

Miniature Portable Communication and Energy Grid for the Digital Soldier

PRODUCT DATASHEET

FEATURES

PORTS:

- 4 x switched 10/100 (Fast Ethernet) ports
- 4 x USB 2.0 ports
- 2 x Audio ports
- 3 x Smart Batteries (SMBUS)
- 3 x Power distribution for different devices
- 1 x External power source input
- 16 x Digital global purpose I/O.

POWER SYSTEM

- Providing power and SoC for 3 devices (via SMBUS)
- Power Consumption: Idle: Micro Watts, Operation: 3W Max,
- Total System Power: Up to 20Watts
- Voltage: 8-18 VDC, Current: 1A, (2A picks)
- Single Battery can support all devices.
- Supports Load Sharing, Hot Swap, None identical batteries,
- Support 3 Smart batteries from 8 VDC to 18 VDC
- Supports internal Smart Chargers for 3 batteries
- External power 24 VDC (18 ~ 32VDC) for system charge
- Supports Fast Charge at 3A, Slow charge at 1A
- Over Voltage, Over Current and Over Temp. protections

CONNECTORS:

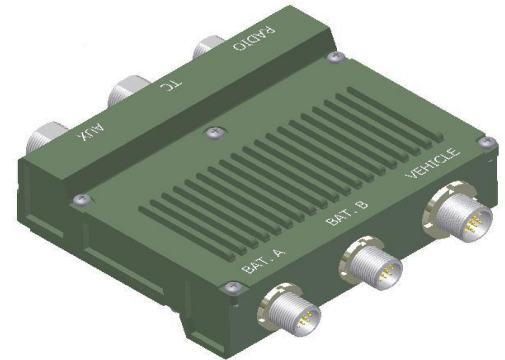
- MIL-D-38999 (Power, Ethernet, USB, Audio, GPIO signals)

CHASSIS:

- Conductively cooled w/custom internal heat-sinks
- Ingress protection against sand, dust and moisture
- Anodize Coating, MIL-A-8625, Type II, Class 2

STANDARDS:

- MILSTD-1275, MILSTD-461E, MILSTD-810F GM, IP68



PRODUCT DESCRIPTION

Techaya's MILPOD™ is an energy grid solution combined with LAN, USB and serial communication for supplying full power energy and communication to foot and dismounted soldiers. The MILPOD™ was specifically designed to outfit soldiers for the digital battlefield by creating lightweight, fully integrated infantry combat systems.

Techaya offers a range of light-weight adaptable systems that are ideally suited for frontline forces in the most complex operational scenarios. The design was inspired by activities in the modern battlefield. This new and unique concept forms the basis for the energy supply system along with all required communication at a tiny size and low weight that can be carried in smart combat vest solutions by soldiers.

The digital soldier is fully equipped advanced weapon and communication systems. He is outfitted with a multitude of electronic devices, such as a navigation systems, battery packs, headsets, warning sensors, video visor for weapons, night vision glasses and many more items necessary for “modern” warfare. All of these devices have to be connected and powered by means of top quality, reliable connection systems and the MILPOD™ does it all.



PRODUCT SPECIFICATIONS

PERFORMANCE:

- 128K Byte of SRAM for Frame Buffering
- 2.0Gbps High-Performance Memory Bandwidth
- Auto MDI-X and Auto-Negotiation on all ports
- Wire-Speed Reception and Transmission
- Programmable FPGA and Digital I/O

STANDARDS COMPLIANCE:

- IEEE 802.3, IEEE 802.3u 10BASE-T, 100BaseTX
- IEEE 802.3x Flow Control
- USB 2.0
- SMBUS V.2.0

POWER:

- MIL-STD-1275B & MIL-STD 704A Surge and Spike protection
- Voltage Input: 24Vdc Nominal (18-32V)
- Power Consumption: 2.8W Typical

ELECTROMAGNETIC:

- MIL-STD-461E Electromagnetic compatibility
- RE-02, RS-03

SHOCK/VIBRATION/HUMIDITY:

- MIL-STD-810F, 501.4I, 501.4II, 502.4I, 502.4II, 507.4, 500.4II, 514, 516I, 516Vi, 514.5, 512.4.
- IP68

PHYSICAL:

- Dimensions: 83mm (L) x 104(W) x 36(H), including connectors & hardware
- Weight: 150g
- Connectors: 3 x Consumers, 2 x Batteries, 1 x External Power (Total of 6 Connectors)

INSTALLATION:

- Set of mounting ears on bottom for mounting to any flat surface..

COOLING:

- No Moving Parts. Passive Cooling

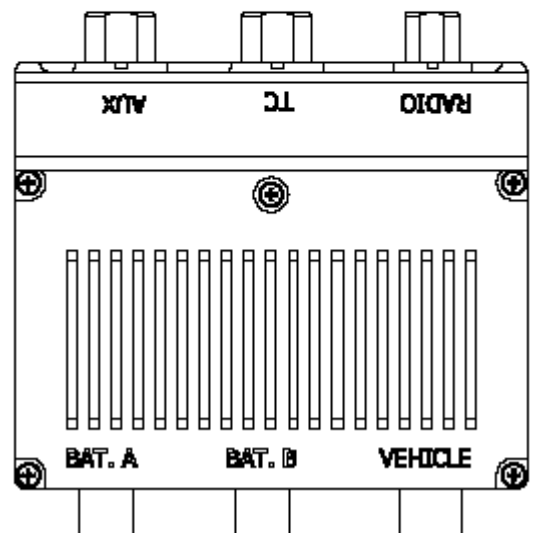
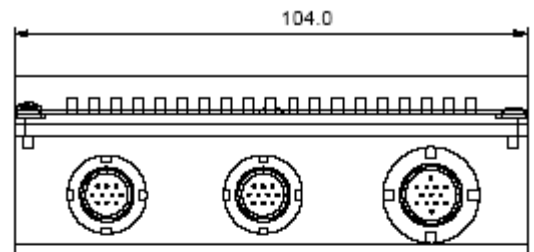
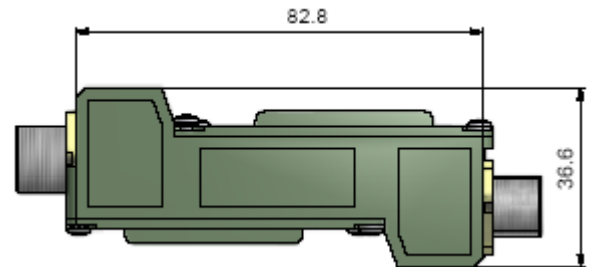
OPERATING TEMP:

- -35°C to +75°C (-31°F to +167°F) – Cold Start-Up

STORAGE TEMP:

- -45°C to +85°C (-49°F to +185°F)

Dimensional Line Drawing



*All measurements are in millimeters

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
MILPOD	MILPOD - Military Rugged portable communication and energy grid
MILPOD-CBL	Starter Cable set for MILPOD device, MIL-D-38999 to RJ-45 Connectors, 5 feet length