

Elbit TMR™ Core

Tactical Data Router for IP & non-IP Radio Networks
When a managed Layer III switch is just not enough!



Elbit Systems™

C⁴I and Cyber



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Connecting heterogeneous tactical radio networks-IP and non-IP, broadband and narrowband, the Mil-Grade Elbit TMR™ Core Tactical Multimedia Router is a compact and cost-effective solution which provides tactical data services through mobile ad-hoc networks (MANET), to armored vehicles and mobile command posts.

Main features

Tactical Internet Enabler

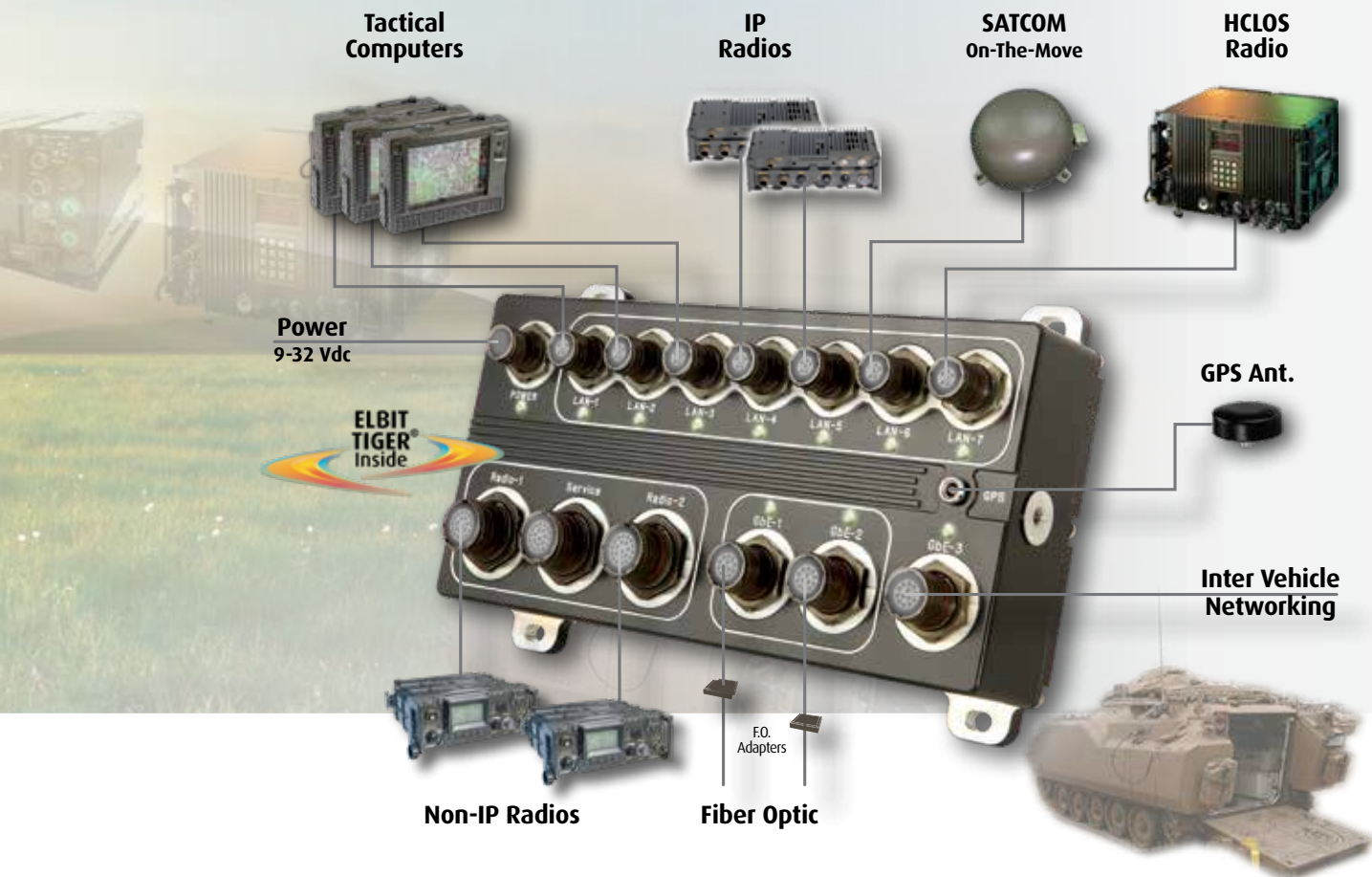
Elbit TMR™ Core nodes create a unified "Tactical Internet", thereby overcoming the complexity of different radio data networks and enabling seamless integration of operational applications.

Standard and optimized routing protocols

The Elbit TMR™ Core implements standard routing protocols to facilitate IP services, together with advanced ad-hoc protocols and QoS mechanisms specifically developed and optimized to meet the challenges of tactical radio network environments.

ELBIT TIGER® inside

ELBIT TIGER® embedded routing system is the result of the Company's significant experience in the field of tactical network communication. ELBIT TIGER® routing protocols are field-proven and currently deployed throughout Elbit Systems' customers' tactical communication systems and data networks.



ELBIT TIGER®

Tactical Routing Subsystem

- Self-healing, self-forming mechanisms.
- Efficient message forwarding from any to any node within the network.
- Efficient Multicast Registration and Distribution Mechanism
- Geographical Publish and Subscribe services.
- Data aggregation and compression services.
- Data replacement and data expiration policies

IP Routing Capabilities

- IPv4 and IPv6 dual stack support
- Routing Core for IPv6
- Standard routing protocols - RIPv2, OSPFv2, PIM-SM, BGP
- Secondary IP addresses support routing protocols
- Class-based forwarding
- IP Multicast subscription (IGMP) and forwarding (PIM)

- GRE Tunneling (including QoS support on Tunnel interface)
- Supports multiple loopback interfaces
- Multiple IP addresses per interface
- DHCP server and client
- Security mechanisms - IPsec, HTTPS, SSL, SSH, SNMPv3
- QoS:
 - DiffServ-based, DSCP/TOS
 - Bandwidth limitation for every access network interface
 - Hierarchical shaping per interface and per queue.
 - ICMP Source Quench support
 - RSVP Support (for CAC)

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Ethernet managed switch capabilities

- Port based and 802.1q VLAN including MSTP
- STP/RSTP (802.1d + 802.1w)
- 802.1p (QoS at Layer 2)
- RMON and user-friendly interface to access switch statistics
- Port mirroring

Physical Interfaces

- 7 Ethernet ports 10/100 Mbps
- 3 Ethernet ports 10/100/1000 Mbps
- 2 non-IP (CNR) radio interfaces. Each connector consists of:
 - Full synchronous / asynchronous RS-232 data interface
 - Asynchronous RS-232 interface for radio control interface
 - Local operator's PTT, Voice Rx indication and data PTT
- Service/Maintenance Interface
- Power input interface.
- GPS antenna input interface, driving internal C/A code GPS receiver

General Specifications

- Dimensions: 265 x 130 x 50mm (WxLxH)
- Input power: 9-32Vdc, 15W, Mil-Std-1275B
- Weight: 2.1 Kg
- WAN & LAN link & status LED indications
- Ambient Temp:
 - -30°C to +55°C (operating)
 - -40°C to +85°C (storage)
- Environmental: according to Mil-Std-810F
- RFI/EMI: according to Mil-Std-461E



Elbit Systems C4 and Cyber

2 H'amachshev St., Netanya 4250712, Israel

E-mail: C4icyber.info@elbitsystems.com www.elbitsystems.com

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