

L3HARRIS RF-330E-CM

Embeddable Modular Radio (EMR)

The L3Harris Embeddable Modular Radio is a small form factor, Software Defined Radio that offers the best available Size, Weight and Power (SWaP) today with various security solutions. It provides a voice and data link with maximum flexibility, capable of a diverse set of Program-Of-Record waveforms suitable for embedment in a wide variety of host platforms.



Anywhere the mission requires—voice, data or video transmission and reception—the EMR provides flexible capabilities.

The proven, leading-edge technology in

this single-board, Software Defined Radio is derived from the L3Harris Falcon III® AN/PRC-159(V)1 Wideband Team Radio—the NSA-certified Type 1, Suite B, non-CCI radio selected by the U.S. Army. With its advanced capabilities, the EMR offers a number of mission-critical options for airborne, maritime and ground operations. Whatever the use case, the L3Harris EMR provides a secure communication link that significantly expands current capabilities and mission goals.



MICRO-SIZED, SECURE SOLUTION FOR MAXIMUM MISSION FLEXIBILITY

KEY BENEFITS

- Interoperable with currentlyfielded DoD assets
- Software Defined Radio capable of storing multiple waveforms in one small form factor
- > SWaP-optimized for flexibility over a wide range of use cases and mission scenarios
- > Flexible security with AES, FIPS or Type 1 capable hardware
- > Superior frequency range from 225 MHz up to 2.5 GHz
- > Selectable power—transmissioncapable from 50 mW to 3.2 W

GENERAL	
RT Nomenclature	RF-330E-CM
Frequency Range	225 MHz to 2 GHz Future capability up to 2.5 GHz
Software Environment	SCA V2.2.2 compliant
GPS	Internal GPS, supports external GPS devices
Bandwidth	25 KHz up to 5 MHz
Voice	MELPe
Management Tool	Communications Planning Application (CPA)

TRANSMITTER	
Operating Voltage	50 mW up to 3.2 watts User selectable levels

SECURITY	
Encryption	AES-256

POWER	
Power Input	8.7 -17 VDC

ENVIRONMENTAL	
Shock and Vibration	Designed and tested to MIL-STD-810G
Temperature	Operating: -22° F to +131° F (-30° C to +55° C) Storage: -40° F to +185° F (-40° C to +85° C)
EMI/RFI	Designed and tested to MIL-STD-461F

PHYSICAL	
Dimensions	3.34 H x 2.42 W x 0.52 D in (8.48 H x 6.15 W x 1.32 D cm)
Volume	2.8 cubic in (45.88 cm ³)
Weight	< 85 grams, standard chassis < 65 grams, lightweight chassis

MODES AND WAVEFORMS	
ANW2°C (MANET - battle-proven, deployed by all DoD services and other government entities)	Network throughput up to 6 Mbps Network range up to 85 km Channel bandwidths 1.2 MHz and 5 MHz Network up to 30 nodes, 200+ guest nodes Data relay up to 29 hops Voice relay up to 9 hops
DDL	2 MHz channel throughput 1.5 Mbps 5 MHz channel throughput 4.5 Mbps
Other Waveforms	Additional waveform combinations

INTERFACES	
Antenna Port	SMPM
Programming	USB
Remote Control	RS-232 compatible
Power and Data Connector	60 pin interface
External Data	USB 2.0, RNDIS, Ethernet Model (EEM), Ethernet Control Model (ECM)

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