# E-LynX<sup>™</sup>VD-15M

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



- Complete NATO frequency coverage: VHF-UHF
- 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





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#### 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<sup>™</sup> 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
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> <li>"Jerk and run" capability</li> <li>HMI with icon-based operation via 2.8" graphic color display and keypad</li> <li>Fast access to both radio configuration and network status, including visual network-topology</li> <li>Supported also via network management and remote operation</li> </ul>
Extensive software tools	Configuration, planning and management, network control, security (including keys generation and loading), network simulation
Immune & Secure Com	nunication
ECCM	Robust frequency hopping combined with FEC and interleaver for improved jamming resistance
Security	<ul> <li>COMSEC and TRANSEC utilizing AES-128/256</li> <li>Red/Black design</li> <li>Anti-tamper and emergency erase</li> <li>Secured management via SNMPv3</li> </ul>
Power	
Power input	Supporting 20-33V
Standard	MIL-STD-1275E
Physical	
Dimensions (HxWxD)	160x230x252mm
Weight	11.75kg

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> <li>Narrowband MANET</li> <li>Wideband high capacity MANET</li> <li>Wideband airborne MANET</li> <li>Soldier radio MANET</li> <li>Combat net radio</li> </ul>
Standard waveforms	STANAG 4204, STANAG 4205
Sovereign waveform option	Supports sovereign waveform porting
Transmitter and Receive	er Performance
Output power	$1^{st}$ transceiver: Low 0.25W, Med 5W, High 50W $2^{nd}$ transceiver: Low 0.25W, Med 5W, High 10W
Channel bandwidth	25kHz, 50kHz, 1MHz, 2MHz, 4MHz
Frequency stability	±0.04ppm
Sensitivity	-116dBm @ 12dB SINAD
Spurious suppression	1 <sup>st</sup> transceiver: 80dB above MDS 2 <sup>nd</sup> transceiver: 75dB above MDS
Harmonic suppression	1st transceiver: $HD2/3 > -20dBm$ , $HD4 > -80dBc$ 2 <sup>nd</sup> transceiver: $HD2/3 > -50dBc$ , $HD4 > -70dBc$
Output protection	Open and short-circuit
Qualifications	
Environmental	MIL-STD-810G
EMC	MIL-STD-461F



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