

Active GPS antenna RV-76

- Low noise figure
- Fully weather proof
- Excellent temperature stability
- High sensitivity



The RV-76 GPS antenna 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 enclosure which, when connected to a GPS receiver with 5 V DC antenna power, provide adequate signal amplification and out-band rejection.

Physical characteristics	
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	59 mm in Diameter x 15.8mm in height
Weight	125 g (Excluding cabel and connector)
Color	Standard in ivory white, other colors available upon request
Mounting	Bulkhead mount with 0.8 inch threaded wing nut
Antenna Element	
Center frequency	1575.42 MHz +/- 1.0233 MHz
Polarization	R.H.C.P. (Right Hand Circular Polarization)
Absolute gain at Zenith	+5 dBi typ.
Gain at 10° Elevation	-1 dBi typ.
Axial Ratio	3 dB max.
VSWR	1.5 max
Impedance	50 Ohm
Low Noise Amplifier	
Center frequency	1575.42 MHz +/- 1.0233 MHz
Gain	28 dB typ.
Band Width	2 MHz min.
Noise Figure	1.5 max.
Outband attenuation	20 dB min. at Fo +/- 50 Hz
Supply Voltage	+2.5 ~ +5.5 V DC
Current consumption	12 mA +/- 2 mA
Impedance	50 Ohm

Cable & connector	
RF cable	5 m RG174/U (standard)
Pulling strength	6 Kg/5 Sec. With molded plastics on connector en for strain relief
Connector available	BNC, TNC, FME, MCX, SMA, SMB or SMC, straight or right-angle
Overall performance (antenna element, LNA & cable)	
Center frequency	1575.42 MHz
Gain	26 dB typ.
Noise figure	2.0 max.
Band width	2 MHz
Axial ratio	3 dB max.
VSWR	2.0 max.
Impedance	50 Ohm
Environmental conditions	
Operating temperature	-30 °C ~ +85 °C
Storage temperature	-40 °C ~ +90 °C
Relative humidity	95% non-condensing
Waterproof	100% waterproof

Technical drawing

