

# **SPECIFICATION**

Part No. : **IP.1621.25.4.A.02** 

Specification No : IP.25A

Product Name : 4mm thick Iridium Patch Antenna, 1621MHz

(PA025AO0000)

Features : 25mm\*25mm\*4mm

**ROHS Compliant** 

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### 1.0 Introduction

This miniaturized ceramic Iridium 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 customer device environment.

### 2.0 Key Antenna Performance Indicators

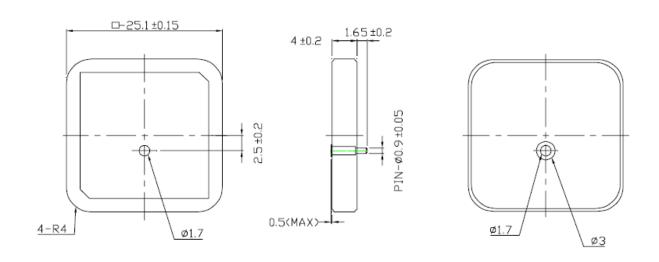
### Original Patch Specification tested on 50\*50mm ground plane

No	Parameter	Specification	Notes
1	Range of Receiving Frequency	1616~1626.5Mhz	
2	Center Frequency	1621MHz ±3MHz	with 50*50mm GND Plane
3	Bandwidth	16MHz	Return Loss ≤-10dB
4	VSWR	1.5 max	Center Frequency
5	Gain at Zenith	+2.0dBi typ.	Center Frequency
6	Gain at 10° Elevation		Center Frequency
7	Axial Ratio	3 dB Max	Center Frequency
8	Polarization	RHCP	
9	Impedance	50Ω	
10	Frequency Temp Coefficient (Tf)	0±20ppm/°C	-40°C to +85°C
11	Operating Temperature	-40°C to +85°C	
12	Antenna Weight	10g	

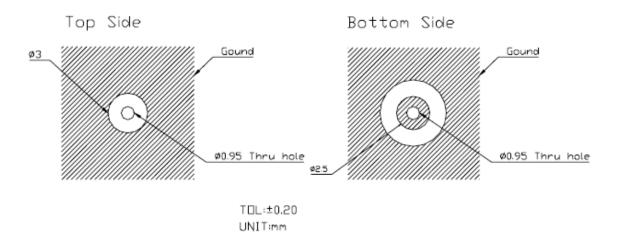


## 3.0 Mechanical Specifications

## 3.1 Shape and Dimension

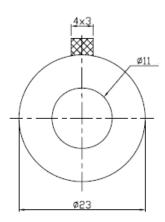


### 3.2 Layout





## **Tape Dimension**



1.NITTO: NO.5015

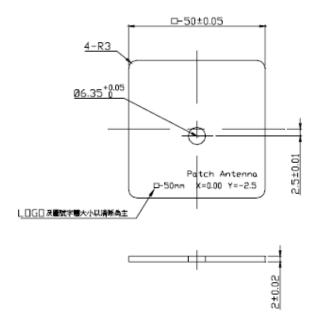
2.Double-coated adhesive tape for industrial use 3.Thickness: 0.12mm

#### Mark

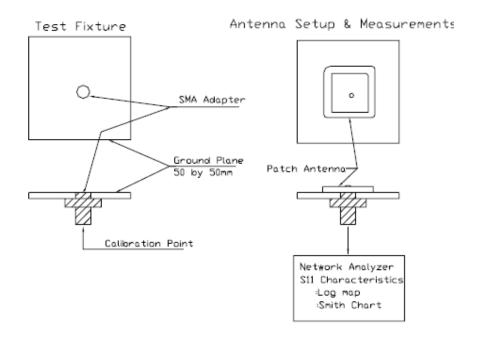




### 3.3 Test Jig and Dimensions

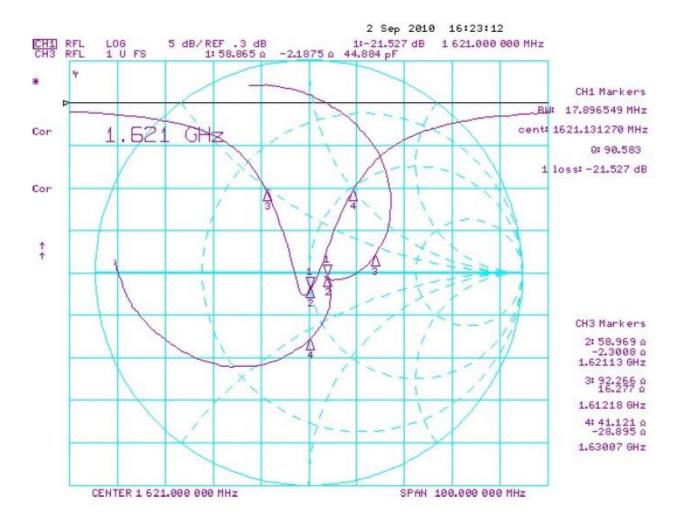


### 3.4 Test Fixture Antenna Setup and Measurements



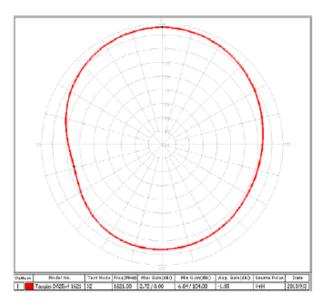
## 4.0 Performance testing and results



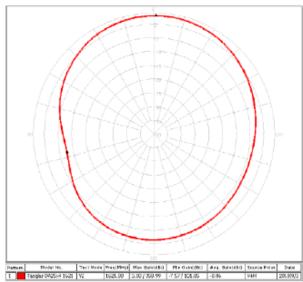




#### **Antenna Gain Chart**

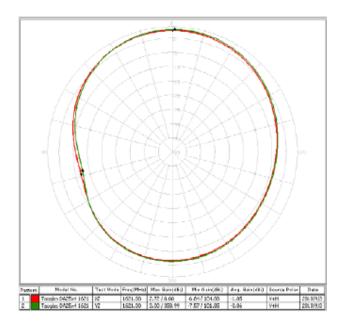


XZ-Plane



YZ-Plane



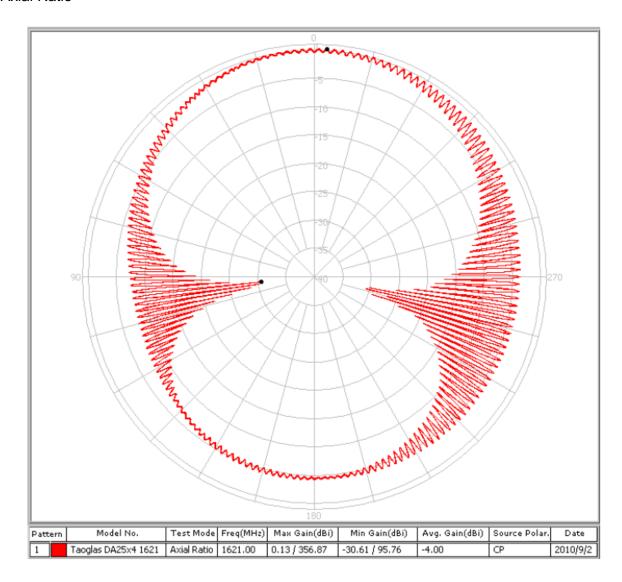


XZ+YZ-Plane

Plane	Max Gain(dBi)	Min Gain(dBi)	Avg. Gain(dBi)
XZ	2.72/1.00	-6.84/104	-1.05
YZ	3.00/358.99	-7.57/101.85	-0.86



#### **Axial Ratio**





## 5.0 Packaging

- •Per Tray: 50 pieces
- ●Per Carton(Inside Box) 4 Trays = 200 pieces
- •Outer Carton (Outside Box)- 4 Cartons = 800 pieces

