

# **GPS & GLONASS Internal Antenna**

# Product Number:ATIGG1040-1

#### 1 · SCOPE

This product can be used as various GPS&GLONASS receivers navigation, GPS&GLONASS clock, positioning.

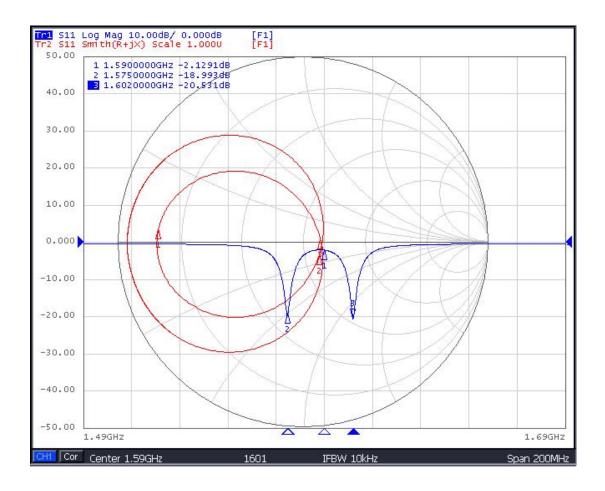
### 2 · OVERALL PERFORMANCE(Antenna Element, LNA & Cable)

CHARACTERISTICS	SPEC
Center Frequency	GPS: 1575.42±1.023MHz
	GLONASS :1602~1615.5±0.51MHz
	(When the antenna are placed on the
	customer's device inside)
Voltage	DC 2.7~5.0V
Current	5mA max
Gain	15dB typ
Noise Figure	2.0dB max
Bandwidth(10dB return loss)	5 MHz min
Output VSWR	2.0 max
Output Impedance	50ohm
Dimensions	10mm(L)×10mm(W)×6.5mm(H) typ
Weight	6±2g(typ)
Cable	60±2mm (Φ=1.13mm)
Connector	IPEX (Pull=0.4Kg)



#### 3 • Patch antenna

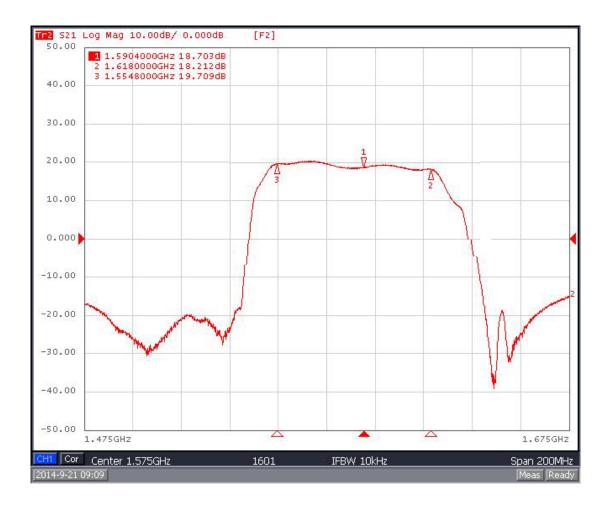
CHARACTERISTICS	SPEC
Dimensions	10mm(L)×10mm(W)×4mm(H) typ
Center Frequency	GPS:1575±1MHz GLONASS: 1602~1615.5±0.51MHz (12mm(L)×12mm(W) Ground)
Bandwidth(10dB return loss)	GPS:1575±1MHz min GLONASS:1609±4.5MHz min
Peak Gain	-3 dB typ
Output V.S.W.R	2.0dB max
Output Impedance	50ohm
Polarization	R.H.C.P





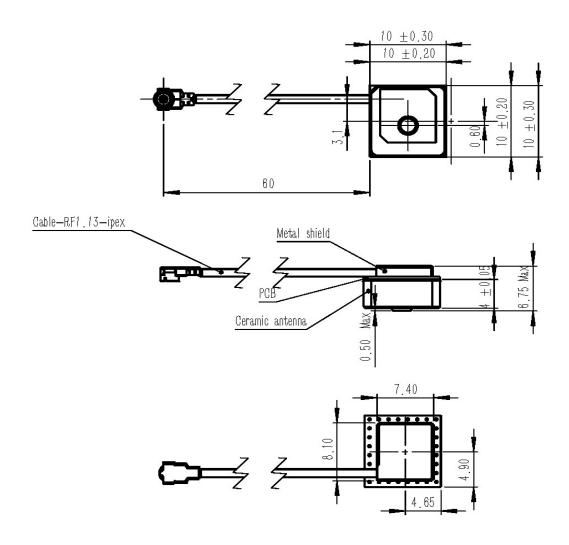
# 4 • LNA/Filter

CHARACTERISTICS	SPEC
Voltage	DC 2.7 - 5.0V
Current	5mA max
Center Frequency	GPS : 1575.42±1.023MHz GLONASS : 1602~1615.5±0.51MHz
Gain	15±2dB typ
Noise Figure	1.5dB max
Filter(Out of band attenuation)	SAW filter 30dB min fo±60MHz (fo=1590MHz)
Output V.S.W.R	2.0 max





## **5 · ANTENNA DIMENSIONS**



Unit : mm

# **6 \ OPERATING CONDITION**

Temperature	-40°C to +85°C
Humidity	10% to 95% RH

# **7 · STORAGE CONDITION**

Temperature	-40°C to +85°C
Humidity	10% to 95% RH



## 8 • Note

8.1 • This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.

 $8.2 \cdot$  We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.

8.3 • The product will get free warranty for one year since the date of purchase users operate in the corrct way; users will have to pay cost of the materials and maintaining fee out of the condition.