

**GPS391N-S3-02-A**

## **Specification**

<b>Product Name</b>	<b>INPAQ RF Active Antenna</b>
<b>Series/PN</b>	<b>GPS391N-S3-02-A</b>

**PN : GPS391N-S3-02-A**

**1. Application:**

This application shall apply for antenna unit which shall be used with an engine for an automobile.(for impedance 50Ω)

**2. Appearance:**

Antenna Unit ( with radome , connector , and cable – refer to an attached drawing )

Dimensions	13.4*13.4*5.6mm	;	Radome	#N
Weight	3.5g typ.	;	Connector	IPEX MHF
Color	Gray	;	Cable	Φ1.13 40mm
PCB	lead free			

**3. Operating Condition:**

Temperature -40 to +90 °C

**4. Storage Condition:**

Temperature -40 to +90 °C

Humidity 65±20 % RH

**5. Electrical Specification:**

\* All value are defined at 25±15 °C ,65±20 % RH, power handling 1 u watt,air pressure 960 ±100 HPA unless otherwise noted.

\* Patch characteristics are measured with test ground plane in an anechoic chamber.

**5-1 Patch**

Characteristics	Specification
Center Frequency	1575.42±1.5 MHz ( when covered with a radome on LNA ground plane. )
Bandwidth (10dB return loss)	16 MHz min
Gain at Zenith	-1.5 dBic typ.
Polarization	R.H.C.P
Axial Ratio	7.0dB typ.

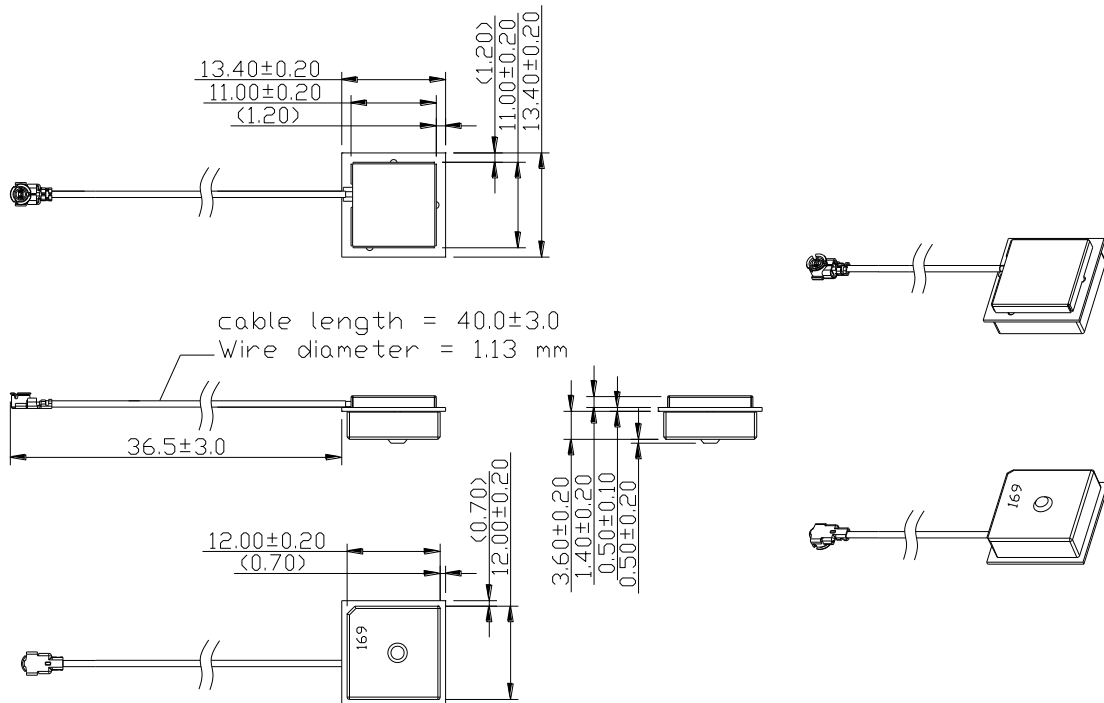
**5-2 Filter / LNA**

Characteristics	Specification
Center Frequency	1575.42±1.023 MHz
Gain	19±3dB
Noise Figure	1.5 dB typ.
Output V.S.W.R	2.0 typ.
Voltage	3.0±0.3V
Current(DC= 3.0±0.1V)	4±1.5mA

### 5-3 Overall Specification

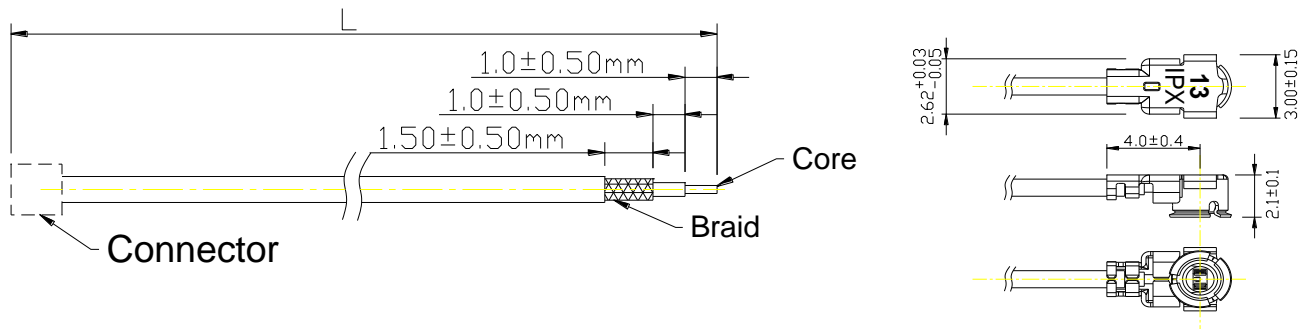
Characteristics	Specification
Center Frequency	1575.42±1.023 MHz ( when covered with a radome on LNA ground plane. )
Gain at Zenith	15.5 dBic typ.(for ground 13.4x13.4mm)
Output Impedance	50 ohm
Output VSWR	2.0 typ.
Operation Voltage	3.0±0.3V
Current	4±1.5mA

### 6. Antenna Dimensions:



**Cab**

### le Length:



**Connector : I-PEX MHF , Cable : RF Cable 1.13 , L : 40.0±3.0mm**

## 7. Design Block Diagram

