

E-LynX™ VD-55M

Tactical multi-band, multi-waveform SDR
for mobile forces



- ▶ **Secure and powerful SDR platform:** Dual RF channels
- ▶ **Complete NATO frequency coverage:** VHF-UHF and L bands
- ▶ **Extended networking coverage**
- ▶ **Advanced techniques:** Unique multi-hop concurrent flooding
- ▶ **Robust communication:** Unprecedented immunity, information security and GNSS-independent self-synchronization
- ▶ **Integrated services:** Simultaneous high-quality voice sessions, IP data, BFT and video in a single network
- ▶ **Seamless connectivity:** Interfaces for voice and data, ensuring smooth integration with customer devices
- ▶ **Innovative user interface:** Modern, information-rich design



E-LynX™ VD-55M

Multi-role, Multi-waveform

Combat-proven solution providing a dynamic secure network adaptable to a variety of terrains and missions.

Superior Performance

Seamless communication and situational awareness with superior RF performance and minimal SWaP.

Member of E-LynX™ SDR Family

Delivers advanced multi-domain networking solutions, meeting the complex communication and connectivity needs of modern battlefields across all echelons and operational scenarios.

Technical Specifications

General

Frequency range	30-512MHz, 960MHz-1.8GHz (L-band optional)
Software environment	SCA 2.2.2
Radio presets	100 configurable presets
GNSS	Internal receiver for location report and 1PPS, supporting multiple constellations
Interfaces	Ethernet, USB, RS-232, analog audio, external communication bearers (Cellular, Satcom, etc.)
Operation	<ul style="list-style-type: none"> HMI with icon-based operation via 2.8" graphic color display and keypad Fast access to both radio configuration and network status, including visual network-topology Supported also via network management and remote operation
Extensive software tools	Configuration, planning and management, network control, security (including keys generation and loading), network simulation

Immune & Secure Communication

ECCM	Robust frequency hopping combined with FEC and interleaver for improved jamming resistance
Security	<ul style="list-style-type: none"> COMSEC and TRANSEC utilizing AES-128/256 Red/Black design Anti-tamper and emergency erase Secured management via SNMPv3

Power

Power input	Supporting 20-33V
Standard	MIL-STD-1275E

Physical

Dimensions (HxWxD)	160x342x252mm
Weight	16.3kg

Waveforms

Networking	Multi-hop Mobile Ad-Hoc IP Network (MANET) featuring robust routing technologies: concurrent flooding and store & forward, multi-hop (up to 4 narrowband & 8 wideband), self-forming, self-healing
Services	Simultaneous voice (analog and external VoIP), IP data, IP video and BFT/PLI Multiple voice groups in a single net
Network synchronization	Autonomous, no master station, no single point of failure, no reliance on GNSS receiver or any external signal
Elbit Systems waveform	<ul style="list-style-type: none"> Narrowband MANET Wideband high capacity MANET Wideband airborne MANET Soldier radio MANET Combat net radio
Standard waveforms	STANAG 4204, STANAG 4205
Sovereign waveform option	Supports sovereign waveform porting

Transmitter and Receiver Performance

Output power	For both transceivers: V/U: Low 0.25W, Med 5W, High 50W L: Low 0.25W, Med 5W, High 10W
Channel bandwidth	25kHz, 50kHz, 0.5MHz, 1MHz, 2MHz, 4MHz
Frequency stability	±0.04ppm
Sensitivity	-116dBm @ 12dB SINAD
Spurious suppression	80dB above MDS
Harmonic suppression	HD2/3 > -20dBm, HD4 > -80dBc
Output protection	Open and short-circuit

Qualifications

Environmental	MIL-STD-810G
EMC	MIL-STD-461F



Elbit Systems C1 and Cyber

2 Hamachshev St., Netanya 4250712, Israel

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

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