HARRIS COMMUNICATIONS
RELAY PAYLOAD SYSTEMS

COMPACT, CUSTOMIZED AIRBORNE RANGE EXTENSION

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LOW SWaP SOLUTIONS INCREASE MISSION AGILITY AND SITUATIONAL AWARENESS

Harris Communications Relay Payload (CRP) Systems expand critical voice, data and video connectivity for tactical edge forces in urban and geographically challenging scenarios. These airborne-integrated systems leverage the small SWaP of Harris airborne radios to provide powerful communication relays.

BROAD RANGE OF SUPPORT

Designed for integration within a variety of UAVs, Harris CRPs enhance force agility and improve Situational Awareness (SA) through UHF, VHF, Black, Red, digital and analog retransmissions. Harris airborne radios deployed in these in-flight solutions are software-defined, providing fast, in-field updates to new capabilities. They support a broad range of waveforms and frequencies, delivering new, multi-mission capabilities, including ground-to-ground, ground-to-air and air-to-air communications.

CRP KEY BENEFITS

- **RANGE EXTENSION**
  Overcomes geographic and urban obstacles to increase the network coverage area, allowing greater distances between users and connectivity with remote assets.

- **COMMUNICATIONS GATEWAY**
  Employs multiple waveforms and frequencies to join separate radio networks using different modulation, encryption or protocols.

- **UAV INTEGRATION**
  Can seamlessly integrate within the UAV fuselage, delivering a high value payload while consuming very little SWaP.

EXPERTLY TAILORED TACTICAL SOLUTIONS

Trust Harris for CRP airborne integrations customized to meet your unique mission challenges. Our systems experts specialize in assemblies and installations on all types of ground, maritime and airborne platforms. They have decades of experience simplifying complex tactical needs and delivering secure, reliable networked connectivity.
FLEXIBLE CRP OPTIONS POWERED BY HARRIS AIRBORNE RADIOS

Harris airborne radios are the core of Harris CRP integration systems. These easily embedded communications solutions feature multiband and multi-mode capabilities. The User Interface is optimized for remote control operation, making it ideal for challenging environments. Harris CRPs deliver theater-proven, high-speed voice, data and video, SATCOM and Line-Of-Sight, IP-based ad-hoc networking.

**THE CHALLENGE**

**TACTICAL LINE-OF-SIGHT NETWORKED COMMUNICATIONS AND CONNECTIVITY WITH REMOTE SENSORS AND WEAPONS ARE LIMITED BY DISTANCE AND GEOGRAPHIC OBSTACLES.**

**SOLUTION 1**

**EXTENDS NETWORKS BEYOND-LINE-OF-SIGHT**

Tactical Line-Of-Sight networked communications and connectivity with remote sensors and weapons are no longer limited by distance and geographic obstacles.

**SOLUTION 2**

**EASILY DEPLOYED VIDEO ISR**

Engineered for customized embedding within UAVs, the CRP collects real-time video ISR from the tactical edge and disseminates it to decision makers in command centers.

**SOLUTION 3**

**RAPID, UNMANNED RANGE EXTENSION**

Forward-looking outposts can quickly deploy a CRP within a tethered aerostat to provide voice, data and ISR video relays for elevations up to 700 feet. Greatly increases Situational Awareness while reducing risks to manned stations.
**SECURE COMMUNICATIONS WITH BOTH TYPE 1 AND TYPE 3 ENCRYPTION**

Harris CRP customers benefit from a long history of encryption and information assurance expertise.

- Sierra™ II-based Type 1 Encryption (Suite A/B)
- NSA-certified Secret and Below
- Citadel™ 128 and 256
- AES 128 and 256

*Note: Harris CRPs are compatible with most DoD and NATO key fill devices.*

**CRP SOLUTION OPTIONS**

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**CRP CAPABILITIES — MULTI-CHANNEL SYSTEM DESIGNED FOR RETRANSMIT**

**FREQUENCY RANGE**
- **Narrowband:** 30–520 MHz, 762–870 MHz
- **Wideband:** 225–450 MHz

**AVAILABLE WAVEFORMS**
- **Narrowband:** AM/FM, VULOS, SINGCARS & HAVEQUICK I/II (standard); HPW, HPW IP, APCO P25 (optional)
- **Wideband:** ANW2®, SRW

**UHF SATCOM**
- MIL-STD-188-181B dedicated channel (standard)
- MIL-STD-188-182A, 183A DAMA (optional)
- MIL-STD-188-181C and 188-183B IW (optional)
- High Performance Waveform (HPW) & HPW IP (optional)

**DATA INTERFACES**
- USB
- USB RNDIS Host and Device
- Ethernet
- RS-232

**PROGRAMMING INTERFACES**
- Communications Programming Applications (CPA) Software
- USB
- Ethernet

**ENVIRONMENTAL CERTIFICATIONS**
- MIL-STD-810G
- MIL-STD-461
- MIL-STD-464
- RTC D0-160G per MIL-HDBK-516

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**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.

Learn more at [harris.com](http://harris.com)