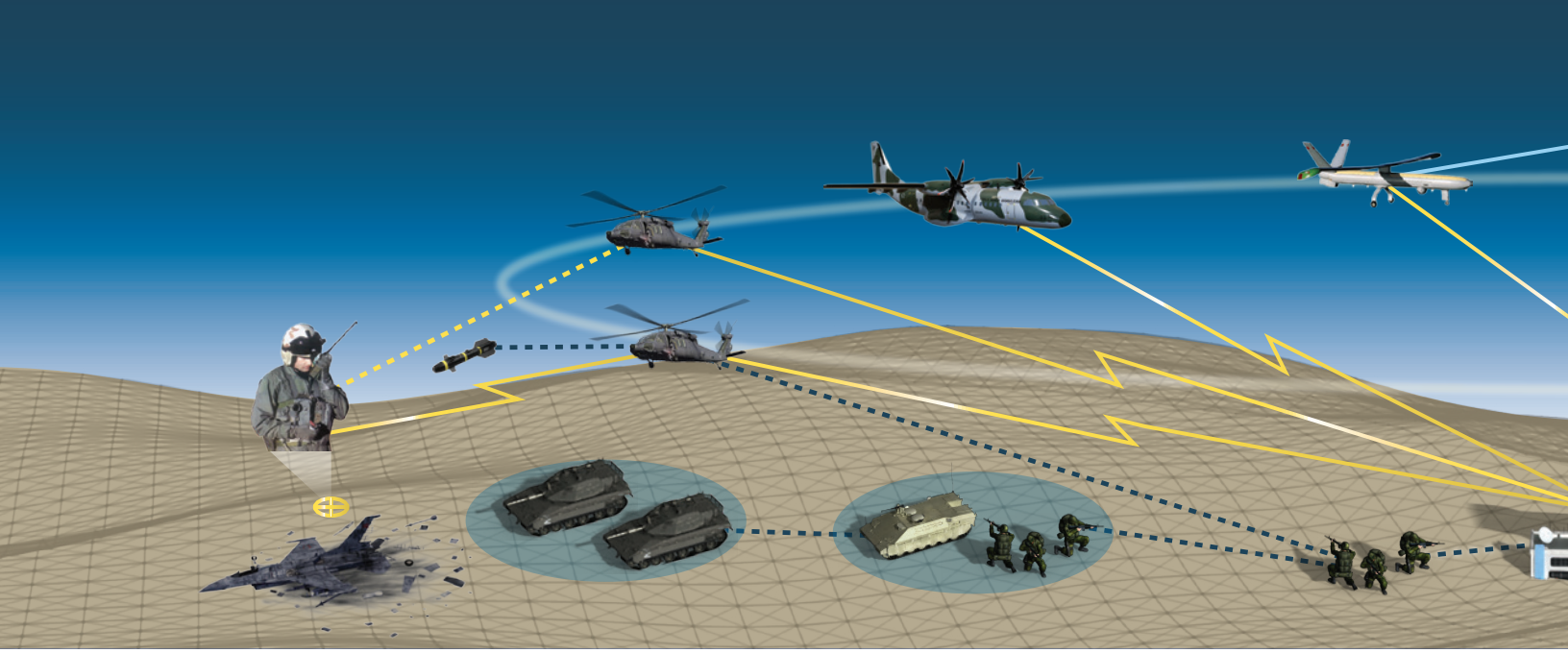
E-LynX™ AR

Multi-channel software defined radio for airborne platforms and Mission Airborne Radio Computer (MARC) applications

Elbit Systems™
C4I and Cyber



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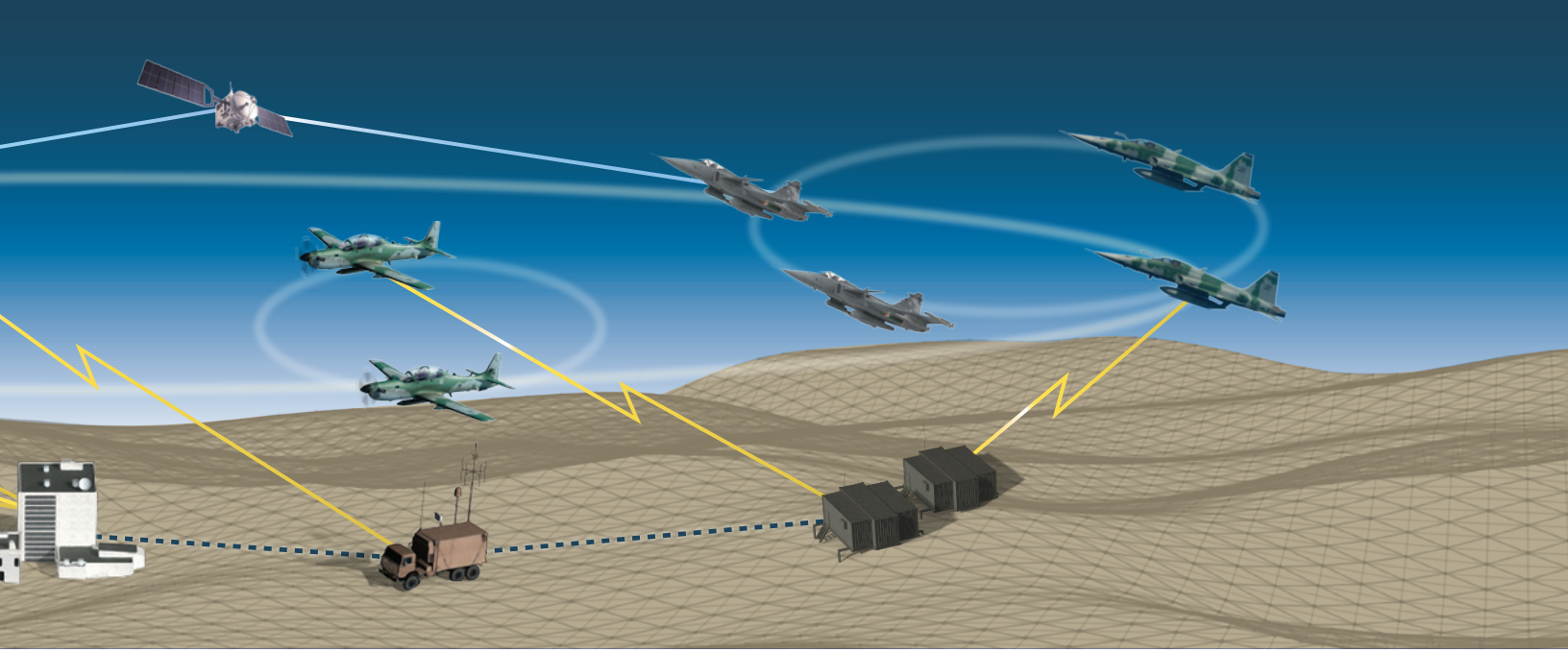
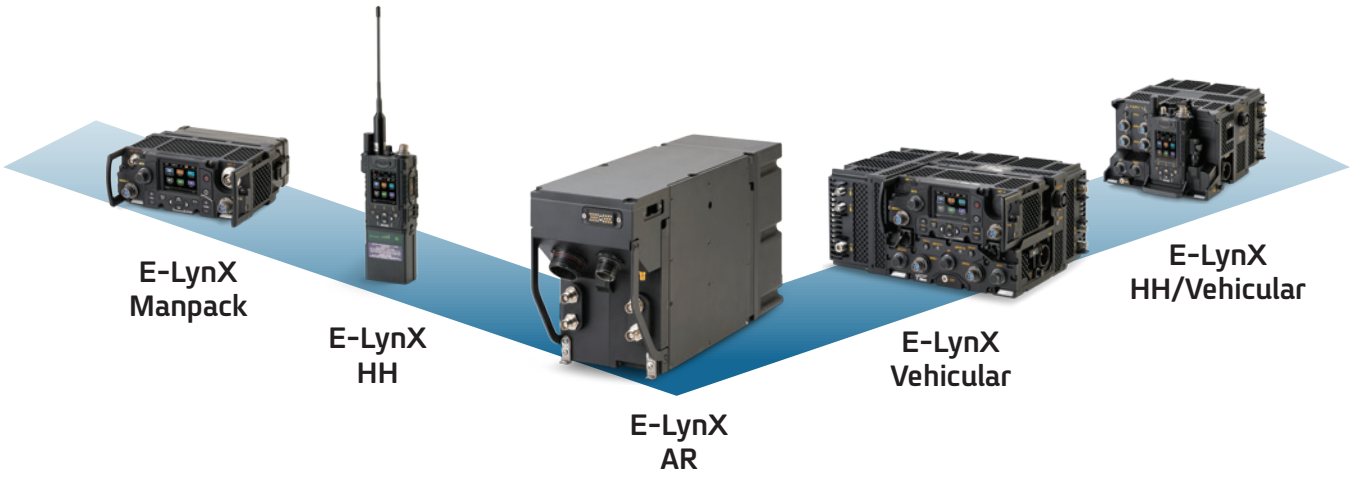
Elbit Systems' E-LynX Airborne Radio is a powerful multi-channel SDR specifically designed for operation and installation aboard airborne platforms, including helicopters, transport aircraft and fighter jets. Part of Elbit Systems' E-LynX solutions, the latest generation of multi-band, multi-waveform tactical IP radios, the networked communication airborne radio provides the highly advanced and robust platform capabilities. E-LynX AR allows simultaneous transmission of wideband and narrowband waveforms with full MANET capabilities and provides support for legacy and porting of other third-party waveforms.

Enabling proven, fully secure communication across the entire battlespace, E-LynX AR delivers the optimal transfer of simultaneous voice, video and high data rate capabilities required for mission success. Together with the on-board mission computer (all-in-one), the unique combination of high-end airborne radio and a set of mission-focused applications creates an advanced, Gen-5 airborne network. These network capabilities empower new and existing tools and applications, maximizing their potential, offering significant operational benefits and a huge operational leap forward.





Key Features

- Powerful hardware SDR platform
- SCA 2.2.2 architecture
- Mobile Ad-Hoc Networking (MANET)
- Multi-channel and multi-band radio supporting simultaneous and independent multiple frequency bands
- Multi-waveform platform supporting advanced narrowband and wideband waveforms
- Compatible with E-LynX ground communication solutions and Elbit Systems' Search And Rescue equipment
- Automatic consolidation of information for a Common Operational Picture (COP) between various members such as airborne, ground and bailed-out pilots using search and rescue radios
- Efficient bandwidth for optimal transfer of simultaneous voice, RT video and high data rate
- Equipped with a powerful mission computer system (MCS) for Mission Airborne Radio Computer (MARC) capabilities:
  A/B intuitive, accessible, effective, mission-focused applications such as situational awareness, collision warning, weapon target allocation and target sharing

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Technical Specifications

Feature	
Radio architecture	SDR - with red/black separation SCA 2.2.2 platform compliant
Frequency band	VHF/UHF: 30-512MHz L-Band: 960-1240MHz
Channel bandwidth	NB and WB up to 4MHz
RF channels	3 independent RX/TX channels simultaneously (V/U/L + Guard channel)
TX output power	Up to 50W for each channel
GPS	Integral GPS receiver, enables radio position
Waveforms	Legacy WF: NB Clear (CLR) mode for analog voice (FM or AM) NB WF: Narrowband voice and MANET IP data simultaneously MANET WB-WF: Wideband waveform (voice, data and video)
Data	IP Layer 2/Layer 3 support
Control I/F	SNMP control
Modem modulation	NB: 8DPSK, FM, AM WB: GMSK, 16QAM, 8DPSK, 64QAM
Networking	IP data network (MANET) No single point of failure Decentralized net management with relay
Number of network members	WB: Up to 64 members in a WB net (voice and data) NB: Up to 32 members, optional configuration for a greater number of users
Adaptive mode	Adaptive rate, modulation and power
Antenna diversity	Automatic
Security	SEC mode and anti-jamming immunity built-in encryption - Legacy and AES 256
Voice	Support for voice groups both analog and digital voice
Video	Support for video transfer (multi-hop), built-in Video codec
GPS	Internal receiver
Size	1/2 ATR short (ARINC 600 4 MCU)
Interfaces	• MIL-STD-1553B / ARINC 429 • Ethernet 10/100/1000Mbps • RS232, RS422, USB • Analog video • Analog audio • GPS

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