# mercury

# PSU-1449 3U OpenVPX Power Supply with BuiltSAFE®

# Power and certify 3U mission computers up to DAL-A



- Up to 220 W output, 5 output channels
- 16–60 V DC Input
- MIL-STD-704F, -40°C to 85°C

## **TECHNICAL SPECIFICATIONS**

#### Power Supply

28 V DC power supply

+12 V, +3.3 V, +5 V, +3.3 V AUX and -12V AUX

Efficiency: @Vin=28 V, Pout=220 W >85%

Built-in input filter to reduce conducted emissions

Connector pinout mapped to VITA 62 standard

ENABLE\* and INHIBIT\* signals according to VITA62 standard

#### **Monitoring Features**

FAIL\* signal if PCB goes over temperature

Two LEDs located on the ejector edge: 28 V input OK (green) and FAIL\* (red)

SMO/SM1 interface to access EEPROM, Elapsed time counter (ETC) and PCB temperature

### BuiltSAFE® Proven Elements

DO-254 hardware

Design and information assurance

- Rugged and efficient
- Safety certifiable up to DAL-A with DO-254 artifacts

#### Mechanical

3U OpenVPX, 1.0" slot pitch, VITA 65 ANSI/VITA 62 modular power supply

### **Rugged and Efficient**

standard (1.0" pitch)

MIL-STD-704F 20 W typical power consumption 4.7 W minimum, 45 W maximum

Temperature:

Non-operating: -55°C to 105°C

Operating: -40°C to 85°C

Humidity: 95%

Fungus resistance

IPC-A-610 class 3 workmanship

IPC J-STD-001 class 3 soldering

IPC-A-600 class 3 PCB manufacturing

IPC-CC-830 conformal coating

REACH compliant, ROHS variant option

UL 94 Class V-0 flammability

EN 9100:2008

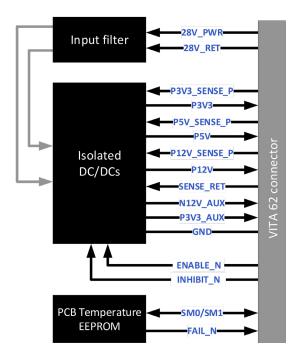
Conduction cooled

Advanced rugged packaging options





### PSU-1449 Block Diagram



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