

## SPECIFICATION

Part No. : **AA.160.301111**

Product Name : Magnet Mount GPS-GLONASS Antenna

Feature : 1575MHz – 1609MHz  
Custom cables and connectors available  
RoHS ✓



# 1. Introduction

This antenna is designed for applications which require high positioning accuracy by combining signals from GPS and Glonass systems. High gain wide-band patch antenna on a large integral ground delivers maximum performance.

## 2. Specification

### 2.1 Ceramic Patch Antenna 36\*36\*6mm

Parameter	Specification
Frequency	1575-1609MHz
Bandwidth	40MHz min.
VSWR	1.5:1
Peak Gain	4.0dBic (70*70mm Ground Plane)
Impedance	50 Ohm
Polarization	RHCP

### 2.2 Low Noise Amplifier

Parameter	Specification
Noise Figure	1.5dB Typ.
Output VSWR	<2.0 Max.
LNA Gain	32dB Typical (without cable)
DC Power Input	3-5V
Impedance	50 Ohm
DC Current	8.5mA @5.0V Typ.

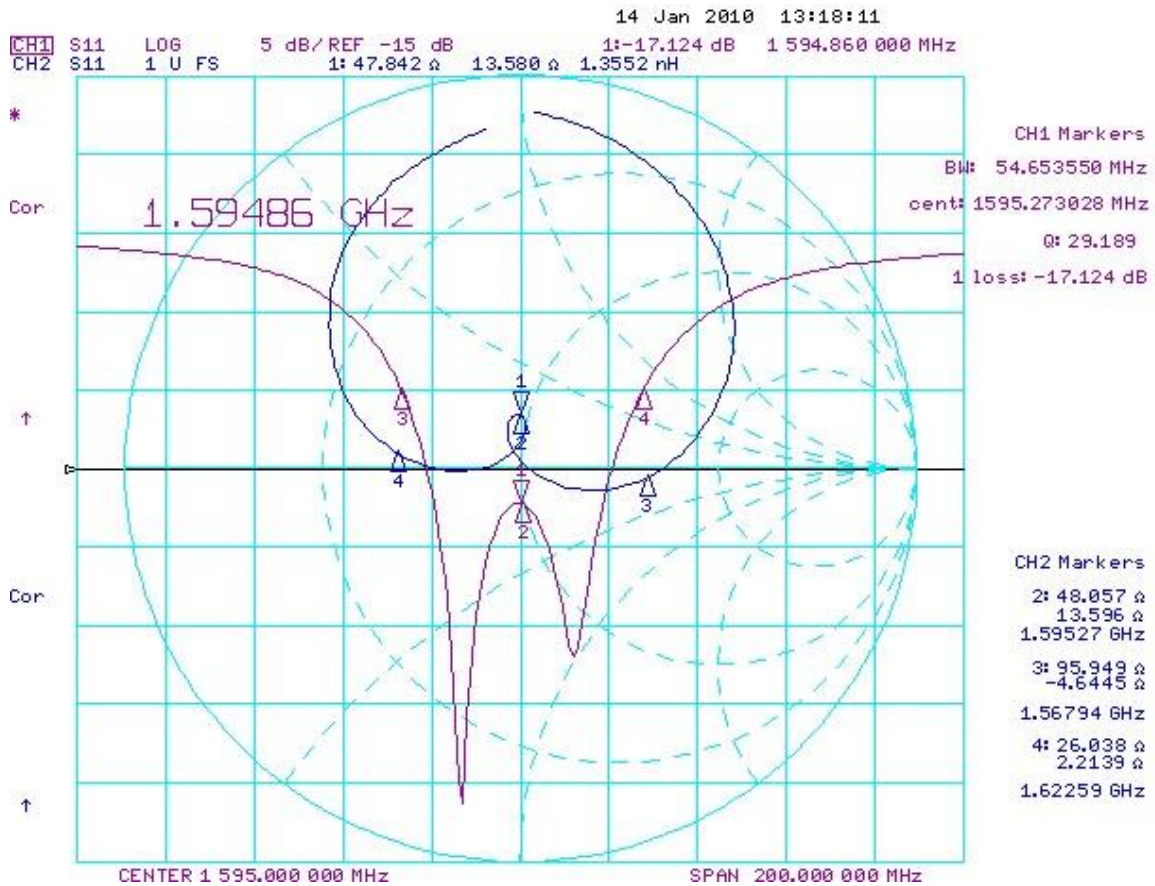
### 2.3 Material

Parameter	Specification
Antenna	Dielectric Ceramics
PCB	FR4
Shielding	Tinplate
Cable	RG-174 Length = 3M
Connector	SMA(M)

## 2.4 Testing Conditions

Parameter	Specification
Working Temp	-40°C~+85°C
Storage Temp	-40°C~+100°C
Vibration	Sine sweep 1g(0-p) 10~55~10Hz each axis
DC Voltage	DC=3-9V

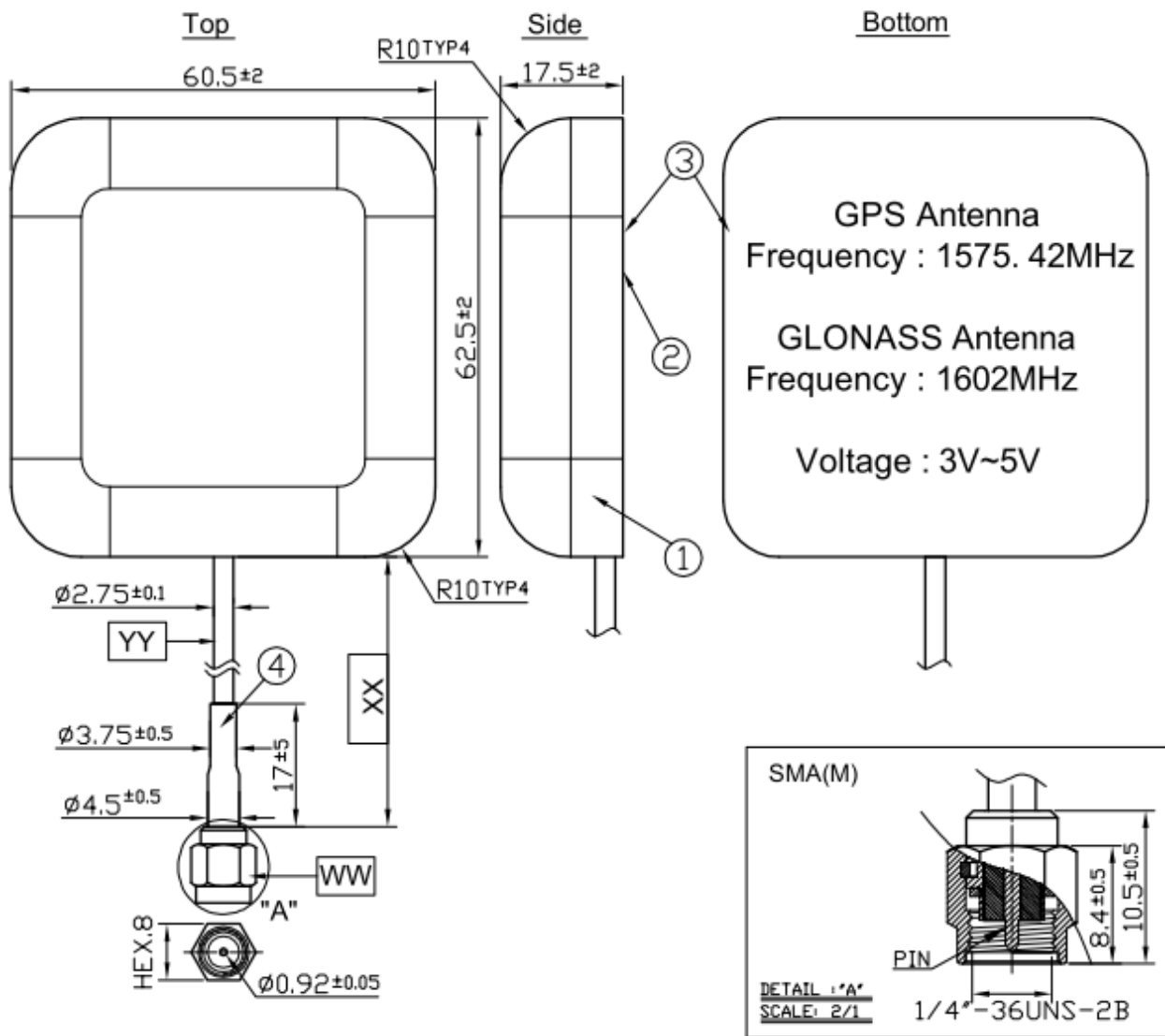
### 3. S11 Performance Comparison (Passive Patch – separated from the LNA)



## 4. S21/S22 Performance Comparison (LNA)



## 5. Drawing



	Name	P/N	Material	Finish	QTY
1	AA.160 Antenna Housing Top	000112A000028A	ABS+PC	Black	1
2	AA.160 Antenna Housing Bottom	000112A010028A	ABS+PC	Black	1
3	AA.160 Sticker	001012A010028A	Terylene	Silver	1
4	Heat Shrink Tube	001311F0000XXA	PE	Black	1
	Name	P/N	Spec	Finish	QTY
WW	Connector Type	SMA.M.ST.PLUG.D.WS	SMA(M)	Gold	1
XX	Cable Length		3000±30mm		1
YY	Cable Type	301311F0000XXA	RG174	Black	1

