

# **ROVER® 6S ACCESSORY KITS**

# Customize Your ROVER System to Meet Your Application Needs

Accessory kits for the ROVER 6S family of transceivers deliver powerful, versatile features to ensure mission success. Reliably configure your system with the right power, antenna and computing options to enhance your mission-critical applications.





Flexible Equipment Support to Meet Every Mission

### **KEY FEATURES**

- Rugged and flexible power options
- Time-tested omnidirectional antennas for Full-Motion Video (FMV)
- > Ku-Band Directional Antenna dramatically improves range, with integrated RFE for full-duplex operation
- > Enhanced omnidirectional C-, S-, and L-Band antennas with improved performance in radio-dense environments
- Integrated transmit capability for multiband network operation

### **BASE KIT FOR THE ROVER 6S**

The ROVER 6S Base Kit is the place to start for your customized mission system. It includes the transceiver, power options, cables, adapters and transit case. The Base Kit includes the Dual Output Battery Eliminator (DOBE) that provides sufficient conditioned power for both the ROVER transceiver, KuDA and E-CLS 2 antenna assemblies in a color-matched, ruggedized form factor.

BASE KIT MAJOR COMPONENTS	QTY
ROVER 6S transceiver	1
Mounting kit (angle bracket, mounting feet and screws)	1
Transit case	1
Mission data interface cable (Ethernet, etc.) with bypass switch	1
DOBE	1
DOBE input cable	1
120" TNC coaxial cable (for receiver use)	2
6" Cat-6 Ethernet cable	3
72" BNC-to-BNC video cable	1
BNC-to-phono video adapter	1
Battery box	1

### Dual Output Battery Eliminator (DOBE)

- > Two 50 W channels of regulated power: sufficient for both the ROVER transceiver and E-CLS 2 or KuDA antenna assemblies
- > 95 VAC to 265 VAC, 47 Hz to 440 Hz input
- > 11 VDC to 36 VDC output
- > MIL-STD-810F ruggedized

### **Mission Data Interface Cable**

- > 100 Base-T Ethernet interface
- > Bypass switch
- > DAGR GPS (RS-232)

### **USER-BASED OPTIONS**

The ROVER 6S Base Kit can be supplemented with the Receive Omni Antenna Kit or the Enhanced Transmit/Receive Antenna Kit. Antenna kit items can be stowed in the Base Kit transit case.

A laptop or tablet PC preloaded with L3Harris FlightLens® software can be added to the ROVER 6S Base Kit. The computer kit includes flexible and ruggedized power options optimized for use with the Base kit.





Laptop



Mission Data Interface Cable



Tablet

### **RECEIVE OMNI ANTENNA KIT**

The game-changing ROVER 6S, which provides ground commanders with reliable high-quality FMV received directly from the transmitting aircraft sensor in real-time, is enhanced by these integrated receive antenna assemblies. Battle-proven and in service since 2003, the antenna assemblies cover all four frequency bands used for ISR worldwide.

RX OMNI ANTENNA KIT COMPONENTS	QTY
CLS omni antenna	1
Ku omni antenna	1
TNC 90-degree angle adapter	1

### **CLS Omnidirectional Antenna Assembly**

- > Integrated low-noise amplifier
- > Out-of-band interference rejection filtering
- > Maximum antenna gain: 0 dBi L band, 1.5 dBi S band, 2 dBi C band
- > Linear vertical polarization
- > Total gain > 30 dB
- > Noise figure < 3.7 dB (C band), < 3.5 dB (L/S bands)
- > Integrated automatic band switching
- > 4400 MHz to 5850 MHz
- > 2200 MHz to 2500 MHz
- > 1625 MHz to 1850 MHz

### Ku Omnidirectional Antenna Assembly

- > Integrated low-noise amplifier
- > Maximum antenna gain: 1 dBi
- > Right-hand circular polarization
- > Total gain > 30 dB
- > Noise figure < 2.5 dB
- > 14.40 GHz to 15.35 GHz





CLS Elevation Gain Pattern

Ku Elevation Gain Pattern

### ENHANCED TRANSMIT/RECEIVE ANTENNA KIT

The Enhanced CLS 2 (E-CLS 2) Antenna Kit delivers increased range performance in congested RF and dynamic On-The-Move (OTM) environments. Each antenna in this kit has proven performance to operate dependably in today's complex radio spectrum environment.

ENHANCED ANTENNA KIT COMPONENTS	QΤΥ
E-CLS 2 transmit/receive antenna	1
Ku directional antenna (KuDA) on-the-move	1
Dual battery box	1
Antenna control interface cable	1
120" TNC coaxial cable (Receiver use)	1
120" N coaxial cable (Transmitter use)	1

#### E-CLS 2 Omnidirectional Antenna Assembly

- > Improved performance in crowded RF environments
- > Integrated SSPA, low-noise amplifier, band-pass filtering
- > Maximum antenna gain: 0 dBi L band, 1.5 dBi S band, 2 dBi C band
- > Transmit or receive operation (not simultaneously)
- > Output power 29 dBm (at antenna feed)
- > 4400 MHz to 5850 MHz (Rx only)
- > 2025 MHz to 2500 MHz
- > 1625 MHz to 1850 MHz

### Ku Directional Antenna On-The-Move (KuDA OTM) Assembly

- > Automatically track target platform
- > Integrated inertial motion sensor to permit tracking even while the unit is in motion
- > Integrated SSPA, low noise amplifier, diplexer
- > Simultaneous transmit and receive operation (full-duplex)
- > Maximum antenna gain: 16 dBi
- > 14.40 GHz to 14.83 GHz receive
- > 15.15 GHz to 15.35 GHz transmit

### **Dual Battery Box**

- > Accommodates two BA5590-series batteries
- > Powers ROVER transceiver and antenna assembly



Elevation Gain

Pattern



E-CLS 2 Omnidirectional Antenna Assembly



Ku Directional Antenna Assembly



Dual Battery Box



### **OPTIONAL ANTENNAS**

### STINGER LITE™

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

The STINGER Lite bi-directional 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 antenna's mobility is complimented by its two-man, less than 10-minute setup time. Frequencies are easily changed through an intuitive interface. The STINGER Lite antenna position tracks with aircraft telemetry data.

The STINGER Lite antenna has receive and transmit capabilities combined with its GPS Inertial Navigation System (INS). 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.

- > Extends CDL range up to 100 nm<sup>1</sup>
- > Supports automatic telemetry tracking
- > Supports L, S, C, Ku bands
- > Includes auto-acquisition feature
- > Internal INS with magnometer and dual GPS (with auto-alignment)
- > Low SWaP
- > Universal power 110 to 240 VAC

### ANTENNA PERFORMANCE

### Gain (mid-band)

- > L-Band: 11.0 dBi
- > S-Band: 12.0 dBi
- > C-Band (Lower): 13.0 dBi
- > C-Band (Upper): 14.0 dBi
- > Ku-Band: 21.0 dBi

### PHYSICAL CHARACTERISTICS

### Ground Terminal Physical Dimensions

- > Size: 46" (W) x 66" (H) x 46" (D)
- > Weight: 143.5 lb. (65.1 kg)

### **Ground Terminal Transportation**

> 4 wheeled cases

**ROVER 6S Accessory Kits** 

> Weight<sup>2</sup>: 49 lbs. (22.3 kg) to 100 lbs. (45.4 kg)



1. Data link range depends on total system configuration.

2. Loaded transit cases meet USAF guidelines for a two-man lift.

### STINGER MB

### Simplified long-distance ROVER communications

STINGER MB mobile bi-directional ground terminal is extremely rugged and easy to deploy, requiring no additional tools for setup or tear down. Two-man setup can be accomplished in less than 15 minutes. Once assembled, the terminal's embedded dual GPS/INS automatically aligns the antenna tracker to true north (+/- 0.5°). This eliminates the need for magnetic calibration or time-consuming setup routines.

- > Extends CDL range in excess of 100 nm<sup>1</sup>
- > Supports automatic telemetry tracking
- > Supports L, S, C, and Ku bands
- > Includes auto-acquisition feature
- > Built-in dual GPS and INS with auto-alignment
- > Universal power 100 to 240 VAC
- > Rear panel local controller with touch screen

### ANTENNA PERFORMANCE

Gain (mid-band)

- > L-Band: 21.0 dBi
- > S-Band: 24.0 dBi
- > C-Band: 30.0 dBi
- > Ku-Band: 36.0 dBi

### PHYSICAL CHARACTERISTICS

### **Ground Terminal Physical Dimensions**

- > Size: 53" (W) x 84" (H) x 42.5" (D)
- > Effective swept volume: 94 ft<sup>3</sup>
- > Weight: 265 lb. (120.2 kg)

### **Ground Terminal Transportation**

- > 5 wheeled cases
- > Weight: 54 lb. (24.5 kg) to 104 lb. (47.2 kg) per case<sup>2</sup>





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