

# E-LynX™ HH Vehicular

Single Channel Vehicular Radio

Multi-band, multi-waveform vehicular SDR



- Powerful 50W SDR platform enabling multiple waveforms covering the NATO mobile frequency bands from 30MHz to 1.8GHz
- Extended networking coverage using robust and unique multi-hop concurrent flooding techniques
- Robust design for the harsh combat environment
- Simultaneous multiple voice sessions along with data, BFT and video services
- Supports a multitude of interfaces required in a modern combat system solution
- Simple and intuitive user interface using icon-based colour display
- Embedded IP router supporting standard IP routing protocols
- VOIP and analog voice interface support
- Embedded GPS supporting continuous high resolution Blue Force Tracking capabilities
- GPS-independent synchronisation

# E-LynX HH Vehicular Single Channel Vehicular Radio

## Multi-band, multi-waveform vehicular SDR

Elbit Systems' E-LynX HH Single Channel Vehicular Radio is a multi-band, multi-waveform and multi-role tactical single fit vehicular SDR, designed specifically to support combat land/maritime forces over any terrain type. The radio operates in VHF and UHF bands continuously, while also covering L Band and featuring GPS-independent synchronisation for all operating modes. This future-proof 50W vehicular SDR offers seamless communications and situational awareness, while utilising unprecedented immunity (ECCM) and communications security (COMSEC) for a multitude of missions and applications. Combat-proven mobile ad-hoc networking (MANET)

provides continuous IP connectivity, while automatic self-forming, self-healing, routing and relay capabilities dramatically extends the E-LynX's reach over harsh battlefield conditions, ensuring no single point of failure. The E-LynX HH Single Channel Vehicular Radio supports narrow band tactical waveforms as well as high data rate wide band waveforms, providing a dynamic solution adapted to any terrain or mission. As a modular expansion of the E-LynX HH which extended the communication range while maintaining dismounted operational capabilities, the E-LynX HH Single Channel Vehicular Radio is a true force multiplier, providing a decisive advantage on the battlefield.

## Technical Specifications

General	
Frequency Range	30-512MHz 1.0-1.8 GHz
Architecture	SCA 2.2.2
Networking	Multi-hop Mobile Ad-Hoc IP Networking (MANET) implementation via hybrid technology: concurrent flooding and store & forward
Preset Channels	100 per waveform
Operation	<ul style="list-style-type: none"><li>• 2.8" graphic colour display</li><li>• Cellular-like icon-based operation</li></ul>
Features	
Voice	<ul style="list-style-type: none"><li>• Analog: F3E, STANAG 4204</li><li>• Digital: 2.4 &amp; 4.8 kbps Vocoders</li><li>• VoIP support</li><li>• Multiple concurrent voice-sessions in all waveforms</li></ul>
Data	IP Layer 3
GPS	<ul style="list-style-type: none"><li>• Internal receiver</li><li>• Auto/manual location report</li></ul>
Embedded Applications	<ul style="list-style-type: none"><li>• Blue Force Tracking (BFT)</li><li>• Visual network-topology</li><li>• Network monitoring</li></ul>
Interface and Management	
Interfaces	Ethernet, Analog Voice, (RS-232, USB optional) Multiple software-controlled antenna ports
Network Management	NMS interfaces support using SNMP-v3
Waveforms	
Bandwidth	25KHz, 50KHz, 1MHz, 4MHz (500KHz, 2MHz optional)
Modulation	FM, BPSK, GMSK, PSK, QAM

Immunity and Robustness	
Synchronization	<ul style="list-style-type: none"><li>• Autonomous, no master station, no single point of failure</li><li>• No reliance on GPS or any external signal</li></ul>
COMSEC and TRANSEC	AES256
ECCM	<ul style="list-style-type: none"><li>• Robust frequency hopping</li><li>• Jamming resistant</li></ul>
Transmitter	
Power Output	Up to 50W Nominal
Frequency Stability	40 PPB
Spurious Emission	-80 dBc
Harmonic Emission	Better than -60 dBc
Output Protection	Open and short-circuit
Receiver	
Typical Sensitivity	FM: -116 dBm for 12 dB SINAD
Squelch	Off, tone, noise, digital
Environmental	
Environmental	MIL-STD-810G
EMC	MIL-STD-461F
Physical	
Dimensions (HxWxD)	170 x 245 x 275 mm
Weight	<8Kg
Power	
Power Source	Nominal 24V
Standard	MIL-STD-1275A/AT