ISOLATED POWER SUPPLY

15V TO 36V, MIL-STD-1275/704/461



DESCRIPTION

This rugged isolated power supply is capable of supplying up to 100 watts of power output for a range of sensitive defense applications as well as industrial applications. Its form factor allows it to work as a standalone unit or as a non-stack through PCI/104 supply. It is ideal for compact small form factor (SFF) systems designed for long term reliability in tough environments that demand input / output voltage isolation. For critical power conditioning in defense applications, the supply meets the power isolation requirements of MIL-STD-1275D, MIL-STD-704F and MIL-STD-461F over an input voltage spread of 15V to 36V.





Front View

Rear View

Features

- Non-stack through PCI/104 or standalone operation
- Ideal for use in non PCI/104 system architectures using discrete connectors for power distribution
- 15V to 36V DC input (operation to 13.7V after start up >=14.7V)
- MIL-STD-1275D, 704F, 461E and 810G compliant
- -40°C to 85° C extended operating temperature

Benefits

- Applicable to a wide range of SFF systems
- Access to Elma's integration and packaging experts for complete system level design and integration support

APPLICATIONS

The rugged isolated power supply is ideal for use in SFF systems targeted for space constrained installations in demanding environments common in defense and industrial applications. Ideal for air and ground based vehicular defense equipment requiring stringent signal isolation.

RELATED PRODUCTS









- > Rugged and industrial system enclosures
- > Thermally conductive card edge retainers.
- > Small form factor building blocks; carrier cards, I/O cards, power supply options

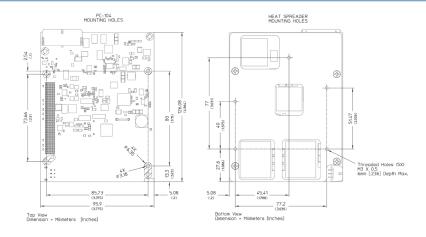
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LINE DRAWING

Designed for PCI/104 standard connectivity. Some dimensional deviations apply as shown here



SPECIFICATIONS

Input / Output

Voltage Input: Nominal 28.0 V DC

Defense/Industrial: (15V to 36V DC with support for +/- 250V spike and 100V surge per MIL-STD-1275D)

Voltage Output: +3.3V@10A, +5VS@5A, +5V@15A, +12V@8.3A, -12V@700mA(Optional)

Isolation: 1500V Galvanic Isolation DC

Input protection: Reverse Polarity, Voltage Transient, Surge, Spike, Over current

Output Protection: Overcurrent protection

ATX compliant signals available : PWRGD & PS-ON#

Surge and Spike Protection: MIL-STD-1275D

Input Transients: MIL-STD-704F EMI filter: MIL-STD-461F

Environmental

Operating temperature: -40°C to 85°C/-40°F to 185°F (MIL-STD-810G, Methods 501,502)

Storage temperature: -40°C to 85°C/-40°F to 185°F (MIL-STD-810G, Methods 501,502)

Operating shock: 40g, 11ms (MIL-STD-810G, Meth 516)
Crash Hazard Shock: 75g, 6ms (MIL-STD-810G, Meth 516)
Random vibration: 10Hz to 2000Hz (MIL-STD-810G, Method 514)

Humidity: Up to 95% RH @40°C, Non-condensing (Conformal Coated)

Operational Altitude: Up to 15,000 feet (4,572 meters) MIL-STD-810G, Method 500

ORDER INFORMATION

Description	Model Number
Small form factor power supply for non-stack through PCI/104 use or standalone operation	PCI104-SFF-IPSU
Small form factor power supply for non-stack through PCI/104 use or standalone operation. Conformal coated	PCI104-SFF-IPSU-C

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