



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 **2.5~3.3V 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 |



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|---|--|
| | 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...