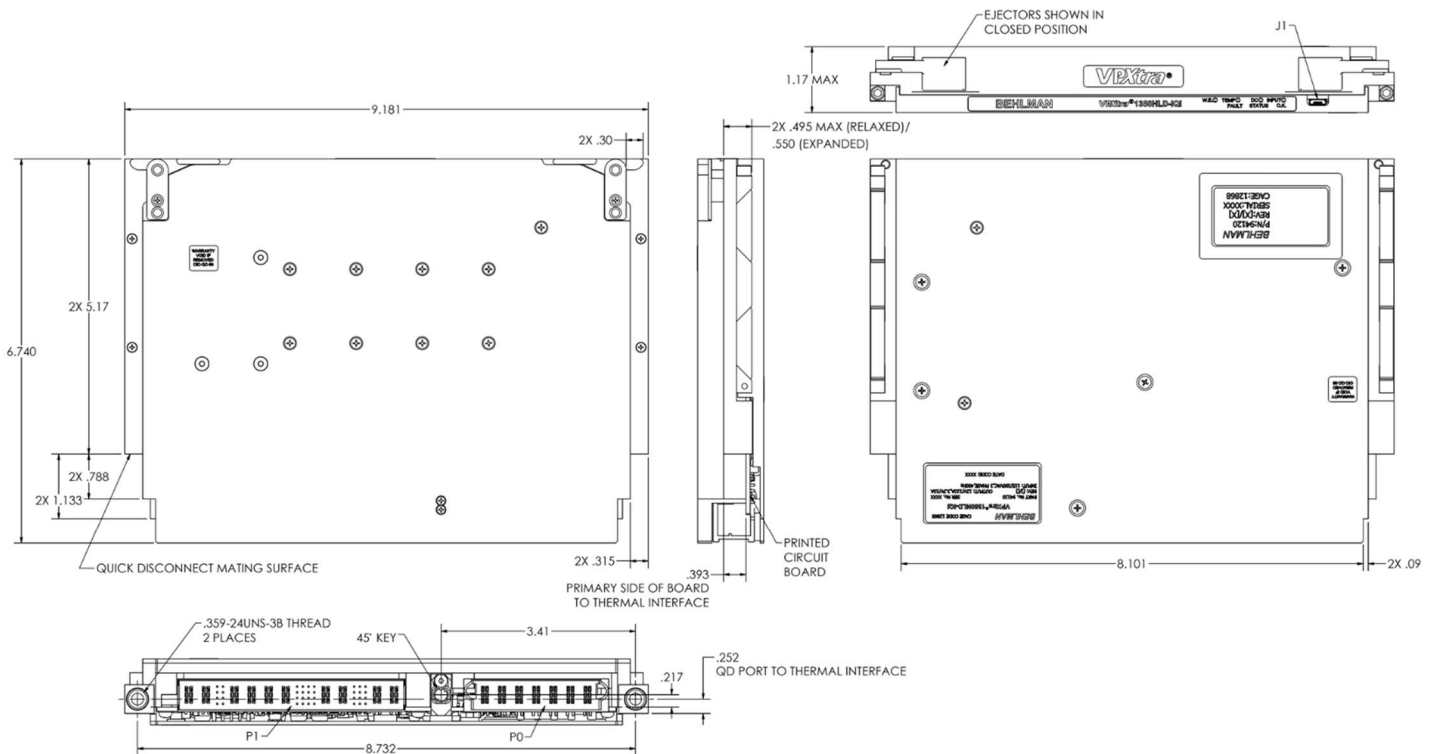
Designed to meet the following:

Humidity: VITA 47.1

Salt Fog: VITA 47.1, Class SL1

MIL-STD-704F: Including operation through normal and abnormal transients

For more detail, see VPXtra® 1350HLD1-IQI.DS Data Sheet



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