

MESHnet® V6 PDU-SFF

Small Form Factor Power Management and Distribution



Scalable Power Management Solution

The MESHnet® V6 PDU-SFF is a right sized power management solution ensuring consistent and clean power distribution in a package designed and qualified to meet exacting military specifications for harsh environments & punishing usage.

Installations can be scaled to any role or fitted systems. Daisy chaining units allow expansion for complex platforms and applications.

Fitted with an optional TEMPEST filter, the PDU-SFF powers sensitive communications systems. Filtering is required to prevent the transfer of electronic information back onto the platform power grid.

Features:

- Qualified to Military Standard 1275B (MIL-STD-127B) for power
- Rated distributions is (up to) fifty amperes (50A) of twenty eight volts of direct current (28 VDC)
- Offers over current protection, surge suppression, and reverse polarity protection (disables power if battery connection are reversed)
- Small form factor lowers footprint, saving valuable platform space

Interfaces

- J1: Power Input 15 to 40 VDC (MIL-STD-1275B)
- J2 to J6 – 25A general purpose outlets
- J7 – 15A power outlet (Optional TEMPEST Filtering)
- Toggle – 50A Breaker & On/Off Control Switch

Physical Characteristics

- Height 112 mm (4.41")
- Width 185 mm (7.28")
- Depth 153 mm (6.02")
- Weight 2 kg (4.41 lbs)

Environmental Specifications

- Operating temperature -40°C to +63°C (-40°F to +145°F)
- Storage temperature -51°C to +71°C (-60°F to +160°F)
- MIL-STD-810D tested for vibration (wheeled and tracked), transit drop, shock, salt fog, sand and dust, fluid contamination, NBC decontamination, immersion, fungus and altitude

Electromagnetic Effects:

- MIL-STD-461E compliance for Electrostatic Discharge (ESD) and TEMPEST
- MIL-STD-1686C compliance for Army Ground Electronic Discharge (ESD)

Power:

- Maximum load 50A DC
- Maximum input/output voltage drop: 0.5 VDC on general purpose outlets; 1.0 VDC on filtered output

Reliability:

- Mean Time Between Failure (MTBF) greater than 82,000 hours
- Mean Time To Repair (MTTR) Level 1 and 2 (Platform): 10 minutes; Level 3: <2 hours

Best-of-Breed Confidence

General Dynamics is a distinguished worldwide provider of ruggedized electronic equipment designed and qualified to withstand operation in the most extreme environments. Our products are field proven and trusted globally for robustness and reliability.

For more information and to learn how General Dynamics can enhance your mission profile effectiveness, please visit: www.gd-ms.ca

The product described here represents a general configuration of this family of products. Specifications are configurable for specific customer requirements. For pricing and availability please contact your General Dynamics representative.