

SPECIFICATION

Part No. : **GP.1575.35.3.A.02**

Product Name : 3.5mm thick GPS Patch Antenna, 1575MHz

Features : 35mm*35mm*3.5mm

ROHS Compliant



SPE-12-8-098/D/AS



1. Introduction

This 35*35mm ceramic GPS/GALILEO patch antenna is based on smart $XtremeGain^{\intercal}$ technology. It is mounted via pin and double-sided adhesive and has been tuned as the optimal solution for the customer device environment.

2. Key Antenna Performance Indicators

Original Patch Specification tested on 50*50mm ground plane

No	Parameter	Specification
1	Center Frequency	$1575MHz \pm 6MHz$
2	Bandwidth	22MHz min
3	VSWR	1.5 max
4	Gain at Zenith	2.0 dBic typ.
5	Gain at 10°elevation	1.5dBic typ.
6	Axial Ratio	3 dB max
7	Polarization	RHCP
8	Impedance	50 Ohms
9	Frequency Temperature Coefficient (Tf)	0 ± 20ppm / °C
10	Operating Temperature	-40°C to +85°C



3. Test Setup

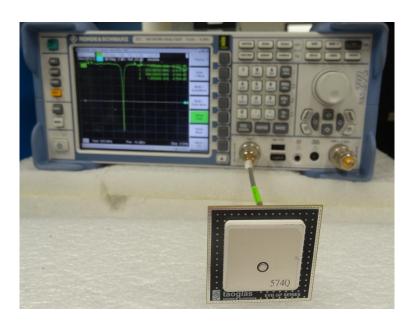


Figure 1. Return Loss measurement.

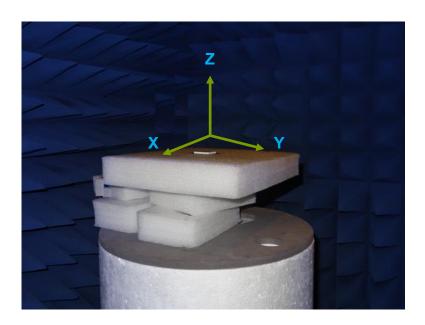


Figure 2. Peak gain, average gain, efficiency and radiation pattern measurements.



4. Antenna Parameters

4.1. Return Loss

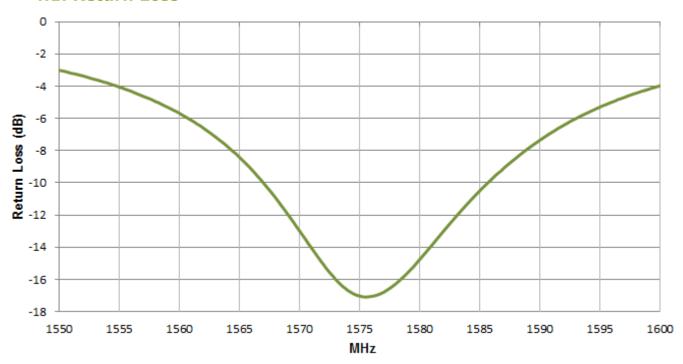


Figure 3. Return Loss of the GP.1575.35.A.02



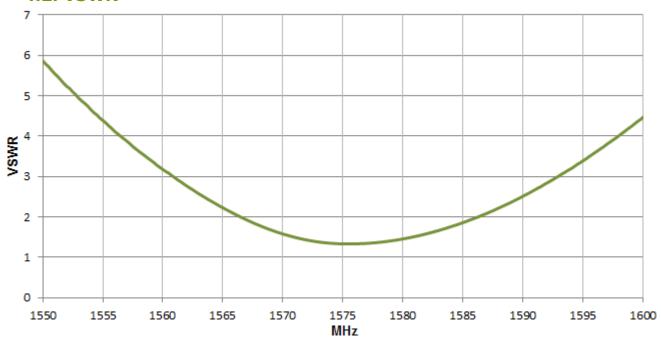


Figure 4. VSWR of the GP.1575.35.A.02



4.3. Efficiency

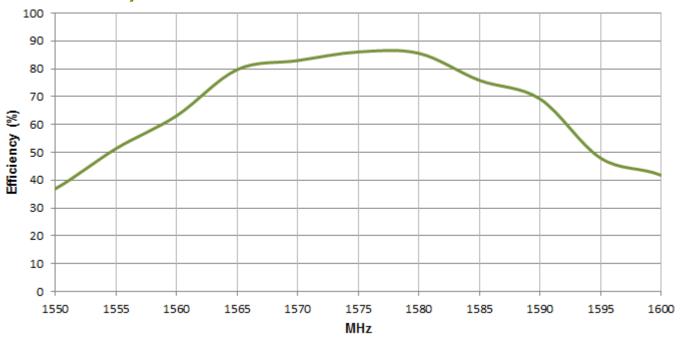


Figure 5. Efficiency of the GP.1575.35.A.02

4.4. Peak Gain

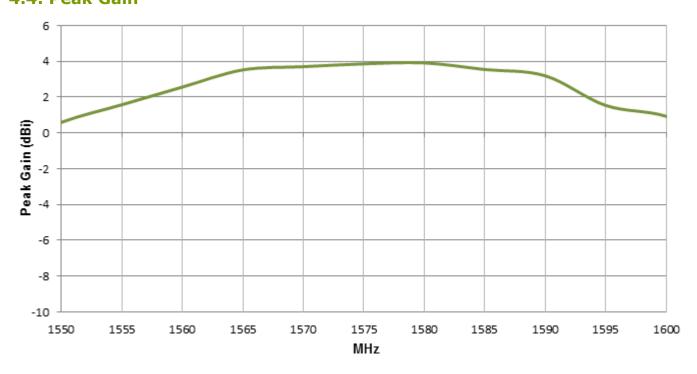
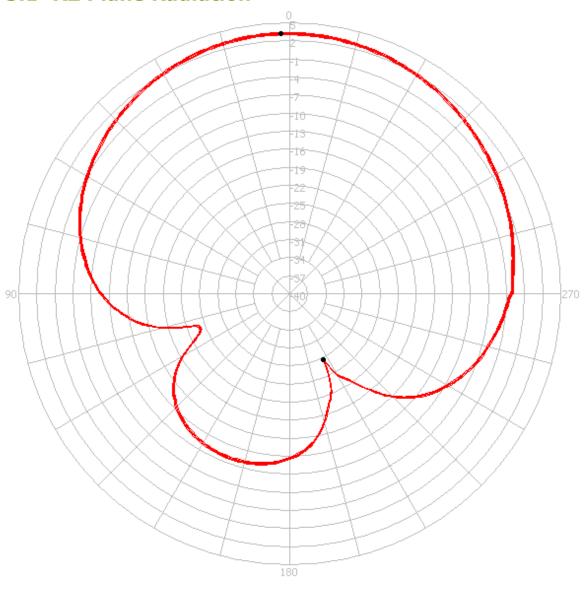


Figure 6. Peak Gain of the GP.1575.35.A.02.



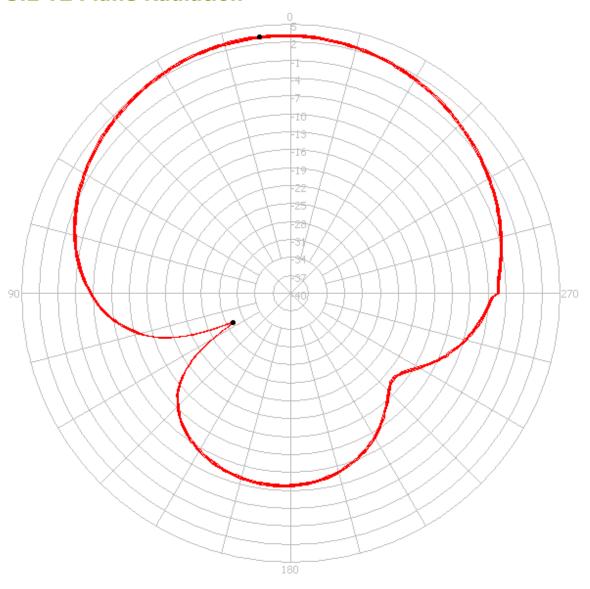
5. 2D Radiation

5.1 XZ Plane Radiation



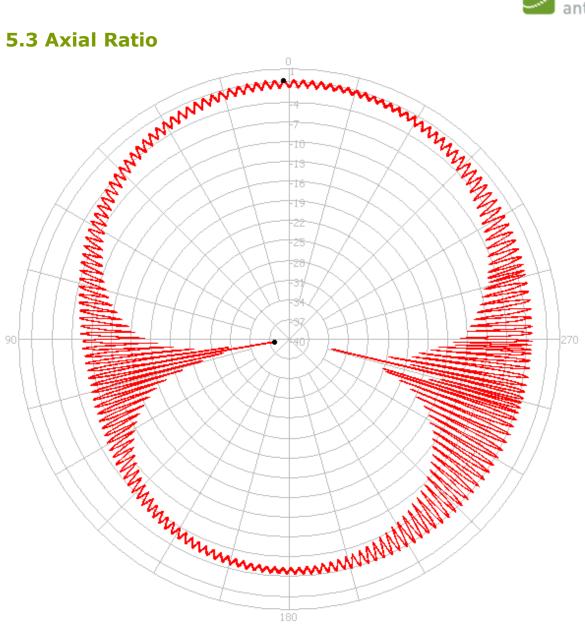


5.2 YZ Plane Radiation





5.3 Axial Ratio





5.4 3D Radiation

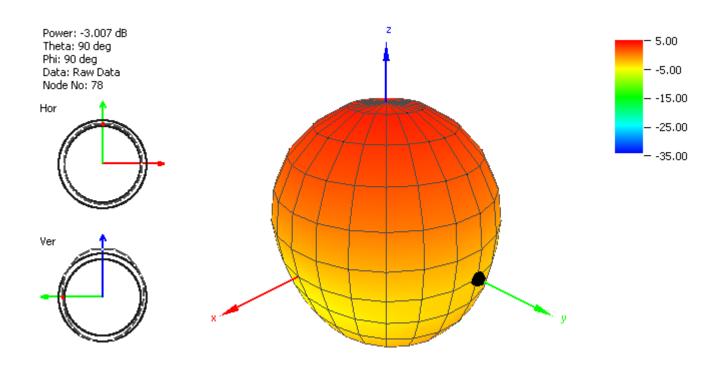
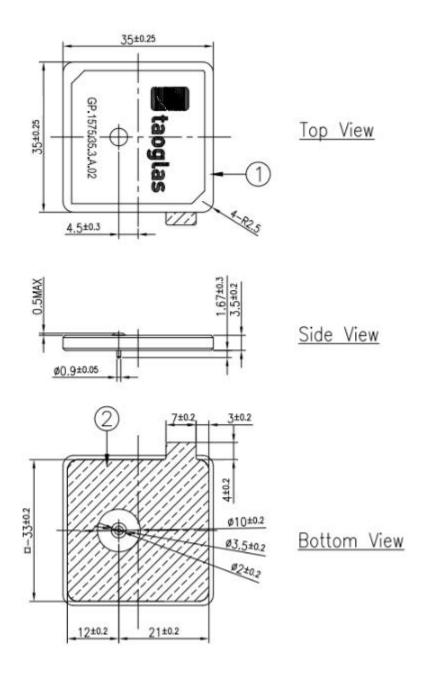


Figure 7. Radiation Pattern of the GP.1575.35.A.02 at 1575Mhz.



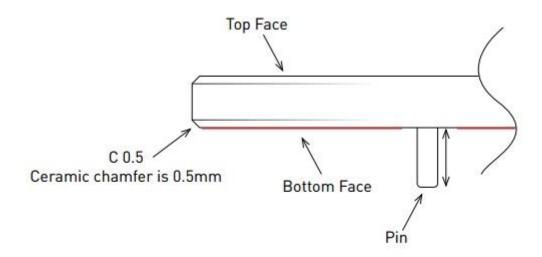
6. Mechanical Drawing



	Name	Material	Finish	QTY	NOTES:
1	GP.35 Patch 35x35x3.5	Ceramic	Clear	1	Double sided adhesive area.
2	Double sided Adhesive	NITTO 5015	White Liner	1	

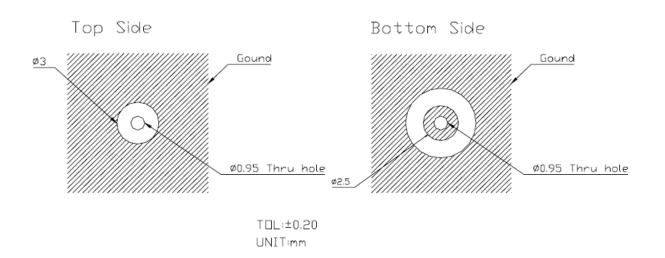


6.1 Adhesive Thickness



Red Line shows the adhesive without Liner - thickness 0.08-0.1mm

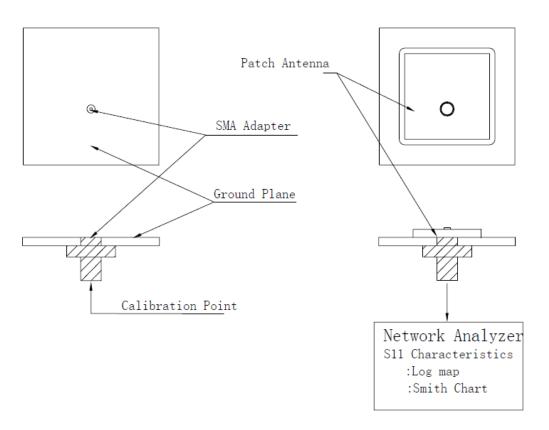
6.2 Layout Dimensions





6.3 Test Fixture Antenna Setup and Measurements

Test Fixture Antenna Setup & Measurements

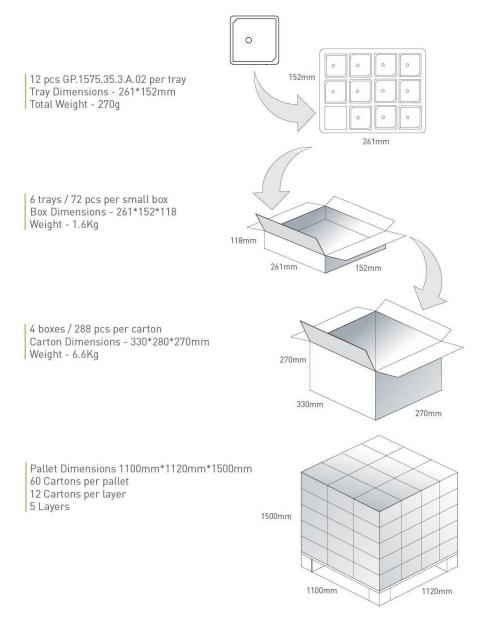




7. Packaging

GP.1575.35.3.A.02

Packaging Specifications



Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Antennas category:

Click to view products by Taoglas manufacturer:

Other Similar products are found below:

GAN30084EU 930-033-R GW17.07.0250E 1513563-1 EXE902SM APAMPG-117 MAF94383 W3908B0100 W6102B0100 YE572113-30RSMM 108-00014-50 66089-2406 A09-F8NF-M A09-F5NF-M RGFRA1903041A1T W3593B0100 W3921B0100 SIMNA-868 SIMNA-915 SIMNA-433 W1044 W1049B090 A75-001 WTL2449CQ1-FRSMM CPL9C EXB148BN 0600-00060 TRA9020S3PBN-001 GD5W-28P-NF MA9-7N GD53-25 GD5W-21P-NF EXB144SM C37 MAF94051 P1744 MA9-5N EXD420PL B1322NR QWFTB120 MAF94271 MAF94300 GPSMB301 FG4403 AO-AGSM-OM54 5200232 MIKROE-2349 WCM.01.0111 MIKROE-2393 MIKROE-2352