

# **SPECIFICATION**

Part No.	:	GP.1575.18.4.A.02	
Product Name	:	Miniature GPS Patch Antenna	
Features	:	18mm*18mm*4mm ROHS Compliant	

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## 1. Introduction

This ceramic GPS patch antenna is based on smart **XtremeGain**<sup>™</sup> technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the 50x50mm ground plane.

### 2. Specification Table

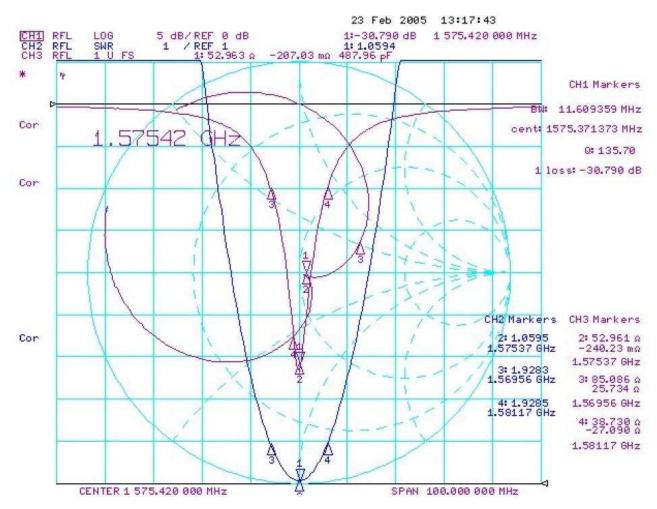
No	Parameter	Specification	
1	Center Frequency	1575MHz +/- 3MHz**	
2	Impedance	50Ω	
3	Bandwidth	8MHz min Return Loss <-10dB	
4	VSWR	1.5 max	
5	Gain toward Zenith	+2.5 dBic typ.	
6	Gain at 10°Elevation	-4.5 dBic typ.	
7	Axial Ratio	3dB Max.	Center Frequency
8	Polarization	Right Hand Circular Polarization	
	Frequency Temperature		
9	$\textbf{Coefficient}~(\tau f)$	0 ± 20ppm/°C	
10	Operating Temperature	-40°C to +85°C	

Original Patch Specification tested on 50\*50mm ground plane

\*\*Changes in user groundplane and environment will offset centre frequency



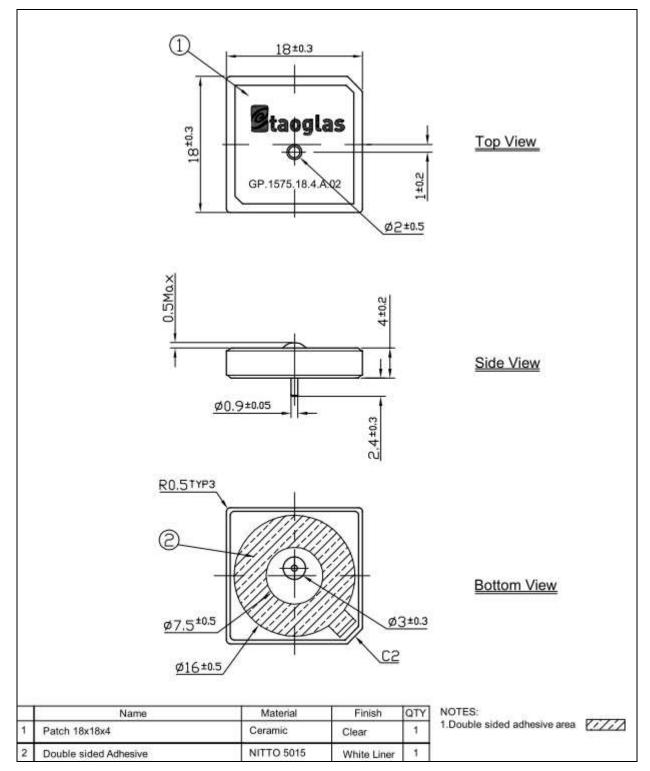
## 3. Electrical Specification



#### 3.1Smith Chart

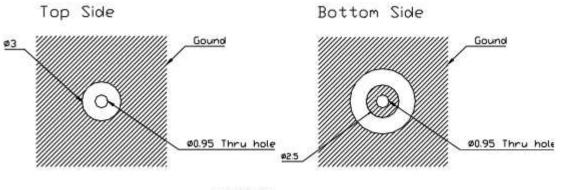








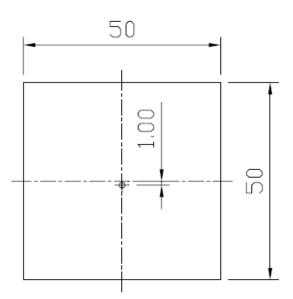
#### **4.1 Layout Dimension**

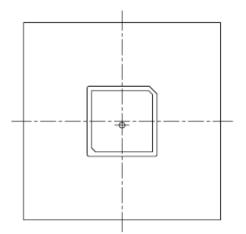


TOL:±0.20 UNIT:mm

\*Note Layout Dimensions may be affected by the thickness of the PCB

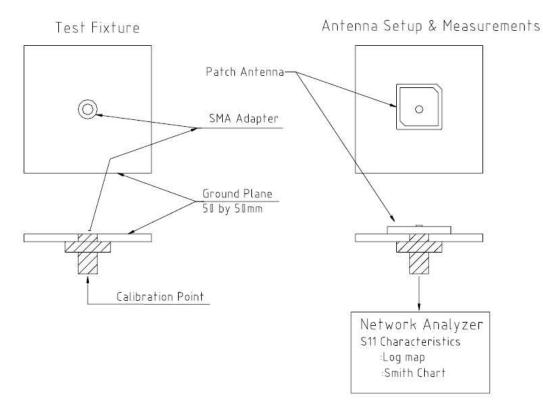
## 5. Test Jig and Dimensions







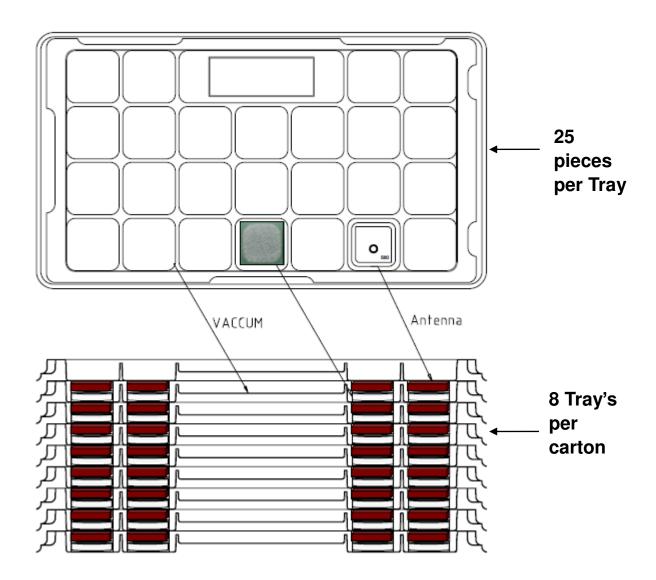
#### **5.1 Test Fixture Antenna Setup & Measurements**



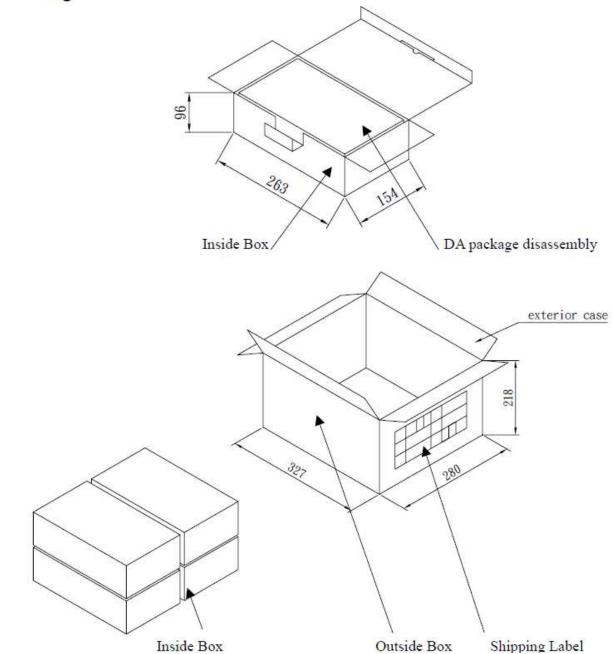


## 6. Packaging

- Per Tray: 25 pieces
- Per Carton(Inside Box) 8 Trays = 200 pieces
- Outer Carton (Outside Box)- 4 Cartons = 800 pieces







Packing