

## SPECIFICATION

Part No. : **GP.1575.18.4.A.02**

Product Name : **Miniature GPS Patch Antenna**

Features : 18mm\*18mm\*4mm  
ROHS Compliant

:



## 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

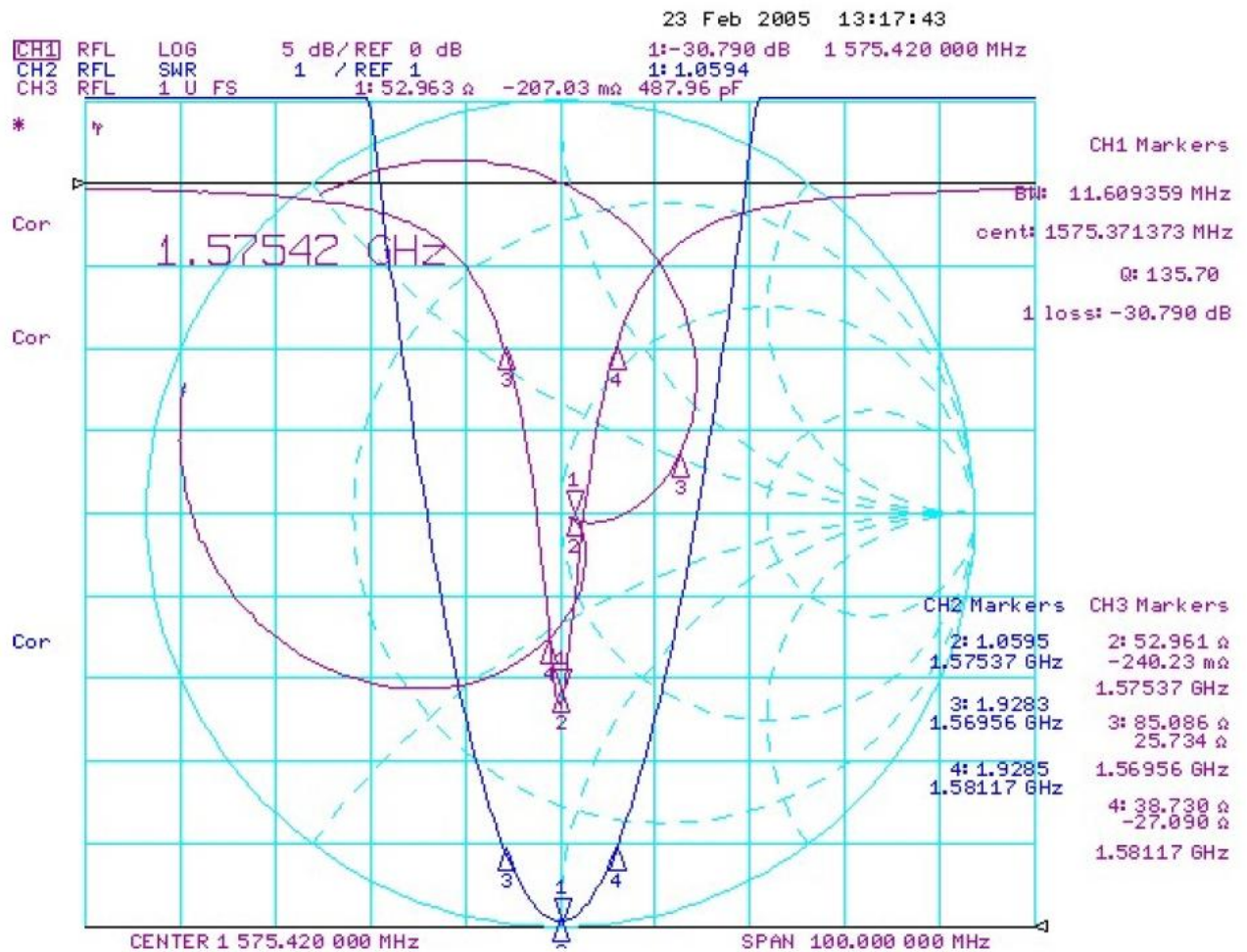
Original Patch Specification tested on 50\*50mm ground plane

| 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 |
| 9  | Frequency Temperature Coefficient ( $\tau_f$ ) | 0 ± 20ppm/°C                     |
| 10 | Operating Temperature                          | -40°C to +85°C                   |

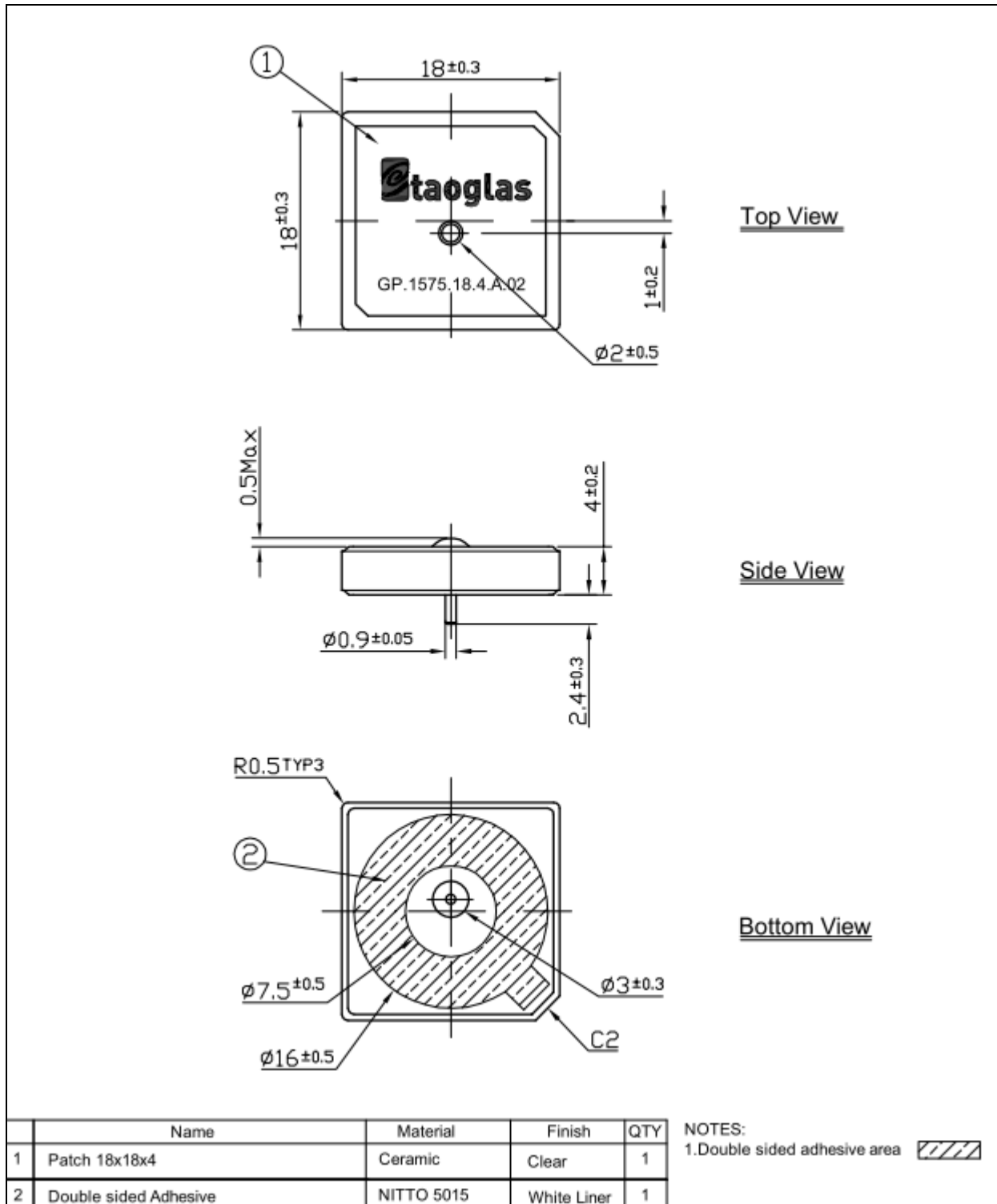
\*\*Changes in user groundplane and environment will offset centre frequency

## 3. Electrical Specification

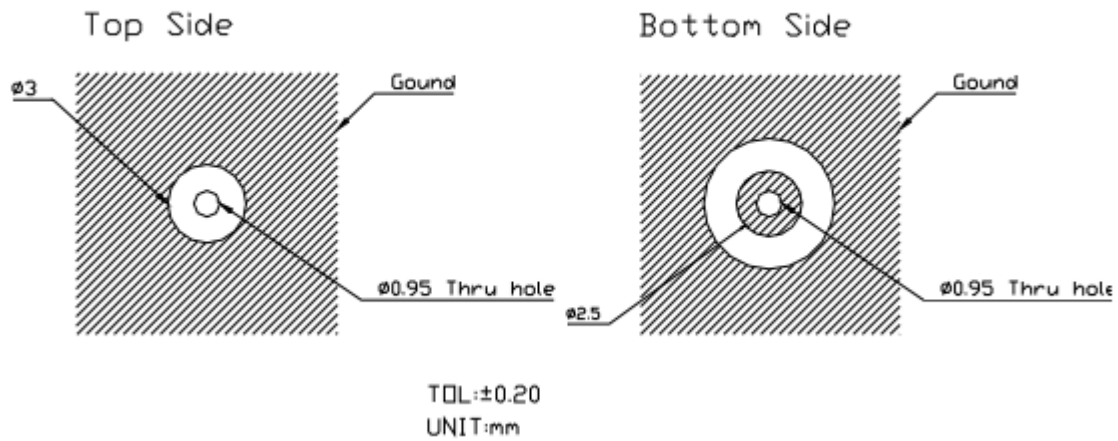
### 3.1 Smith Chart



## 4. Dimensions and Drawing

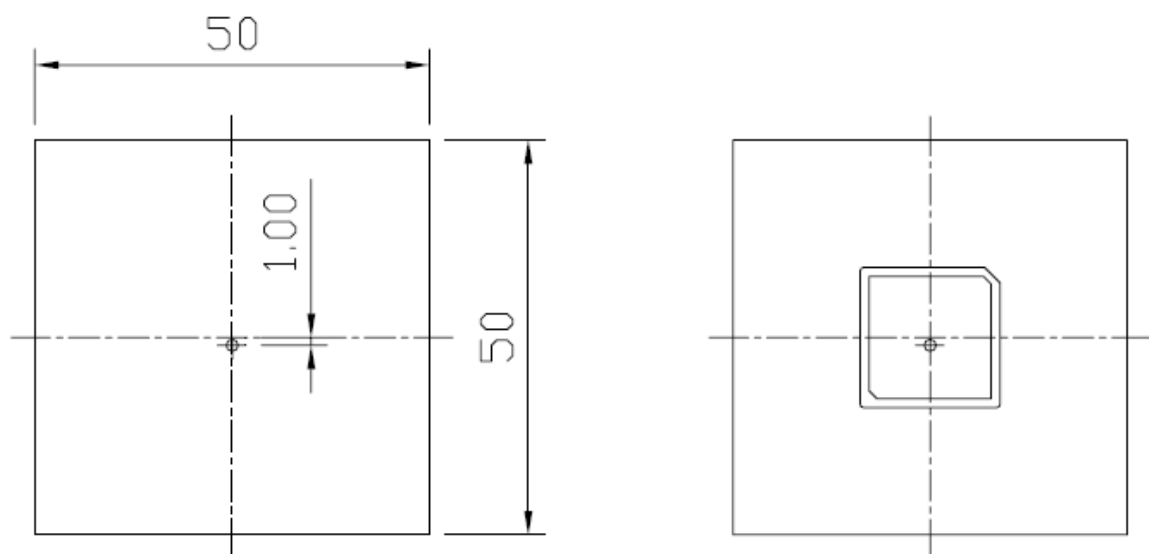


## 4.1 Layout Dimension

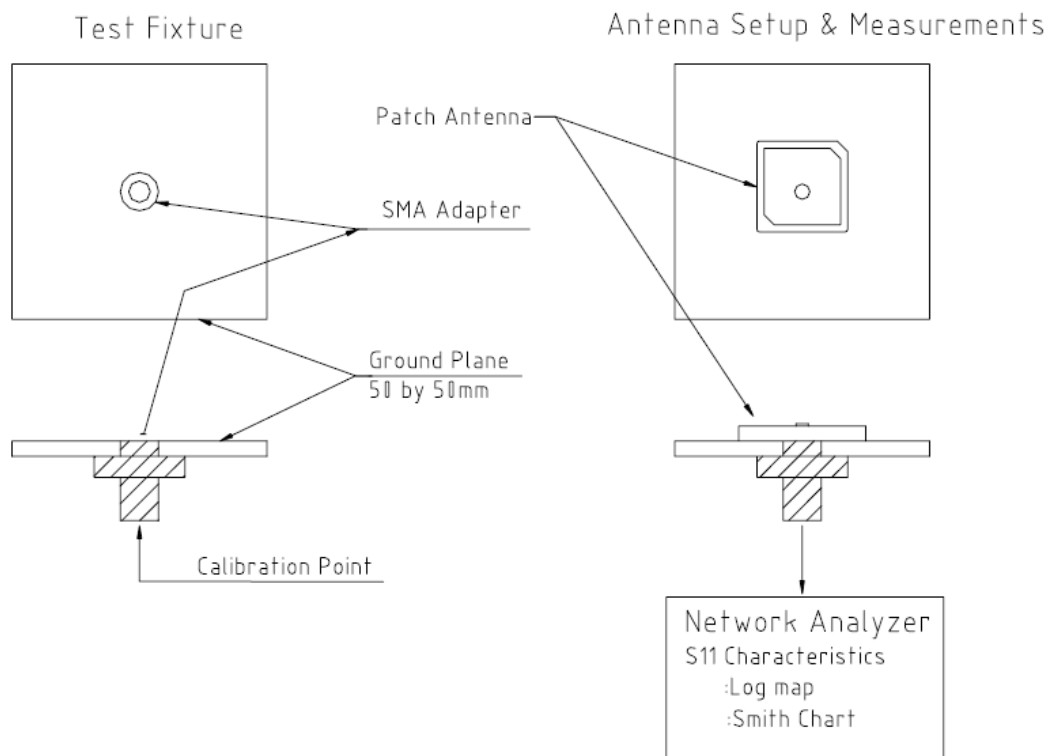


\*Note Layout Dimensions may be affected by the thickness of the PCB

## 5. Test Jig and Dimensions

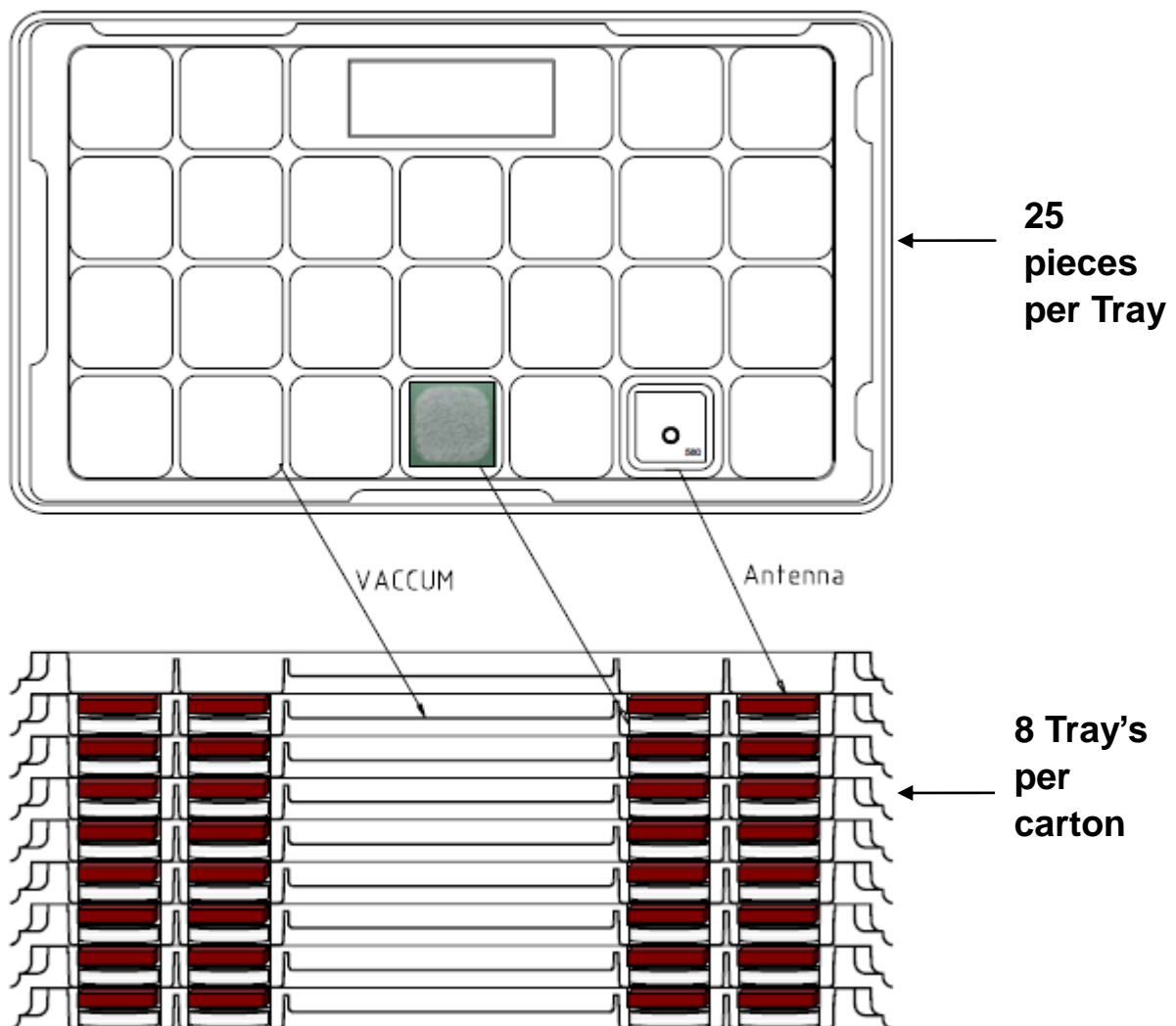


## 5.1 Test Fixture Antenna Setup & Measurements

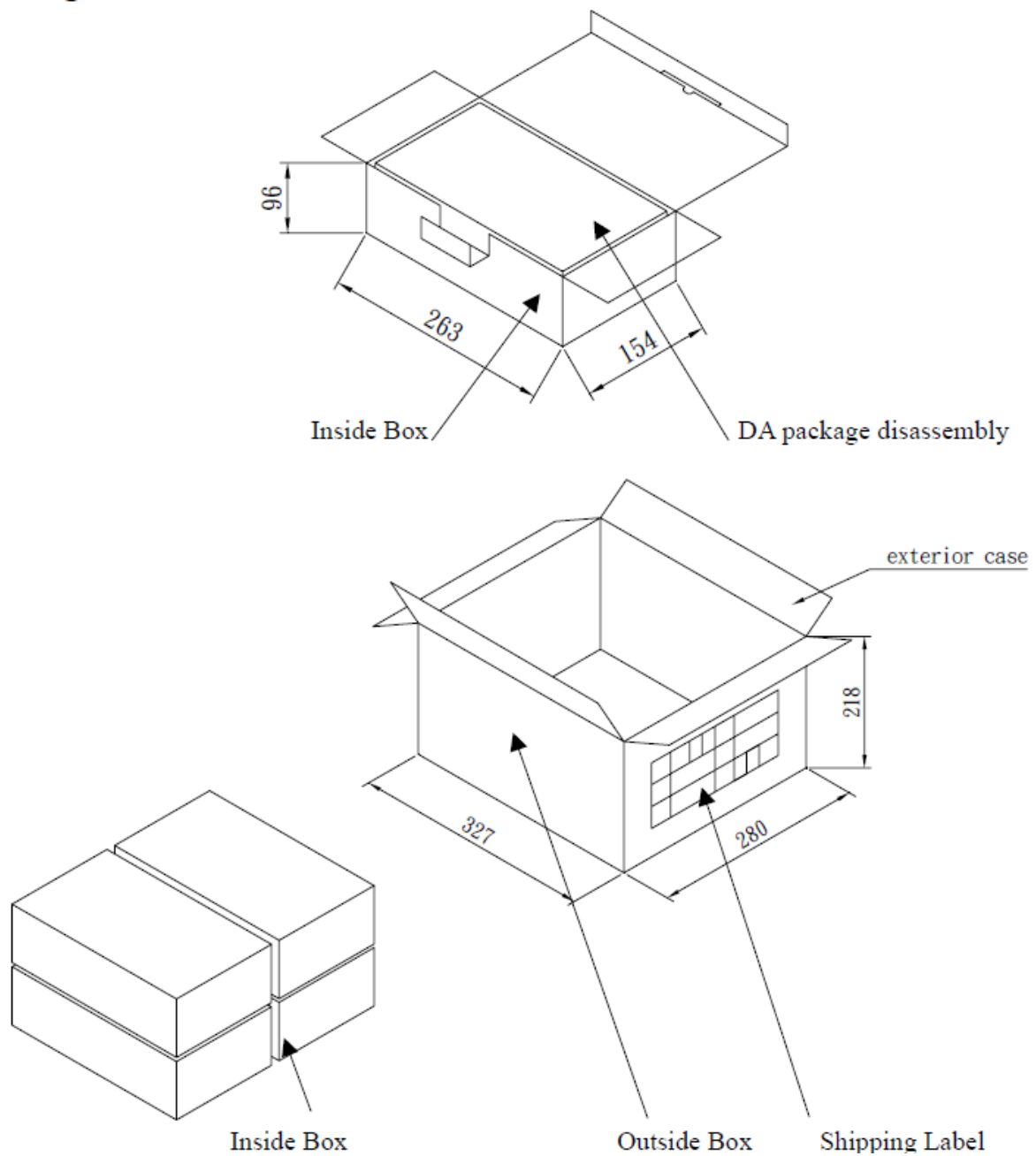


## 6. Packaging

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



## Packing





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