

STINGER-LITE™

Medium-to-long-range quad-band antenna designed for ground operations

The L3Harris STINGER-LITE antenna quickly establishes high-reliability receive and transmit data links for ground-based operations. STINGER-LITE establishes and maintains links through innovative hardware and software. The antenna integrates seamlessly with L3Harris ROVER® 6 family of modems and our field proven amplifiers.

PRODUCT DESCRIPTION

The STINGER-LITE antenna is a mobile, configurable ground antenna with a low SWaP that combines four frequency bands (L, S, C, and Ku) into a ruggedized single unit. The STINGER-LITE's mobility is complimented by its two-man, less than 10-minute setup time, which means the warfighter spends less time setting up and more time communicating. Frequencies are easily changed through an intuitive software interface. The STINGER-LITE position tracks with aircraft telemetry data.

The STINGER-LITE has receive and transmit capabilities combined with its GPS Inertial Navigation System. The INS allows the execution of rapid setup by eliminating the need to manually boresight during deployment by using differential GPS to automatically find true north.

The STINGER-LITE features a rugged design capable of operating efficiently in austere tactical environments and comes in three configurable options:

1. Receive (Rx) ground station

2. Transmit/Receive (Tx/Rx) ground station

3. On-the-move (OTM) antenna for vehicle mount operations

Critical components of the antenna include the controller, power supply, and internal LNAs. This product comes in a tactical kit including transit case(s), tripod, and applicable cable reels.





Rugged, low SWaP antenna combining capability and configurability in a single compact unit

KEY BENEFITS

- > Quad-band (L, S, C, and Ku)
- > Rapid setup
- > Configures quickly and easily
- > Low SWaP
- > ROVER 6 and ROVER 6S interoperable
- > MBRFE interoperable



ROVER 6 Family of Modems



Multi-Band RFE: MBRFE (Only needed with Tx/Rx Configuration)

ANTENNA PERFORMANCE (PRELIMINARY)

	L-BAND	S-BAND	C-BAND (LOWER)	C-BAND (UPPER)	KU-BAND
Frequency	1700-1900 MHz	2000-2500 MHz	4400-5000 MHz	5200-5800 MHz	14.40-15.35 GHz
Gain (dBi)	10.0 dBi	11.0 dBi	15.5 dBi	15.5 dBi	20.0 dBi
Polarization	Linear Vertical	Linear Vertical	Linear Vertical	Linear Vertical	RHCP
BW EL (-3dB)	+/- 70.0°	+/-65.0°	+/-45.0°	+/-25.0°	+/-25.0°
BW AZ (-3dB)	+/- 70.0°	+/-65.0°	+/-45.0°	+/-35.0°	+/-30.0°

CONFIGURATION OPTIONS (PRELIMINARY)

1. Receive (Rx) Ground Station

- > Position: Internal Inertial Measurement Unit (IMU) (INS with magnetometer and dual GPS)
 - I. GPS reports local position to ROVER products
 - II. Component listing: antenna, tripod, cable reel, transit cases

2. Transmit/Receive (Tx/Rx) Ground Station

- > Position: Internal IMU (INS with magnetometer and dual GPS)
 - I. GPS reports local position to ROVER products
 - II. Component listing: Tx/Rx antenna, 10W RFE, tripod, cable reel, transit cases

3. On-the-move (OTM) antenna for vehicle mounted operations

- > Position: Internal IMU (INS with magnetometer and dual GPS)
 - I. GPS reports local position to ROVER products
 - II. Component listing: Tx/Rx antenna, 10W RFE, tripod, cable reel, transit cases

ANTENNA SPECIFICATIONS (PRELIMINARY)

Input Power

> 110-240 VAC

Axis Range

> Azimuth: 360° (continuous)

> Elevation: +90°/-20°

SWaP

> Size (radome): 13.2" (height) x 14" (diameter)

> Weight (radome/tripod): ~65 lb

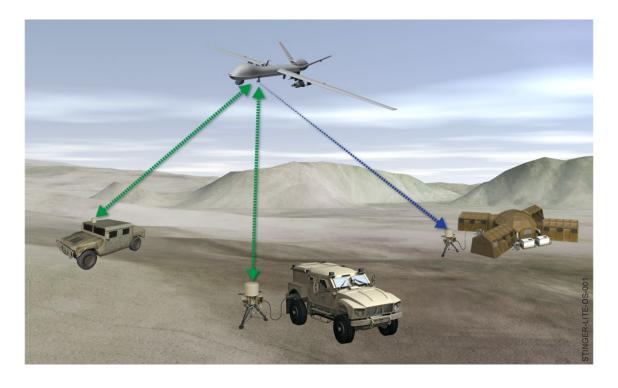
> Operation: Stationary or on-the-move

Setup Time

> Two Man ~10 minute setup

Interfaces

> Communications: Ethernet



STINGER-LITE

© 2023 L3Harris Technologies, Inc. | 06/2023 | BCS | 22-DSD-272 | Rev-204

These item(s)/data have been reviewed in accordance with the International Traffic in Arms Regulations (ITAR), 22 CFR part 120.11, and the Export Administration Regulations (EAR), 15 CFR 734(3)(b)(3), and may be released without export restrictions.

L3Harris Technologies is a Trusted Disruptor for the global aerospace and defense industry. With customers' mission-critical needs always in mind, our 46,000 employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains.

Use of U.S. DoD visual information does not imply or constitute DoD endorsement.



1025 W. NASA Boulevard Melbourne, FL 32919 t 833 537 6837 CSW.Products@L3Harris.com