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FAST. FORWARD.

ROVER® 6x TRANSCEIVER

The industry standard for rugged, all-in-one, transportable ROVER radios

L3Harris ROVER® 6x Transceiver is the next generation of portable ROVER radios. Like earlier ROVER products, it receives sensor data from multiple airborne platforms. The ability to transmit and use standard AES encryption transforms the ROVER 6x sensor-to-shooter networking and increases levels of collaboration and interoperability.

PRODUCT DESCRIPTION

Designed for air, surface and maritime use, the L3Harris ROVER 6x transceiver provides real-time, full-motion video and data for situational awareness, targeting, battle damage assessment, surveillance, relay, convoy overwatch operations and other situations where eyes-on-target are required. ROVER 6x includes the International Waveforms (IWF) suite to provide interoperability with large airframes, UAVs and targeting pods. ROVER 6x is able to receive in two different channels, in one or two different frequency bands, from a single data source. This frequency diversity provides link redundancy, robust reception, and resiliency to platform shading, multi-path interference, line-of-sight blockages and RF interference.

POTENTIAL APPLICATIONS

> Man-packable communications
> Tactical Operations Center communications
> Vehicle-mounted communications
> Airborne communications
> Maritime communications


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Combining high-def video and radio communications with proven reliability

KEY FEATURES

> **Multi-band reception and transmission**
> **Transmit capable**
  - **Five-band operation (UHF, L, S, C and Ku)**
  - **External transmitter control**
  - **Transmitter amp blank and enable signals**
> **Two independent reception channels**
  - **Same or different bands**
  - **Diversity reception with two receive antennas**
  - **Single data source**
  - **Two external receiver interfaces**
> **Secure digital communications**
  - **AES[1]**
> **Various powering options**
  - **Accepts 10 VDC to 32 VDC**
  - **AC/DC battery eliminator**
  - **BA-5590 battery-compatible**
> **Web-browser GUI control**

1 AES may be export controlled

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SPECIFICATIONS

PERFORMANCE CHARACTERISTICS

Transmit and Receive Bands[1]

- Ku-Band: 14.40 GHz to 14.83 GHz and 15.15 GHz to 15.35 GHz, 1.0 MHz steps
- C-Band: 4400 MHz to 4950 MHz and 5250 MHz to 5850 MHz, 1.0 MHz steps
- S-Band: 2200 MHz to 2500 MHz, 0.25 MHz steps
- L-Band: 1625 MHz to 1850 MHz, 0.25 MHz steps
- UHF: 400 MHz to 470 MHz, 1 kHz steps

Programmable Data Rates

- International
  - 400 kbps, 3.5 Mbps, 10 Mbps, 45 Mbps
- International (Extended)
  - 750 kbps, 1.5 Mbps, 3.0 Mbps, 6.0 Mbps

Video

- NTSC/PAL
- H.264 (MPEG-4 part 10) and MPEG-4 part 2
- MPEG-2 (legacy compatible) and motion JPEG

Encryption

- AES[2] (optional)

PHYSICAL CHARACTERISTICS

SWaP

- Size: 17.2 cm (w) x 10.9 cm (h) x 34.1 cm (d) (without battery) 17.2 cm (w) x 10.9 cm (h) x 44.7 cm (d) (with battery)
- Weight: 4 kg (without battery)
- Power: 10 VDC to 32 VDC, approx. 40 watts BA5590 battery Battery eliminator for AC or DC input

Environmental

- Immersion: 1 meter of water for up to 30 minutes
- Shock: 3-foot drop (without battery) 20 G, 11 msec (terminal sawtooth peak) (operating)
- Altitude: 30,000 feet (9,144 m) (operating)
- Temperature: -20 °C to +60 °C (operating, ambient) -20 °C to +70 °C (operating, cold plate or forced air) -20 ° C to +85 ° C (non-operating)

External Interfaces

- 100 Base-T Ethernet, IPv4 networking
- RS-232 (one user channel)
  - For local GPS[3] input
  - For remote GPS[4] output
- Triaxial video in and out ports
- External power amp
- Dual interfaces for external directional antenna control
- Dual DC bias RF receive (for external LNA)

WAVEFORM NAME	DATA RATE	APPLICABLE BANDS
XBR-0.4 (Legacy)	400 kbps	Ku
XBR-0.75 (Extended)	750 kbps	UHF, L, S, C, Ku
XBR-1.5 (Extended)	1.5 Mbps	UHF, L, S, C, Ku
XBR-3.0 (Extended)	3.0 Mbps	UHF, L, S, C, Ku
XBR-3.5 (Legacy)	3.5 Mbps	Ku
XBR-6.0 (Extended)	6.0 Mbps	UHF, L, S, C, Ku
XBR-10.0 (Legacy)	10.0 Mbps	Ku
XBR-45.0 (Legacy)	45.0 Mbps	Ku

1 With external RF amplifiers and antennas
2 AES may be export controlled
3 GPS receiver not included.

ROVER® 6x Transceiver

L3Harris Technologies is the Trusted Disruptor in the defense industry. With customers' mission-critical needs always in mind, our employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security. Visit L3Harris.com for more information.

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