# E-LynX™VD-55M

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



- 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





#### 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	30-512 MHz, 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	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> <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)	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> <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 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	



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