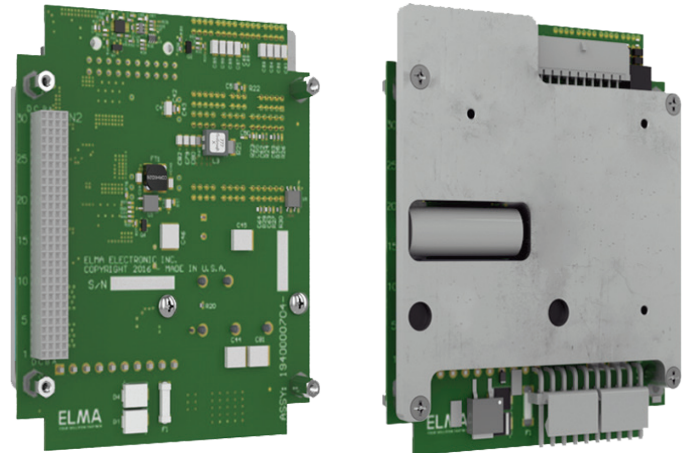


ISOLATED POWER SUPPLY

16.5V TO 50V, MIL-STD-1275/704/461

DESCRIPTION

This rugged isolated power supply is capable of supplying up to 120 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 power supply 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 requirements in defense applications the isolated power supply is MIL-STD-1275D, MIL-STD-704F, MIL-STD-461F and MIL-STD-810G compliant with an input voltage spread of 16.53V to 50V. The isolated power supply also meets the requirements of rugged industrial applications as well.



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
- 16.53V to 50V DC input
- MIL-STD-1275D, 704F, 461F and 810G compliant
- Integrated heat spreader (separate heat spreader required)
- -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

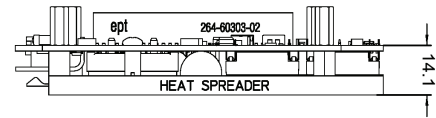
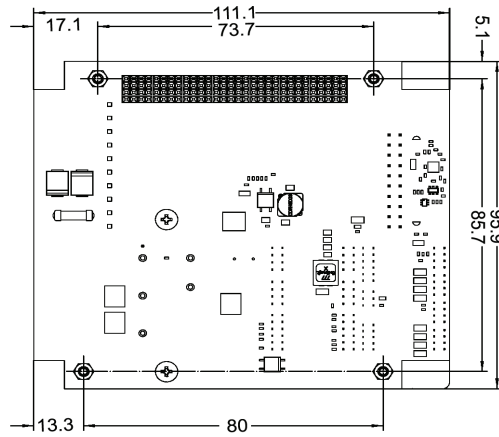
- › Rugged and industrial system enclosures
- › Thermally conductive card edge retainers.
- › Small form factor building blocks; carrier cards, I/O cards, power supply options

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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: 16.53V to 36V DC with support for +/- 250V spike and 100V surge per MIL-STD-1275D
 Voltage Output: V1 = 5V/10A , V2 = 3.3V/10A, V3 = 12V/10A, V4 = 5V/15A, -12V/0.6A (Optional) (Total Max Wattage = 120W)
 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. 16.53V to 36V	PCI104-SFF-IPSU-16-50
Small form factor power supply for non-stack through PCI/104 use or standalone operation. 16.53V to 36V. Conformal coated	PCI104-SFF-IPSU-16-50-C
Aluminum heat spreader for added thermal conductance	CAE052131
Copper heat spreader for enhanced added thermal conductance	CAE052126

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