



Vehicle Locating GPS Antenna **MODEL: RV-19**

Featuring extremely low voltage and current consumption without compromising its high gain



RV-19 is the integration of a high performance GPS patch antenna and a low noise amplifier into a low profile, extremely compact and fully waterproof enclosure. When connected to a GPS receiver with **2.5~5.0V DC** antenna power, **RV-19** provides excellent signal amplification and out-of-band rejection for that receiver.

Coming up with small size and ruggedness, **RV-19** is designed mainly to meet the robust demand for a GPS antenna that can maintain GPS signal stability for automatic vehicle locating and navigation even in a harsh environment.

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

SPECIFICATIONS

Physical Constructions:	
Constructions:	Polycarbonate radome, detachable cable/connector for easy mount, rubber-O-ring between top radome and screw base for waterproof
Dimensions:	60mm in diameter x 38mm in height.
Weight:	125 grams (w/o cable & connector).
Color:	Standard in ivory white, other colours available upon request.
Mounting:	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory)
Cable & Connector:	
RF cable: 5	5 meter RG174/U (standard) other length (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. Straight or right angle.
Optional:	Universal Connector Adapter (FME to



	TNC/BNC/SMA/SMB/MCX)
Antenna Element:	
Center Frequency:	1575.42 MHz +/-1.023 MHz
Polarization:	R.H.C.P. (Right Handed Circular Polarization).
Absolute Gain @ Zenith:	+5 dBi typical.
Gain @ 10o Elevation:	-1 dBi typical.
Axial Ratio:	3 dB max.
Output VSWR:	1.5:1 max.
Output Impedance:	50 Ω
Low Noise Amplifier:	
Center Frequency:	1575.42 Mhz +/- 1.023 Mhz
Power Gain:	14dB typically
Bandwidth:	2 MHz min.
Noise Figure:	1.7 max.
Outer Band Attenuation:	20 dB min. @ Fo +/-50 MHz.
Supply Voltages:	+2.5~+3.3V DC
Current Consumption:	5.5mA +/- 1mA@3.3V.
Output Impedance:	50 Ω
Overall Performance: (antenna element, LNA & coax cable)	
Center Frequency: 1575	1575.42 Mhz.
Gain:	14dB typically
Noise Figure:	2.0 dB max.
Axial Ratio:	3 dB max.
Bandwidth:	2MHz min.
VSWR:	2.0 max.
Output Impedance:	50Ω
Enviromental Condition:	
Operating Temperature:	-40°C~ +85°C.
Storage Temperature:	-40°C~ +85°C.
Relative Humidity:	95% non-condensing.
Water Resistance:	100% waterproof.

This specification is subject to change without prior notice...