RF-330E-CM EMBEDDABLE MODULAR RADIO (EMR)

MICRO-SIZED, SECURE SOLUTION FOR MAXIMUM MISSION FLEXIBILITY
EASILY DEPLOYED VIDEO ISR

Harris advanced micro-engineering and manufacturing technologies provide warfighters video ISR for improved threat awareness, enabling them to make better-informed battlefield decisions.

- As a small form factor radio with unmatched SWaP, the EMR is ideal for airborne applications in small UAVs
- Enables sharing of video ISR and Situational Awareness (SA) in remote, challenging environments
- Warfighters can quickly deploy EMR in small UAVs for video collection and dissemination

EXTENDS THE RANGE OF NETWORKS

When using a mobile ad-hoc networking waveform, dismounted soldiers can now communicate Beyond-Line-Of-Sight through an EMR embedded in a small, hand-thrown airborne asset.

- The airborne EMR becomes an additional node in the network, allowing soldiers to reach Beyond-Line-Of-Sight range and communicate to other squads
- Unit leaders get real-time intelligence from forward-deployed forces, including target activities and friendly force Position Location Information
- Expanded battlespace networks increase safety, security and mission capabilities

NEW OPPORTUNITIES FOR FLEXIBLE MISSION SCENARIOS

Unrivaled in today’s marketplace for providing video ISR and range extension, the Harris RF-330E-CM delivers maximum-power intelligence even in the most SWaP-constrained platforms.

This single-board, Software Defined Radio is built on Harris’ industry-leading tactical radio expertise. Featuring various encryption and unmatched waveform support, the EMR is embeddable in a wide range of platforms for use in unique mission scenarios.

The EMR is a flexible, easily customized solution for embedding into a variety of small-SWaP airborne, dismounted and vehicular applications.

3.34 H x 2.42 W x 0.52 D inches and <85 grams

ULTRA-MINIATURE SOLUTION REDEFINES WHAT’S POSSIBLE

Operator receiving video ISR

Quadcopter with EMR

UAV with EMR

Operator receiving video ISR
RANGE EXTENSION IN RF-CHALLENGED ENVIRONMENTS

The EMR's wideband capabilities succeed in narrowband-challenged environments—even through steel-hulled ships or hardened bunkers. In a proof of concept, the EMR in the AN/PRC-159(V)1 form factor, using only two radio relays, successfully maintained communications throughout an 18-deck, 950-foot ship.

- Enables video and data transmission—acting as a black relay for “breadcrumb” transmissions
- Delivers encrypted secure communications in a non-CCI device
- Small form factor allows covert placement

CREASES NEW CONOP NETWORKS

The EMR provides new networked capabilities when embedded into currently fielded electromagnetic environment-sensing devices. Using DoD waveforms via the Tactical Internet, remote coordination, synchronization and tasking are now possible.

- Provides real-time monitoring, recording and transmitting of Situational Awareness data
- Networking of sensor devices allows for remote load set designation and built-in test reporting
- Transmits highly secure data over a Tactical Network through a variety of body-worn and in-vehicle sensor devices

MULTI-CHANNEL SOLUTION ENHANCES MISSION CAPABILITIES

When integrated into a single vehicular installation, three EMRs expand mission capabilities with multiple channels utilizing different frequency options simultaneously.

- A single small, low-profile multi-channel radio can be designed and integrated into various on-the-move platforms for a wide range of mission scenarios
- Capable of providing industry-leading wideband waveforms including DDL, ANW2®C and SRW
- Potential for expanded frequency ranges: VHF, S-band and C-band

SECURE, FLEXIBLE MICRO-TECHNOLOGY PLATFORM
UNMATCHED SWaP
Small (3.34 H x 2.42 W x 0.52 D in) and lightweight, <85 grams

FLEXIBLE AND UPGRADEABLE
Software-defined Software Communications Architecture for future capabilities upgrades
AES-256 Security; Type 1 Suite B Secret and Below upgradeable
Interoperable with current fielded assets including Harris Falcon III® radios
Built-in GPS
Supports standard radio interfaces: video, USB, RNDIS, RS-232, Ethernet, HDMI, H250 audio, PLGR/DAGR

SUPERIOR FREQUENCY RANGE AND WAVEFORM
Wideband networking from 225 MHz to 2 GHz
Supports multiple waveforms—DDL, ANW2®C, SRW (future)
Simultaneous processing of voice, text, PLI and XML data

About Harris Corporation
Harris Corporation is a leading technology innovator, solving customers’ toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world.
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