

MESHnet® V6 TMR-308

Enterprise Class L3 Tactical Mobile Router with PNT Replication



Reliable, End-to-End Connectivity

Overcomes challenges associated with high bandwidth overhead by analyzing network feedback to characterize links and deliver information through the most appropriate bearer.

Using advanced protocols, the TMR-308 transfers messages with reliability, efficiency and reasonable latency in the most demanding environments.

Its modular architecture supports the creation of rapid-turn variants to accommodate new functionality and the integration of customer specific capabilities via Linux OS and internally programmable System-On-Chip hardware.

Features

- Quantity (12) Ethernet interfaces up to GigE speed
- Ethernet, RS232, RS422 and USB connectivity
- Radio over IP (RoIP) gateway to join radio networks
- Supports multimedia server to distribution voice, video, chat and data
- Dynamic transport protocol selection based on network characteristics

Interfaces:

- Ethernet:
 - Qty. (12) x 10/100/1000 Mbps
- Audio:
 - Qty. (1) x Audio I/F Port + PTT
- Radio:
 - Qty. (2) x Analog Audio (Voice) + PTT
 - Supports Radio Data via Ethernet and serial
- Serial:
 - Qty. (5) x RS-232
 - Qty. (1) x RS-232/RS-422
 - Qty. (3) x USB 2.0
- Accurate Timing:
 - Qty. (1) 1PPS input
 - NTP supports
 - Qty. (6) 1PPS repeater
- Processing:
 - Qty. (1) x Xilinx Zynq 7000 series FPGA with Dual-core ARM v9
 - Qty. (1) x Dual-core ARMv7
 - Qty. (1) x DSP
 - Qty. (1) x Marvell Advanced L3 Router IC

Display and Controls:

- Built-in Test, Power, and Ethernet status LEDs
- Unit Reset and Backlight mode switches

Physical Characteristics:

- Height 109 mm (4.29")
- Width 180 mm (7.09")
- Depth 152 mm (6.00")
- Weight 2.24 kg (4.95 lbs)

Environmental Specifications:

- -40°C to +63°C (-40°F to +145°F) operating
- -51°C to +80°C (-60°F to +176°F) storage
- 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

Power:

- 24 to 32 VDC (MIL-STD-1275B), Max. consumption 22 Watts

Reliability:

- Mean Time Between Failure (MTBF) greater than 10,000 hours
- MIL-HDBK-217F, Ground Mobile Environment @ 25°C

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 tactical environments. Our MESHnet® Family of products is field proven and trusted globally for robustness and reliability.

General Dynamics products are based on proven, configurable modules and are available in standard or custom configurations. This product sheet describes many of the options for this product family. For availability and details of specific configurations or for custom requirements, please contact General Dynamics.