# **RC-67TL GNSS Antenna**

Model: RC-67TL

Compact & Sensitive GPS/GLONASS/BEIDOU/GALILEO Antenna with Excellent Signal Amplification



**RC-67TL** is our latest integration of a high performance antenna covering with GPS L1, GLONASS L1, BEIDOU B1, GALILEO E1, and QZSS L1, combined a power-saving low noise amplifier within a low profile, extremely compact, and fully waterproofs enclosure. When connected to the GPS receiver, it can provide both excellent signal amplification and Band Pass Filtering/Saw Filtering functions for Out-of-Band Attenuation of the receiver.

Coming up with its small size and toughness, RC-67TL is featuring for its high gain performance. This design provides not only for the automatic vehicle locating/navigating demand, but also maintains the high signal receiving ability/stability in virtually any severe environment. RC-67TL's low noise figure, compact construction, fully waterproof, excellent temperature durability, ultra sensitivity and power gain capability will completely fulfill your flawless criterion.

#### **Applications**

- Marine GPS
- Weather Balloon
- · Utility Electric Grid Synchronization
- Security Surveillance / Banking / Financial Time Stamping / Carrier Network Timing



#### **Features**

- GPS L1, GLONASS L1, BEIDOU B1, GALILEO E1, and QZSS L1 Frequencies
- Compact Construction/ Low Profile/ Fully Weatherproof/ Designed for harsh environment
- Special Cone Housing reduces the effect of snow or dust coverage, as well as bird perching
- Outstanding Out of Band Attenuation capability
- Anti-theft locking nut
- Ultra-High Sensitivity

## **Specification:**

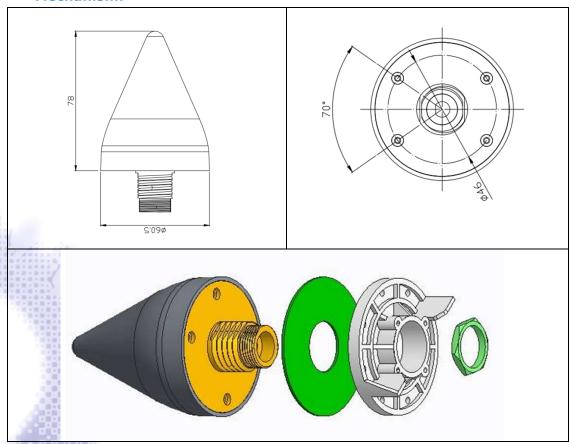
Physical Condition		
Construction:	Polycarbonate radome detachable cable/connector for	
	easy mount, rubber-O-ring between top radome and	
	screw base for waterproof.	
Dimension:	60.5 mm in diameter x 78mm in height.	
	Standard in ivory with 0.8 inch threaded wing nut	
Color	(standard accessory )	
Manakhara	Bulkhead mount with 0.8 inch threaded wing	
Mounting:	nut( standard accessory)	
Connector		
RF Cable:	5 meters RG174/U (standard) cable & length (optional)	
Pulling Strength:	6 Kg @ 5 sec.	
Connector Available:	BNC, TNC, GT5, MCX(OSX), SMA, SMB or SMC. Straight	
	or right angle.	
Optional Adapters:	Universal Connector Adapter (FME to	
Optional Adapters.	TNC/BNC/SMA/SMB/MCX)	
Antenna Element	1	
Polarization:	R.H.C.P. (Right Hand Circular Polarization)	
Gain at Zenith:	1575.42 MHz	2 dBic typical
	1561 MHz	-0.5 dBic typical
	1598~1606 MHz	0.6 dBic typical
	Mounted on the 70mm x 70mm square ground plane	
Axial Ratio:	3 dB max.  Mounted on the 70mm x 70mm square ground plane	
Low Noise Amplifier		
Gain:	35dB @ 5V typically (1575MHz)	
Band Width:	51 MHz min. @ S11≤-10 dB	
Noise Figure:	1.6 dB Typical	
Supply Voltage:	3~5.5V DC	
VSWR:	2.0 max.	



Current Consumption:	12 mA Typical	
Out of band rejection	f0=1586Mhz , f0±50Mhz:≥34dB	
	f0±60Mhz: ≥60dB	
OVERALL PERFORMANCE (Antenna Element, LNA & Cable)		
Center Frequency:	1575.42 MHz & 1561 MHz & 1598~1606 MHz	
Gain:	At 90° 35 <u>+</u> 3dB (Cable loss) note:1.	
	Mounted on the 70mm x 70mm square ground plane	
VSWR:	2.0 max.	
Output Impedance:	50 ohm	
Environmental conditions		
Operating Temperature:	-40°C~+85°C	
Storage Temperature:	-40°C~+90°C	
Relative Humidity:	95% non-condensing	

Note:1:Cable loss-(-1.2dB/m)

## **Mechanism:**



Unit: mm

Tolerance: 0.3mm