

ViDi™ & mViDi™

A Mil-Grade H.264 Video & Telemetry Streamer through tactical narrowband and broadband networks



Real-time streaming video for tactical level armored vehicles and manpack configurations

The complex, rapidly evolving situations that take place at modern battlefields, demand accurate and often instantaneous tactical level decision-making. Visual intelligence, especially when clear and vivid, significantly expands situational awareness and enhances commanders' COA decision, thus enabling swift neutralization of threats and minimization of injury.

To meet these operational needs, Elbit Systems Land and C4I has developed the **ViDi™**—a Tactical Video Streamer for armor vehicle installations, and the **mViDi™**—a lightweight and slim manpack version of the Tactical Video Streamer that's designed for manpack mounting. Both ViDi™ units are part of Elbit Systems' **TMR™**—Tactical Multimedia Routing solution.

The ViDi™ and the mViDi™ deliver reliable real-time streaming video through diverse narrowband and broadband networks for all echelons, enabling the delivery of effective visual intelligence from every video source to any soldier at the battlefield.

ViDi™ & mViDi™

A MIL-GRADE H.264 VIDEO & TELEMETRY STREAMER

Cutting-Edge Capabilities

Utilizing H.264—the most advanced video compression technology, the ViDi™ supports transmission of video streaming over IP broadband radio channel. Notably, the ViDi™ overcomes the significant technical challenges associated with delivering streaming video by serial communication, enabling transmission of video streams through narrowband Combat Net Radio. The sophisticated, fully portable ViDi solution supports half-duplex and full duplex video transmission together with picture telemetry and voice stream, simultaneously.

ViDi™ provides single or dual H.264 video streams, encoded from an analog PAL or NTSC video input. Each stream can be configured to deliver 9.6kbps to 2Mbps at QCIF to 4CIF resolution with low latency.

An internal digital video recording (DVR) capability and an integrated voice channel can be provided as an option.

Both ViDi™ units comply with Mil-Std 810E, Mil-Std 461E. The vehicular version also complies with Mil-Std 1275, for use at the most harsh environments.

Technical Specifications

Key Features:

- Standard H.264 video coding technology
- Up to 2 video streams simultaneously
- Video Stream Bit rate: 9.6 Kbps to 2 Mbps
- Frame rate: Up to 25 fps in PAL or 30 fps in NTSC
- Delay: 120 mSec (End to End)
- Video Resolution: QCIF, CIF and VGA resolution
- Video stream outputs: RS-232 interface and Ethernet IP interface
- RTSP / RTP / RTCP Video Streaming protocols
- Constant bit rate or variable rate (I-Frame or I-Block method)
- Speex audio coding technology (option)
- Internal C/A code GPS receiver
- Position & LOS Telemetry: merged within video stream
- Built-in digital video recorder— DVR (option)

Connectivity:

- Video, Radio, LAN, Power, GPS antenna, LOS sensor (ViDi only)

Ambient Temp:

- -30°C to +55°C (operating)
- -40°C to 70°C (storage)

Environmental:

- According to MIL-STD-810E

RFI / EMI:

- According to MIL-STD-461E

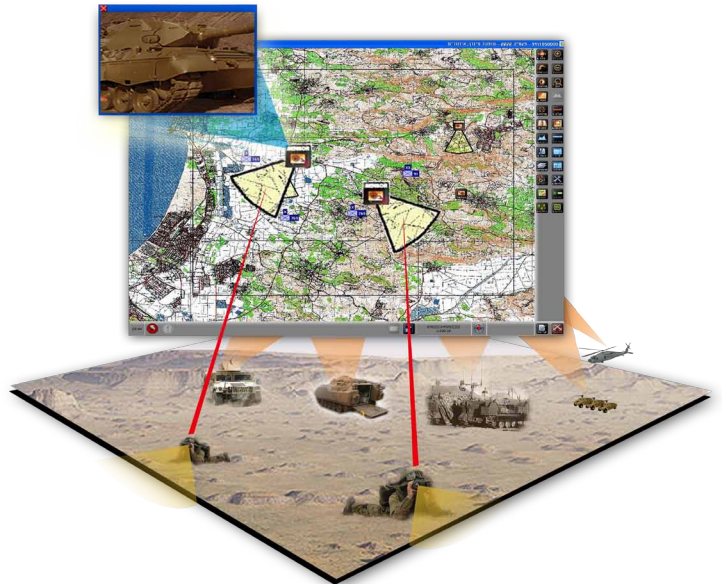
Input Power:

- 9-36Vdc (MIL-STD-1275 for ViDi unit),
- ViDi unit: 5W maximum
- mViDi unit: 3W maximum

Physical:

- ViDi: 150 mm x 102 mm x 52 mm
1350 grams
- mViDi: 150 mm x 102 mm x 34 mm
450 grams

Faster Closure of the Sensor-To-Shooter Loop



The ViDi™ merges the video stream with the position coordinates from the internal C/A code GPS sensor and the data received from the camera-mounted 3D magnetic orientation line-of-sight sensor, to provide projection of the video footprint over a C4I digital map. This maximizes situational awareness and enables faster closing of the Sensor-To-Shooter loop within the tactical network.



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