

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**[™] 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

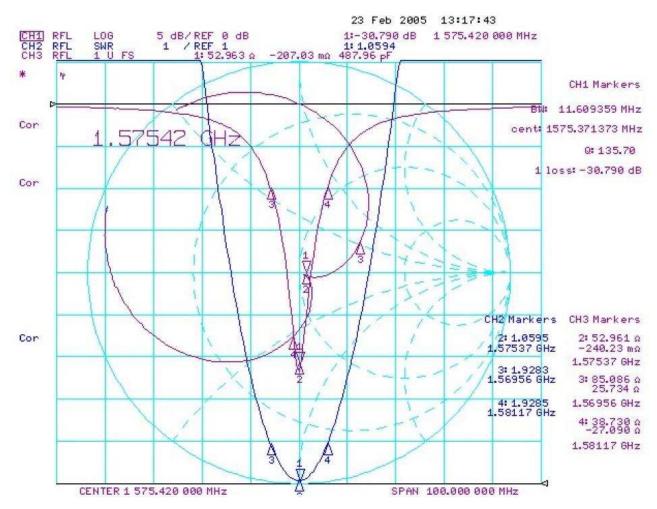
No	Parameter	Specification	
1	Center Frequency	1575MHz +/- 3MHz**	
2	Impedance	50Ω	
3	Bandwidth	8MHz min Return Loss <-10dB	
4	VSWR	1.5 max	
5	Gain toward Zenith	+2.5 dBic typ.	
6	Gain at 10°Elevation	-4.5 dBic typ.	
7	Axial Ratio	3dB Max.	Center Frequency
8	Polarization	Right Hand Circular Polarization	
	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



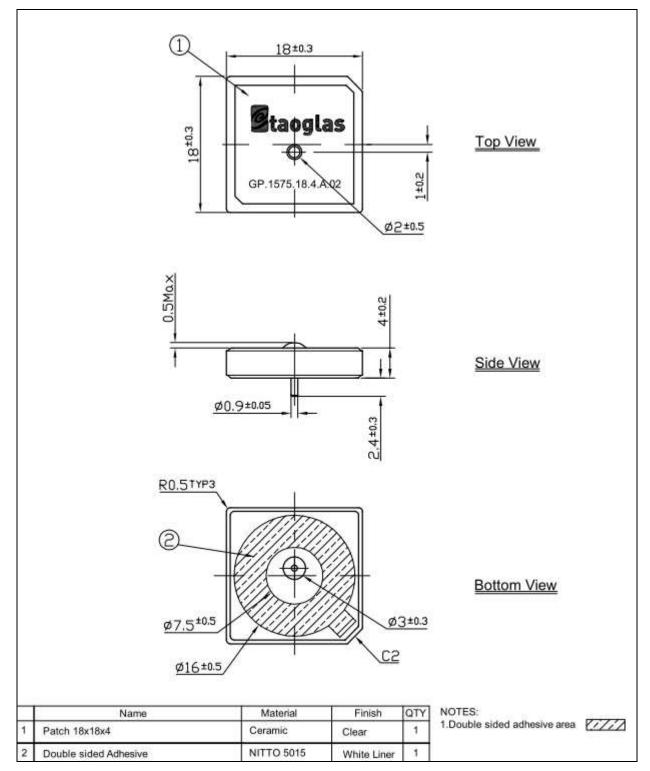
3. Electrical Specification



3.1Smith Chart

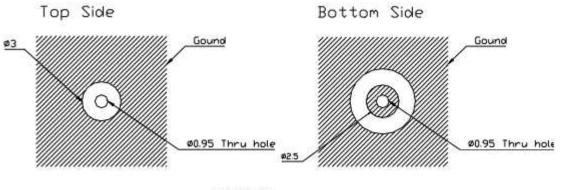








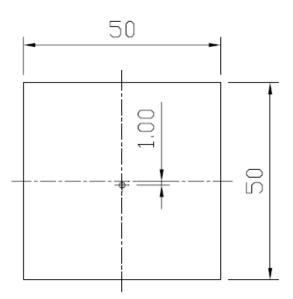
4.1 Layout Dimension

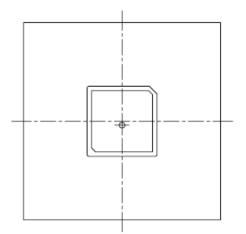


TOL:±0.20 UNIT:mm

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

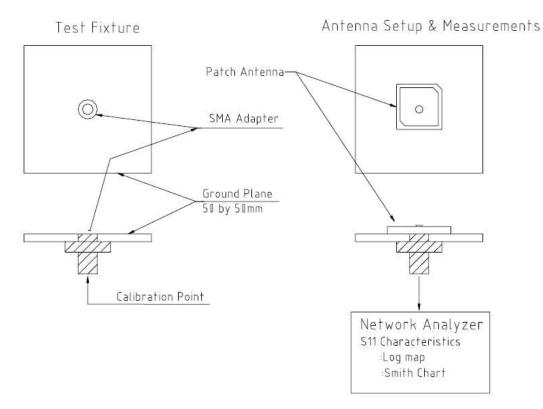
5. Test Jig and Dimensions







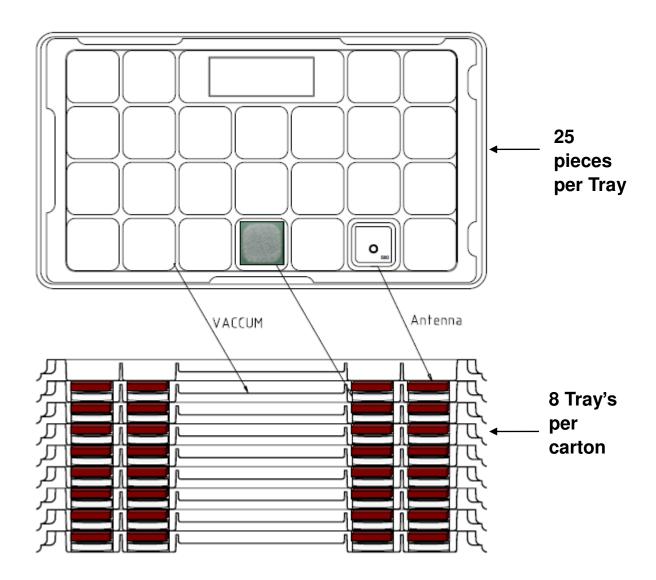
5.1 Test Fixture Antenna Setup & Measurements



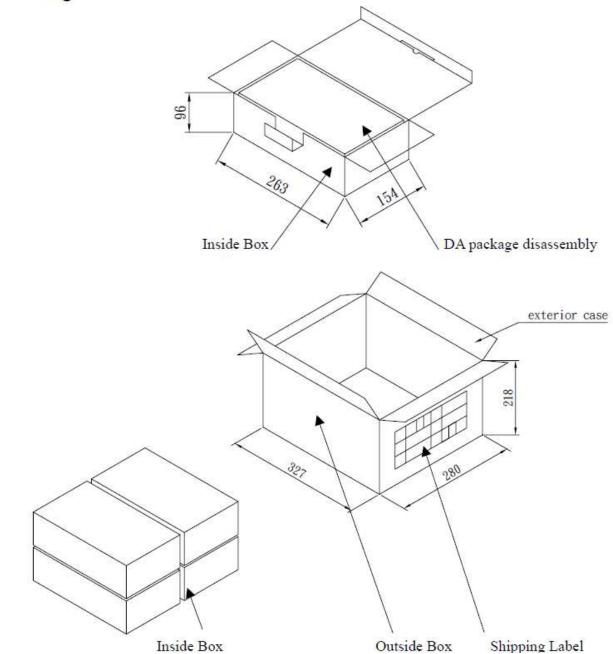


6. Packaging

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







Packing