L3HARRIS®
FAST. FORWARD.

VORTEX®x

The Industry Standard for Secure, Flexible and Interoperable ISR Communications

L3Harris VORTEXx is the industry standard of compact, highly capable, multi-use transceivers. With simultaneous dual-band transmission, VORTEXx dramatically increases situational awareness via increased levels of collaboration and interoperability. A VORTEXx-to-VORTEXx dual-band link provides high reliability through spatial and frequency redundancy.

PRODUCT DESCRIPTION

Designed for air, surface and maritime use, the VORTEXx transceiver provides real-time full-motion video and high bandwidth throughput for for situational awareness, VoIP, targeting, surveillance, data relay, wide area wireless networks, convoy overwatch and remote operations. VORTEXx can transmit and receive digital data simultaneously. VORTEXx can simultaneously transmit common data to multiple platforms using two different channels in one or two different bands. VORTEXx is able to receive in two different channels in one or two different bands from a single source. This band and channel diversity provides link redundancy, better reception and resiliency to platform shading, multipath interference, line-of-sight blockages and RF interference.


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Comprehensive and flexible features ensure the system enables your exacting mission requirements

KEY FEATURES

- Multi-band reception and transmission
- Two simultaneous transmit channels
  - Same or different bands
  - Common data source
  - Common baseband modulation
  - Two external transmit interfaces
- Web browser GUI control
- Provides control for two external transmitters
- Baseband modulation output for two transmitters
- Two simultaneous reception channels
  - Same or different bands
  - Diversity reception with two receive antennas
  - Single data source
  - Two external receive interfaces
- Front panel indicators include video activity, transmit-enabled, system status and reverse polarity
- Reverse polarity protection

SPECIFICATIONS

PERFORMANCE CHARACTERISTICS

Transmit and Receive Bands

- Ku-band: 14.4 to 14.83 and 15.15 to 15.35 GHz, 1.0 MHz steps
- C-band: 4.4 to 4.94 and 5.25 to 5.85 GHz, 1.0 MHz steps
- S-band: 2.2 to 2.5 GHz, 0.5 MHz steps
- L-band: 1.71 to 1.85 GHz, 0.5 MHz steps
- UHF: 400 to 470 MHz, 1 kHz steps

Waveforms

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

Video

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

Encryption

- AES*

External Interfaces

- IPv4
- 10/100 Base-T Ethernet
- RS-232 (2 user-channels, 1 GPS console)
- RS-422 (2 full-duplex user-channels)
- Headset connection
- SMA (1 video output, 1 video input)
- Remote LED indicators
- Dual external SSPA and transmitter control
- Dual interfaces for external directional antenna control
- Dual DC bias RF receive (for external LNA)

PHYSICAL CHARACTERISTICS

- Size: 11.9 cm (w) x 9.4 cm (h) x 21.8 cm (d)
- Weight: < 4.5 kg
- Power: 9 to 32 VDC, approx. 50 watts[1] (typical)
- Immersion: 1 meter of water for up to 30 minutes
- Shock: 20 G, 11 msec (terminal sawtooth peak), (operating)
- Altitude: < 21.3 km (70,000 ft) (operating)
- Temperature: -20 °C to +70 °C (operating at MSL)
  -20 °C to +85 °C (non-operating)

			WAVEFORMS		
			International (Legacy)	International (Extended)	FM Analog
SUPPORTED FEATURES	Frequency Band	L		Tx/Rx	Tx/Rx
		S		Tx/Rx	Tx/Rx
		C		Tx/Rx	Tx/Rx
		Ku	Tx/Rx	Tx/Rx	
	Encryption*	AES	X	X	

*May be subject to export limitations

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