

GNS01U7W-S6-00-A

Specification

Product Name	INPAQ RF Active Antenna
Series/PN	GNS01U7W-S6-00-A

PN : GNS01U7W-S6-00-A

1. Application

This product shall be applied as an antenna unit in positioning or timing system application.

2. Appearance

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

Dimensions	41*34*13.5 mm
Radome	#U7W
Connector	FKA FML C CODE (GEN 4.0)
Cable	RG174 / 5 M
Magnet	YES
Adhesive	YES
Label	NO
Weight	99.4 g typ.

3. Operating Condition

Temperature	-40~+85 °C
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4. Storage Condition

Temperature	-40~+85 °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 U7W housing in an anechoic chamber.

5-1. Patch

Characteristics	Specification	
Frequency Range	1572~1605 MHz	
Peak Gain	1575.42 MHz	1.8 dBic
	1602 MHz	1.9 dBic
Polarization	RHCP	
VSWR	2.0 typ.	
Impedance	50 ohm	

5-2. Filter / LNA

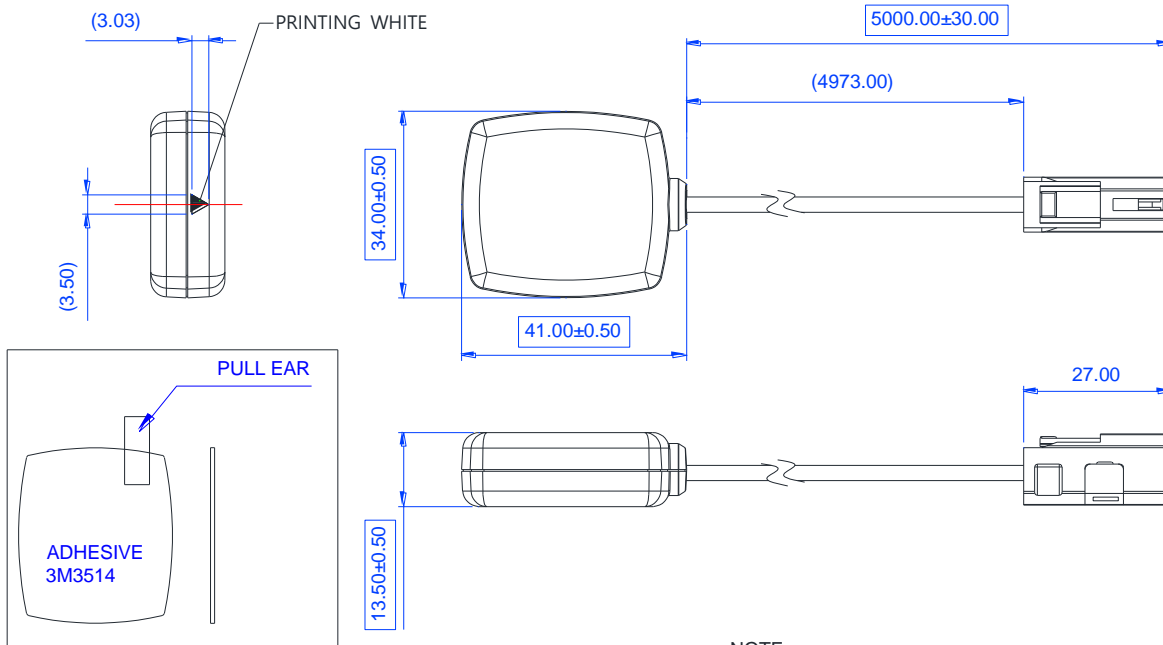
Characteristics	Specification		
Frequency Range	1575.42~1602 MHz		
Gain	1575.42 MHz	27.0±3.0 dB (at 3.0 V)	
		28.0±3.0 dB (at 5.0 V)	
	1602 MHz	25.0±3.0 dB (at 3.0 V)	
		28.0±3.0 dB (at 5.0 V)	
Noise Figure	2.5 dB typ.		
Filter Out Band Attenuation	F ₁ = 1575.42 MHz	F ₁ -50 MHz	> 35 dB
		F ₁ -100 MHz	> 35 dB
	F ₂ = 1602 MHz	F ₂ +50 MHz	> 35 dB
		F ₂ +100 MHz	> 35 dB
Output VSWR	2.0 typ.		
Operation Voltage	2.7 V~5.5 V		
Current	10.0±3.0 mA (at 3.0 V) ,20.0±4.0 mA (at 5.0 V)		

5-3. Overall Specification (Through Antenna, LNA, Without Cable Loss)

Characteristics	Specification	
Frequency Range	1575.42~1602 MHz	
Gain	1575.42 MHz	28.8±3.0 dB (at 3.0 V)
		29.8±3.0 dB (at 5.0 V)
	1602 MHz	26.9±3.0 dB (at 3.0 V)
		29.9±3.0 dB (at 5.0 V)
Output VSWR	2.0 typ.	
Operation Voltage	2.7 V~5.5 V	
Current	10.0±3.0 mA (at 3.0 V)	
	20.0±4.0 mA (at 5.0 V)	

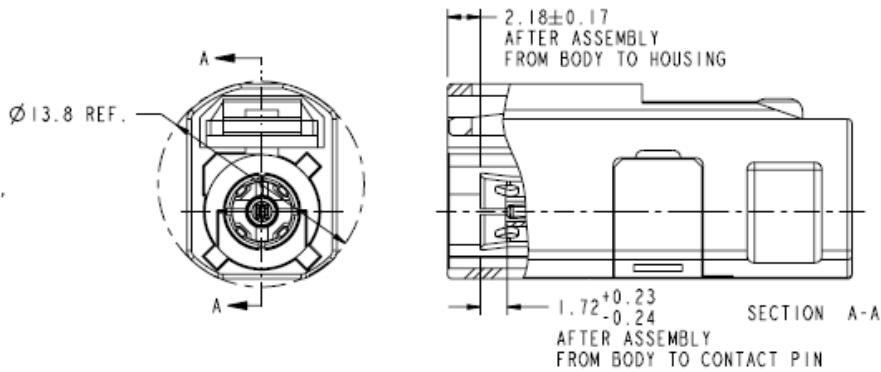
6. Antenna Dimensions

6-1. Antenna Dimension



- NOTE:
1. "○" INDICATES PROCESS CONTROL DIMENSION.
 2. "□" INDICATES CPK CONTROL DIMENSION.

6-2. Connector Appearance (FAKRA Female C Code (GEN 4.0))



6-3. 3M Acrylic Foam Tape (Tape is Not Fixed At The Antenna)

