

SPECIFICATION

PART NO.	UGNA-103 (GPS/GLONASS 3-5V, SMA(m), 5m)
PRODUCT NAME	UGNA-103
DESCRIPTION	GPS/GLONASS Antenna 3V/30dB/5M/SMA 180° IP67





SPECIFICATION FOR GPS/GLNASS ANTENNA WITH LOW NOISE AMPLIFIER

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

Operation Temperature	- 40°C to + 85°C
Storage Temperature	- 40°C to + 105°C
Relative Humidity	40% to 95%

2.2 ELECTRICAL SPECIFICATIONS

Input Voltage	Min: 2.5 V	Typ: 3.0V	Max: 5.5V
Current Consumption		Typ: 10mA	Max: 15mA @ 3.0V

2.3 CABLE & CONNECTOR

RF Cable	RF Coaxial Cable,d=2.7± 0.2mm L =5M+/- 5 cm
RF Connector	SMA(m) 180°



3.0 ANTENNA

Antenna Dimensions	25mm x 25mm x 4mm
Frequency Range	1575.42 ± 10 MHz. 1602±8 MHz.
GAIN	1575.42MHZ:+ 1 dBic Typ. @zenith(d=70mm Ground) 1602MHZ:+1 dBic Typ. @zenith(d=70mm Ground)
Polaration	RHCP
Axial ratio	3dBic(at Elevation 90°-Zenith)

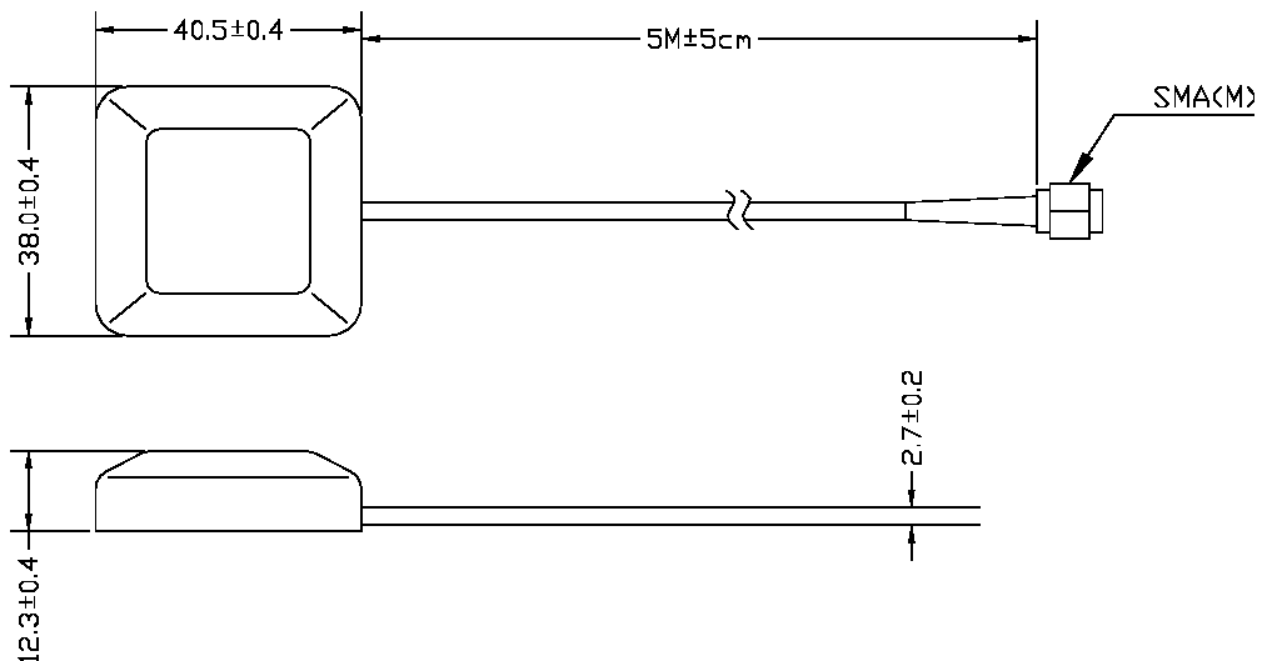
4.0 LNA and FILTER

Frequency Range	1575.42 ± 10 MHz 1602±8 MHz.
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)
Noise Figure	2.0 dB Typ. (+ 25 °C ± 5°C) 2.6 dB Max. (+ 85 °C)
Output Impedance	50Ω
Output VSWR	2.0 Max
Out Band Rejection	1587.5 ±140MHz 15dB Min

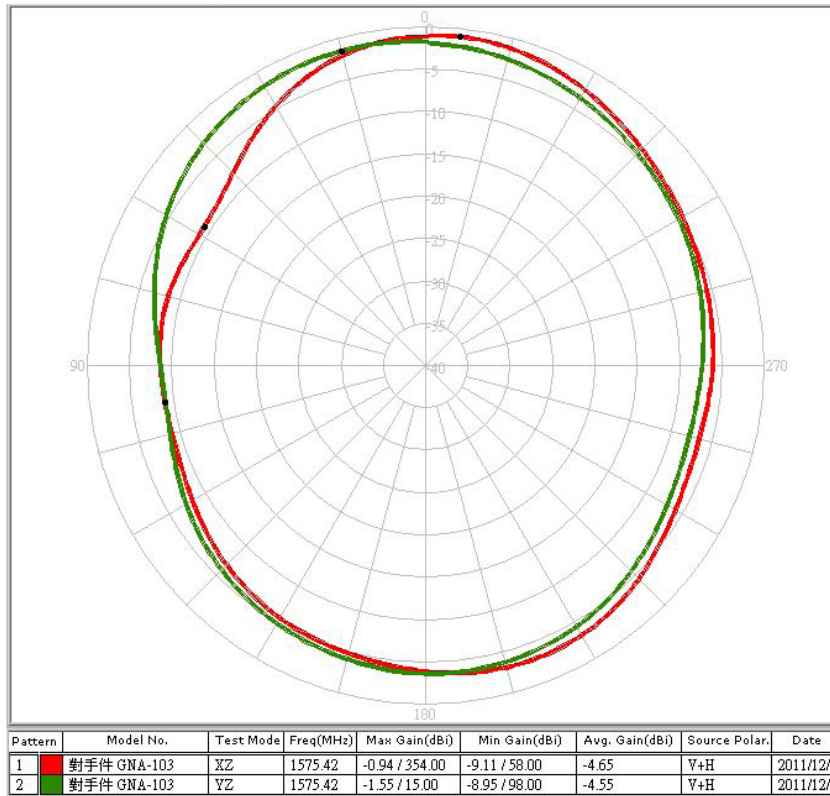
5.0 TOTAL SPECIFICATIONS (Through Antenna, LNA, Cable and Connector)

Frequency Range	1575.42 ± 10 MHz. 1602±8 MHz.
Gain	At 90° 31± 3dBic
Output Impedance	50Ω
Output VSWR	2.0 Max

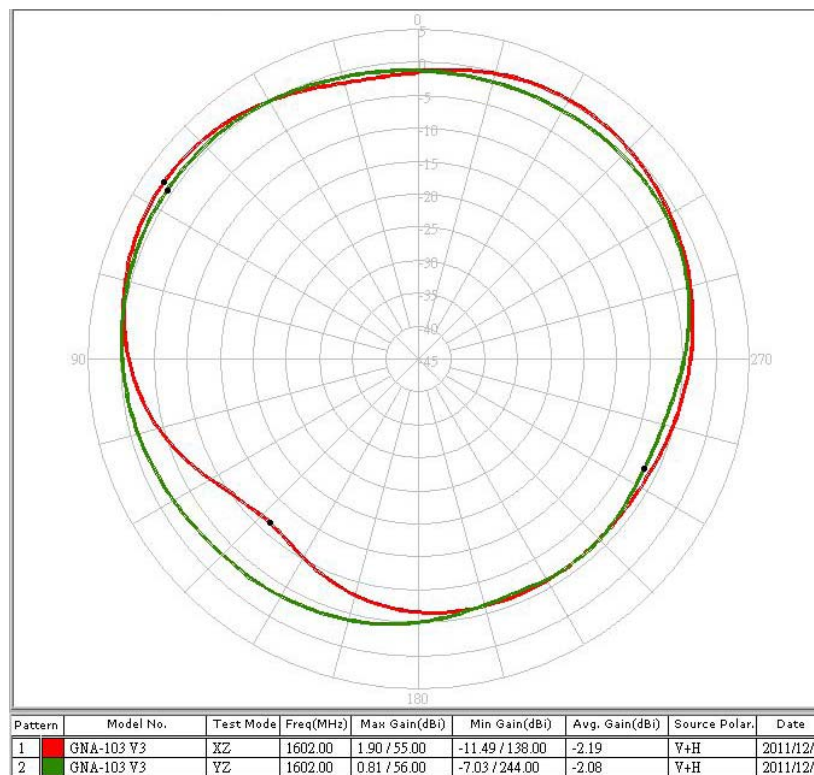
6.0 OUTLINE



7.0 Radiation patterns



Gain Pattern Value (1575MHz)



Gain Pattern Value (1602MHz)