



GPS Antenna with Low Noise Amplifier

MODEL: TM-76

Low Input / High Gain

Integration of the high performance GPS patch antenna and a cutting-edge LNA into a very low profile extremely compact/fully waterproof enclosure



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

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 enclosure and die-cast-shell at the bottom
Dimension	58 mm(L)x 48 mm(W)x 15 mm(H)
Weight	63 grams (excluding cable & connector)
Standard Mounting	2 magnetic mounts, screw mount with 2 M3 tapped holes on the base.
Optional Mounting Plate	Metal flanges with holes for permanent mount.
Cable and Connector (Standard)	
RF cable	5 meter RG174/U (standard) cable & length (optional)
Pulling Strength	6 Kg @ 5 sec.
Connector Available	BNC, TNC, FME, MMCX, MCX, SMA, SMB or SMC. Both straight and right angle are available.
Optional	Universal Connector Adapter (FME to TNC/BNC/SMA/SMB/MCX)
Environmental Conditions	
Operating Temperature	-10°C to +65°C
Storage Temperature	-20°C to +70°C
Relative Humidity	5% to 95 %, non-condensing
Antenna Element	
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.
Low Noise Amplifier	
Power Gain	28 dB typically
Bandwidth	2 MHz min.
Noise Figure	1.3 max.
Supply Voltages	+2.5 ~5.5V DC
Current Consumption	≤5mA @ 3.0 ~ 5.0V DC
Overall Performance	
Center Frequency	1575.42 MHz
Gain	30 dB typically
Noise Figure	1.8 max
Axial Ratio	3dB max
VSWR	2.0max
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

(*PS: The specification is subject to change without prior notice)