

TACTICAL ROVER® **QUAD-BAND ANTENNA**

Quad-Band Handheld Radio-Mounted Antenna

L3Harris' multipurpose Tactical ROVER Quad-Band Antenna is a medium-gain, rugged, small form factor antenna that may be handheld or mounted. Our omnidirectional antenna includes a built-in Ku-band Low Noise Amplifier (LNA) and downconverter circuitry that can be powered by DC offset on the TNC interface connector when paired with L3Harris handheld Tactical Network ROVER 2 line of products.

PRODUCT DESCRIPTION

L3Harris' Tactical ROVER Quad-Band Omni Antenna is a compact, programmable, antenna with built-in Ku-band low noise amplifier for use in a variety of handheld and mobile applications. Ruggedized design and environmentally sealed packaging provide reliable communications in harsh operating conditions. Directly mounts to the radio or can be connected through a coaxial cable for remote placement of the antenna. Weighing less than eight ounces, this antenna is an extremely versatile, multi-application solution for law enforcement, emergency services or military use.



Actual Size



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

Versatile, Small Form
Factor, Quad-Band
Antenna

KEY FEATURES

- > Down converts Ku-Band signals to S-Band
- > Transmits and receives C-, L- and S-Bands
- > Excellent gain-to-size-ratio antenna element
- > Built in Ku-Band low noise amplifier
- > Rugged, water/dust-sealed design
- > TNC RF interface connector with easy thumbscrew
- > Powered over the RF connection via DC offset
- > Excellent omnidirectional gain pattern
- > Compatible with L3Harris' handheld Tactical Network ROVER 2 products

SPECIFICATIONS

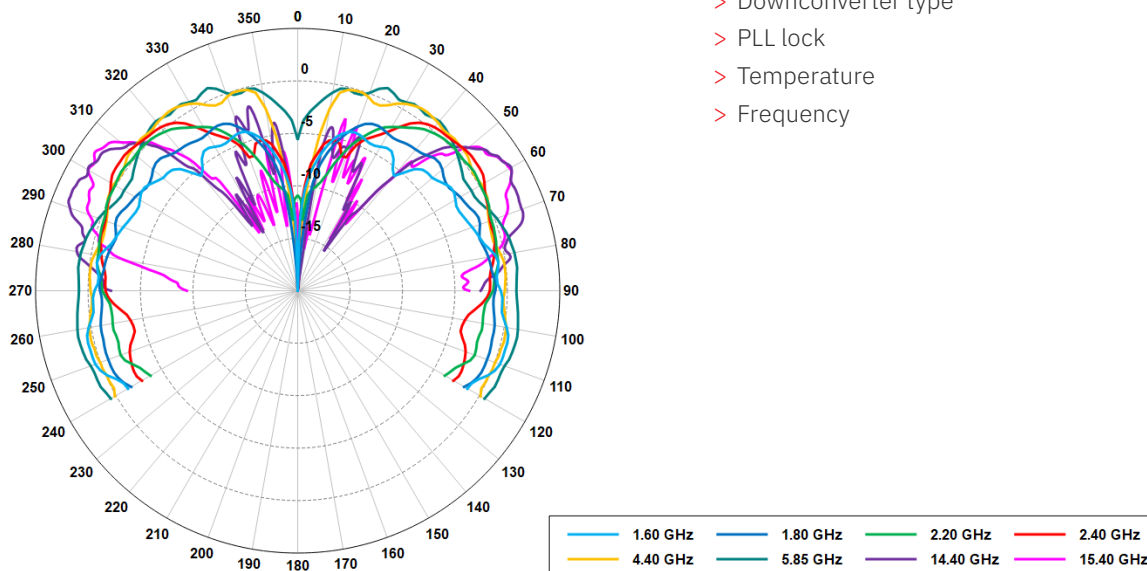
PHYSICAL CHARACTERISTICS

- > Size: 4.85" (l) x 1.45" (dia)
- > Weight: < 8.0 oz.
- > Antenna Connector: TNC male (J1)

PERFORMANCE CHARACTERISTICS

Antenna Rx

- > Impedance: 50 ohms
- > Receive Frequency range:
 - 1625 MHz to 1850 MHz
 - 2025 MHz to 2110 MHz
 - 2200 MHz to 2500 MHz
 - 4400 MHz to 4950 MHz
 - 5250 MHz to 5850 MHz
 - 14.4 GHz to 14.83 GHz
 - 15.15 GHz to 15.35 GHz
- > Max input power without damage: -20 dBm in
- > Ku-band tuning resolution: 1.0 MHz
- > The Quad-Band Omni antenna is a passive antenna for L, S, and C bands and will pass any step size within the allotted frequency bands
- > Ku Noise figure: 4.0 dB (max)
- > Ku-Band element gain: 3.0 dB at 30° elevation
- > L-Band element gain: -4 dBi at 2° elevation
- > S-Band element gain: -5 dBi at 2° elevation
- > C-Band Low element gain: -7 dB at 10° elevation
- > C-Band High element gain: -4 dBi at 10° elevation



TNR Quad-band omni elevation gain pattern

Antenna Tx

- > Transmit Frequency range:
 - 1625 MHz to 1850 MHz
 - 2025 MHz to 2110 MHz
 - 2200 MHz to 2500 MHz
 - 4400 MHz to 4950 MHz
 - 5250 MHz to 5850 MHz
- > The Quad-Band Omni antenna is a passive antenna for L, S, and C bands and will pass any step size within the allotted frequency bands

DC Input Power

- > Nominal: +5.7 VDC, or +12 VDC
- > Max current: 0.14 A
- > Max power: 1.68 W

Temperature

- > Operational: -40 °C to +55 °C
- > Non-operational/storage: -40 °C to +85 °C

Altitude

- > -500 ft. to 30,000 ft. MSL

COMMAND/STATUS

The Tactical ROVER Ku Antenna requires Command and supports Status Requests via the RF connector.

Commands:

- > Frequency

Status:

- > Downconverter type
- > PLL lock
- > Temperature
- > Frequency



TNR 2 Quad-Band Antenna

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