

E-LynX™ Manpack

Dismounted SDR Solution

Multi-band, multi-waveform tactical SDR



- Powerful SDR platform enabling multiple waveforms covering the NATO mobile frequency bands from 30MHz to 512MHz
- Extended networking coverage using robust and unique multi-hop concurrent flooding techniques
- Robust design for harsh combat conditions
- 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 Manpack Dismounted SDR Solution

Multi-band, multi-waveform tactical SDR

Elbit Systems' E-LynX MP is a multi-band, multi-waveform and multi-role tactical single fit Manpack SDR, designed specifically to support combat land/maritime forces over any terrain type. The radio operates in VHF and UHF bands continuously and featuring GPS-independent synchronisation for all operating modes. This future-proof 10W Manpack 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 MP supports narrow band tactical waveforms as well as high data rate wide band waveforms, providing a dynamic solution adapted to any terrain or mission.

Technical Specifications

General	
Frequency Range	30-512MHz
Optional mission modules (dual channel radio)	225-512 MHz 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">• 2.8" graphic colour display• Cellular-like icon-based operation
Features	
Voice	<ul style="list-style-type: none">• Analog: F3E, STANAG 4204• Digital: 2.4 & 4.8 kbps Vocoders• VoIP support• Multiple concurrent voice-sessions in all waveforms
Data	IP Layer 3
GPS	<ul style="list-style-type: none">• Internal receiver• Auto/manual location report
Embedded Applications	<ul style="list-style-type: none">• Blue Force Tracking (BFT)• Visual network-topology• Network monitoring
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	
Synchronisation	<ul style="list-style-type: none">• Autonomous, no master station no single point of failure• No reliance on GPS or any external signal
COMSEC	AES256
ECCM	<ul style="list-style-type: none">• Robust frequency hopping• Jamming resistant
Transmitter	
Power Output	Up to 10W Nominal
Frequency Stability	0.28 PPM
Spurious Emission	-80 dBc
Harmonic Emission	Better than -50 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)	155 x 225 x 85 mm
Weight without battery pack	<2.8 Kg
Power	
Power Source	Nominal 14.4V
Battery	TLI-9380E1, 17.4Ah