

GPS/GLONASS Antenna

Ct-GG6180 MCX 90D 5M



Specifications Sheet

Part No.: 3-6004-225R000

Features :

- RG174/5M/3V/ MCX 90°

1.0 SYSTEM

This antenna system consists of two functional blocks, the LNA portion and the patch antenna.

2.0 GENERAL

2.1 ENVIRONMENTAL CONDITIONS

2.1.1	Operation Temperature	-40°C to + 85°C
2.1.2	Storage Temperatur	-40°C to + 85°C
2.1.3	Relative Humidity	40% to 95%

2.2 ELECTRICAL SPECIFICATIONS

2.2.1	Operation Voltage	Min:2.5V	Typ:3.0V	Max:5.5V
2.2.2	Current Consumption	Typ: 10mA. Max: 15mA. @ 3.0V		

2.3 MECHANICAL SPECIFICATIONS

2.3.1	Mounting	Magnets mount
2.3.2	Water Proof	Deep into water 50cm, 30 Min.
2.3.3	Shock	10msec. Half sine wave.
2.3.4	Vibration	10~200Hz Log. Sweep 3.0G sweep time: 15 Minutes, 3 Axes.
2.3.5	Cable Pulling Off Force	At room temperature Min 7Kg /10sec. Apply 7Kg /10sec pulling force between the cable and the antenna unit, no visible damage shall appear on the cable and connector.
2.3.6	Bending Test	After bending 90° right and left for 1,000 cycles, no permanent damage were found.
2.3.7	Weight	105g Max.
2.3.8	Dimension	See Fig. 2

3.0 ANTENNA

3.1	Antenna Dimensions	25mm*25mm*4mm
3.2	Frequency Range	1575.42 ± 10 MHz. 1602 ± 8MHz.
3.2	Gain	1575.42MHZ:-3 dBi Typ. @zenith 1602MHZ:-0.5 dBi Typ. @zenith
3.3	Polarization	RHCP

4.0 LNA and FILTER

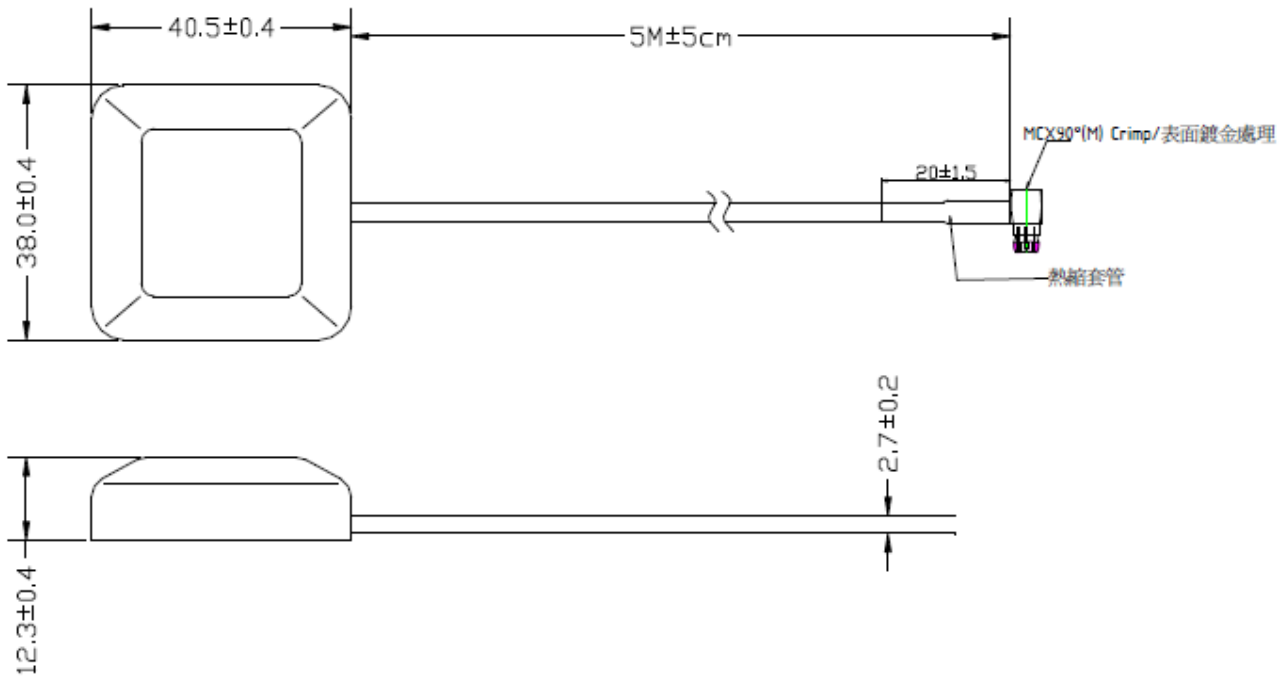
4.1	Frequency Range	1575.42 ± 10 MHz 1602 ± 8 MHz
4.2	Gain (without Cable)	1575.42MHZ:28 dB Min.30 dB Typ.(+ 25°C ± 5°C) 1602MHZ:28 dB Min.30 dB Typ.(+ 25°C ± 5°C)
4.3	Noise Figure	2.0 dB Typ. (+25 °C ± 5°C) 2.6 dB Max. (+85 °C)
4.4	Output Impedance	50Ω
4.5	Output VSWR	2.0 Max
4.6	Out Band Rejection	1587.5 ±140MHz 15dB Min

5.0 TOTAL SPECIFICATIONS

(Through Antenna, LNA, Cable and Connector)

5.1	RF Cable	RG174 , ψ2.7 ± 0.2mm , Black	
		Cable Length	5M ± 5cm
5.2	RF Connector	MCX 90° (M)	
5.3	Frequency Range	1575.42 ± 10MHz 1602±8 MHz.	
5.4	Gain	1575.42MHZ: 27± 3dBi @zenith 1602MHZ: 29.5± 3dBi @zenith	
5.5	Output Impedance	50Ω	
5.6	Output VSWR	2.0 Max	

6.0 OUTLINE



Unit:mm

Fig. 2

7.0 RADIATION PATTERNS

