



Active GPS Antenna

MODEL: RV-76

GPS antenna featuring high gain & low power consumption, coming with cutting-edge low-noise amplifier and anti-theft locking nut



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The RV-76 is the integration of a high performance GPS patch antenna and a state-of-the-art low noise amplifier into a very low-profile, extremely compact and fully waterproof antenna-signal enclosure. When connected to a GPS receiver with +2.5 to +5.5 VDC antenna power, it provides excellent signal amplification and out-band-rejection for that receiver.

The small size and ruggedness of this antenna is a prerequisite for an antenna in the high demand of vehicle locating and car navigation GPS antenna that will sustain harsh environment.

Last but not least, the design of a double lock (or an anti-theft locking nut) provides sound security for the product.

Features

- Low Noise Figure
- Fully Weatherproof
- Ultra-high Sensitivity
- Compact Construction
- Excellent Temperature Stability

Specifications

Physical Construction:

Construction: Polycarbonate radome over a die-cast base, along with detachable cable/connector for easy mount, rubber-O-ring between top radome and metal base for waterproof

Dimensions: 59mm in diameter x 15.8mm in height (excluding the thread)

Weight: 125grams (excluding cable & connector)

Color: Standard in ivory white, other colors available upon request.

Mounting: Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).

Cable & Connector (Standard):

RF Cable: 5 meter RG174/U (standard) and RG58 (optional)

Pulling Strength: 6 Kg @ 5sec. molded plastic on connector end for strain relief.

Connector Available: BNC,TNC,GT5,MCX(OSX),SMA,SMB or SMC in straight or right angle.

Optional Adapters: Universal Connector Adapter (FME to TNC/BNC/SMA/SMB/MCX)

Cable & Connector (Optional):

Permanently mounted cable with the center feeding design, resulting in enhanced waterproof performance

Antenna Element:

Center Frequency: 1575.42 MHz +/-1.023 MHz

Polarization: R.H.C.P. (Right Handed Circular Polarization)

Absolute Gain @ Zenith: +5 dBi typically

Gain @ 10° Elevation: -1 dBi typically

Axial Ratio: 3 dB max.

Output VSWR: 1.5:1 max.

Output Impedance: 50 ohm

Low Noise Amplifier:

Center Frequency: 1575.42 MHz +/- 1.023 MHz

Gain: 28 dB typically

Bandwidth: 2 MHz min.

Noise Figure: 1.5 max.

Outer Band Attenuation: 20 dB min. @ Fo +/- 50 MHz

Supply Voltages: +2.5 ~ 5.5VDC

Current Consumption: 12mA +/- 2mA

Output Impedance: 50 ohm

Overall Performance: (antenna element, LNA & coaxial cable)

Center Frequency: 1575.42 MHz.

Gain: 26 dB typically

Noise Figure: 1.5 dB max.

Axial Ratio: 3 dB max.

Bandwidth: 2MHz min.

VSWR: 2.0 max.

Output Impedance: 50 ohm

Environmental Conditions:

Operating Temperature: -40° C ~ +85° C.

Storage Temperature: -50° C ~ +95° C.

Relative Humidity: 95% non-condensing.

Water Resistance: 100% waterproof.