E-LynX™ AR

Multi-band, multi-waveform SDR for airborne platforms

► **Secure and powerful SDR platform:** Tripple RF channels

► **Complete NATO frequency coverage:** VHF-UHF and L bands

► **Extended networking coverage:** Multiple MANET waveforms

► **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

► **Powerful mission computer system:** Mission Airborne Radio Computer (MARC) applications

Elbit Systems™
C⁴I and Cyber

E-LynX™ AR

Multi-role, Multi-waveform

Unique design for airborne platforms including helicopters, transport aircraft, fighter jets and UAVs. Together with optional on-board Mission Computer System (all-in-one), the unique combination of high-end airborne SDR and mission-focused applications creates an advanced, Gen-5 airborne network.

Superior Performance

Seamless communication and situational awareness with superior RF performance and minimal SWaP. Provides secure communication across the entire battlespace for Common Operational Picture (COP) between various members, including Elbit Systems Search and Rescue (SAR) radios (Opt).

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	VHF/UHF: 30-512MHz L-Band: 960-1240MHz
Software environment	SCA 2.2.2
RF channels	3 independent RX/TX channels simultaneously (V/U, L, Guard channel)
TX and RX Antenna diversity	Two antennas for V/UHF Two antennas for L band
Interfaces	• MIL-STD-1553B / ARINC 429 • Ethernet • RS232, RS422, USB • Analog video • Analog audio
GNSS	Internal receiver for location report and 1PPS, supporting multiple constellations
Extensive software tools	Configuration, planning and management, network control, security (including keys generation and loading), network simulation

Immune & Secure Communication	
ECCM	Robust frequency hopping
Security	• COMSEC and TRANSEC utilizing AES-128/256 • Red/Black design • Anti-tamper and emergency erase • Secured management via SNMPv3

Power	
Power input	MIL-STD-704D

Physical	
Size	1/2 ATR short (ARINC 600 4 MCU)
Weight	11 kg

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

Waveforms	
Networking	Multi-hop Mobile Ad-Hoc IP Network (MANET) featuring robust routing technologies, multi-hop, self-forming, self-healing
Services	• Simultaneous voice (analog and external VoIP), IP data, video (analog and external IP) and BFT/PLI • Multiple voice groups in a single net • Built-in video codec
Network members	Up to 64 members in airborne MANET
Network synchronization	Autonomous, no master station, no single point of failure, no reliance on GNSS receiver or any external signal
Elbit Systems waveform	• 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	V/U: Low 0.25W, Med 5W, High 50W L: Low 0.25W, Med 5W, High 50W Guard: 5W
Channel bandwidth	12.5KHz, 25kHz, 50kHz, 1MHz, 4MHz (8.3 KHz optional)
Frequency stability	80ppb
Sensitivity	-116dBm @ 12dB SINAD
Spurious suppression	80dB above MDS in-band
Harmonic suppression	HD2/3 > -67dBc, HD4 > -80dBc
Output protection	Open and short-circuit

Elbit Systems C⁴I and Cyber
2 Hamachshev St., Netanya 4250712, Israel
E-mail: C4icyber.info@elbitsystems.com   www.elbitsystems.com

Follow us on

Elbit Systems™
C⁴I and Cyber