

Mobile GPS Antenna

MODEL: XANT-GA-38-GT16

Compact & Sensitive GPS antenna with Excellent Signal Amplification
for Mobile Applications



- High performance
- Out-band filtering & rejection
- Fully waterproof
- Voltage: 2.5 V ~5.5 V DC
- Provides excellent signal amplification

GA-38 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/ fully waterproof enclosure which, when connected to a GPS receiver with 2.5~5.5V DC antenna power, provides excellent signal amplification and out-band filtering & rejection, provide 3V or 5V input Voltage is available.

FEATURES:

- Compact Construction/ Low Profile/ Fully Waterproof
- Magnet and Screw Mount Base
- Excellent Temperature Stability
- Low Noise Figure
- High Sensitivity

APPLICATIONS:

- Automobile GPS
- Bluetooth Receiver
- Car Tracking Navigation System
- AVL / Fleet Management Systems
- External Antenna for Handheld GPS
- External Antenna for PDA Navigator

SPECIFICATIONS:

Physical Condition	
Construction	Polycarbonate- radome at top, die-cast shell at bottom/ rubber gasket for water seal in between
Dimension	40.5mm (L) x 38mm (W) x 12.3mm (H)
Weight	50 grams (excluding cable & connector)
Standard Mounting	Magnet mount with two magnets & screw mount
Optional Mounting Plate	customized metal sheet
Environmental Conditions	
Operation temperature	-40°C to +85°C
Storage temperature	-40°C to +100°C
Relative Humidity	95% non-condensing
Cable & Connector	
Cable	5 meter RG174/U (standard) cable, other length available
Pulling Strength	6 Kg @ 5sec with molded plastics on connector end for strain relief

	1575.42 MHz +/-1.023MHz
Polarization	R.H.C.P. (Right Handed Circular Polarization)
Absolute Gain @ Zenith	3 dBic Typ.
Gain	90° : 2.0dBi min. 20° : -5.0dBi min. Mounted on the 60mm x 60mm square ground plane
Axial Ratio	90° : 3.0dB max. Mounted on the 60mm x 60mm square ground plane

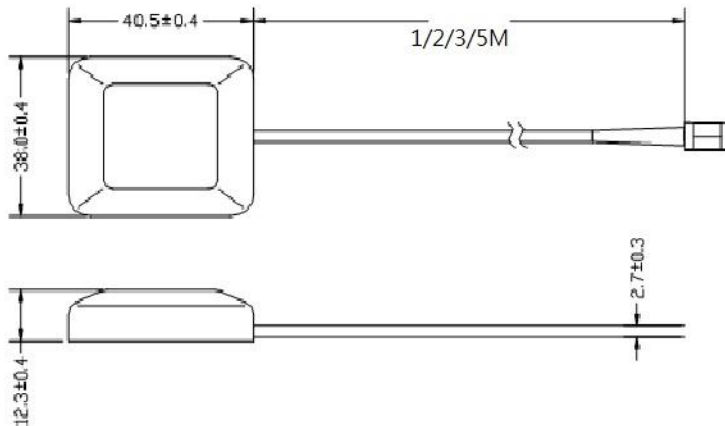
Low Noise Amplifier

Center Frequency	1575.42 MHz +/- 1.023 MHz
Gain	28+/-4.5dB
Bandwidth	10 MHz min. @S11$\leq -10\text{ dB}$
Noise Figure	1.5dB Typ.
Filter	25dB @ $f_{o\pm 50\text{MHz}}$ 35dB @ $f_{o\pm 100\text{MHz}}$ * $f_o=1575.42\text{MHz}$
Supply Voltages	2.5 ~5.5V DC
Current Consumption	2.5V : 6.6mA Typ. 3V: 8.6mA Typ. 4V: 12.6mA Typ. 5V: 16.6mA Typ.
Output Impedance	50 ohm
Output VSWR	2.0 max.

Overall Performance (Antenna Element, LNA & Cable)

Frequency range	1575.42 +/- 1.023 MHz
Gain	At 90° 30 ± 4.5dBi-(cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane
Output Impedance	50 ohm
VSWR	2.0 max.

(This specification is subject to change without prior notice) Note:1:Cable Loss=(-1.2dB/m)



GT16 Connector

