

# MESHnet® V6 TMR-304

## *Enterprise Class L3 Tactical Mobile Router*



### Reliable Data Prioritization and Distribution

The TMR-304 overcomes challenges associated with high bandwidth overhead, by analyzing network feedback and delivering information through an appropriate bearer.

Transport protocols transfer variable length messages with reliability, efficiency, reasonable latency and end-to-end congestion control.

Disruption Tolerant Networking (DTN) technology provides message delivery mechanisms using store and forward techniques to eliminate end-to-end connectivity.

### Features

- Ethernet RS232, RS422 and USB connectivity
- Radio over IP (RoIP) gateway to join radio networks
- Supports multimedia server for distribution of voice, video, chat and data over high/low bandwidth links
- Disruption Tolerant Networking (DTN) for disrupted paths
- Dynamic transport protocol selection of TCP, UDP, DTN and CFP path on detected bearer

# Technical Information

## Interfaces:

- Ethernet:
  - Qty. (4) x 10/100/1000 Mbps
  - Qty. (4) x 10/100 Mbps
  - Qty. (1) x 10/100 Mbps Isolated
- Audio:
  - Qty. (1) x Audio I/F Port
- Radio:
  - Qty. (6) x Analog Audio (Voice)
  - Supports Radio Data via Ethernet and serial
- Serial:
  - Qty. (6) x RS-232
  - Qty. (1) x RS-232/RS-422
  - Qty. (3) x USB 2.0
  - RS-232 repeater functionality
- Accurate Timing:
  - Qty. (4) x 1 PPS
  - Qty. (9) x PTPv2
  - Optional integrated Chip Scale Atomic Clock (Stratum I)
- Processing:
  - Qty. (1)x Dual-core ARM v9
  - Qty. (1) x Single-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.

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.