

GPS277N-S3-10-A

Specification

Product Name	INPAQ RF Active Antenna
Series/PN	GPS277N-S3-10-A

PN : GPS277N-S3-10-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)

Characteristics	Specification
Dimensions	22.0*21.0*7.45mm
Radome	#N
Weight	8.2g typ.
Connector	I-PEX MHF
Color	Gray
Cable	RF Φ1.13 55mm(overall length 60mm)
PCB	Lead free

3. Operating Condition:

Temperature	-40~+90°C
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4. Storage Condition:

Temperature	-40~+90°C
Humidity	65±20%RH

5. Electrical Specification:

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

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

5-1 Patch Specification.

Characteristics	Specification
Center Frequency	1575.42±2.5MHz (when covered with a radome on LNA ground plane.)
Bandwidth (10dB return loss)	8MHz min.
Zenith Gain	0.7 dBic typ.
Polarization	R.H.C.P
Axial Ratio	4.0dB max

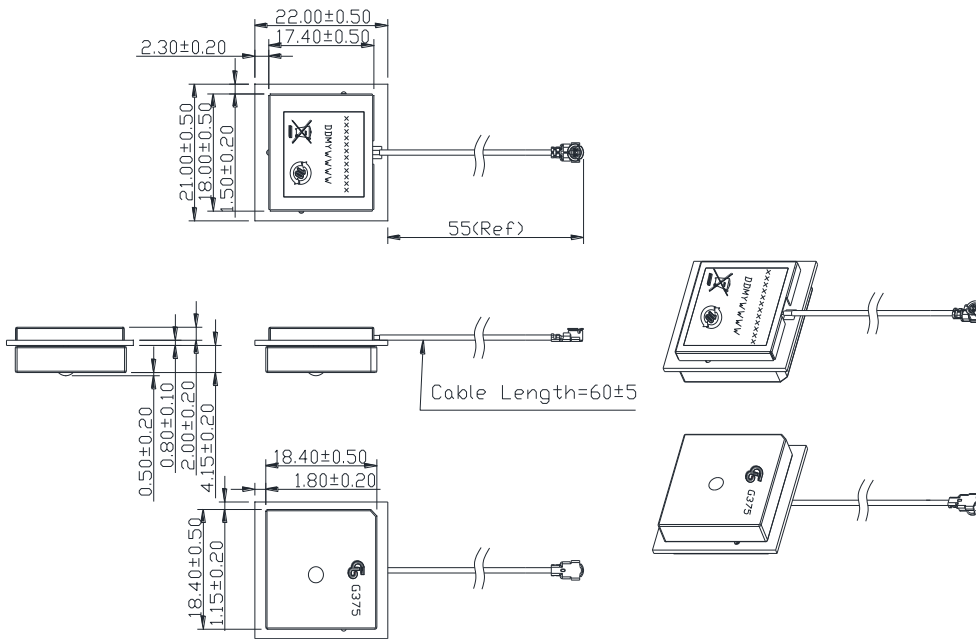
5-2 LNA Specification.

Characteristics	Specification
Gain	24±3dB (at 3.0±0.1V)
Noise Figure	2.0dB typ.
Filter Outband attenuation	34.0dB typ. fo±100MHz (fo=1575.42MHz~1602MHz)
Output V.S.W.R	2.0 max
Operation Voltage	DC=3.0±0.1V
Current	DC=7±3mA (at 3.0±0.1V)

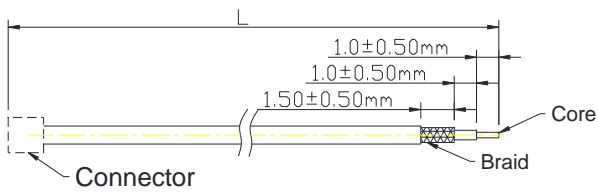
5-3 Overall Specification. (Through Antenna, LNA, without cable loss)

Characteristics	Specification
Center Frequency	1575.42±1.023MHz (when covered with a radome on LNA ground plane.)
Zenith Gain	24.7±3dBic(+25°C±5°C) 24.7±4dBic(-40°C~+85°C)(MOUNTED ON THE 60mm*60mm SQUARE GROUND PLANE)
Output Impedance	50ohm
Output V.S.W.R	2.0 typ.
Operation Voltage	DC=3.0±0.1V
Current	DC=7±3mA (at 3.0±0.1V)

6. Antenna Dimensions:(unit : mm)



Cable Length



Connector: I-PEX MHF (此為示意圖，其圖一內應有線徑標示”13”)

Cable: RF Cable φ1.13 (灰色)

L: 60±5mm

