



# TAOGLAS®



# Datasheet

## 915/868MHz Terminal Antenna

**Part No:**  
TI.08.C.0112

### Description

915/868MHz ISM Band Terminal Antenna Fixed Right-Angle SMA(M) Connector

### Features:

- Omni-Directional Dipole Antenna
- TPU Housing
- Dimensions: 53x17mm
- SMA Male Right Angle Connector
- RoHS & Reach Compliant

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# 1. Introduction



The Taoglas TI.08.C.0112 is a high performance antenna covering both 915 and 868MHz, small form factor, dipole omni-direction terminal mount antenna. This antenna features an SMA(M) right angle connector as standard.

Some typical applications include:

- Smart Lighting
- Remote Monitoring
- IoT (Internet of Things)
- Smart Metering

This antenna is fabricated using TPU, which is a lightweight robust material used on several other Taoglas products. The TI.08.0112 can function impressively with a small ground plane while maintaining high efficiencies, on the band 863~870 it can reach at least 53% on a 15x9cm ground plane. The antenna connector type can be customizable, please contact your regional Taoglas sales facility for support.

## 2. Specification

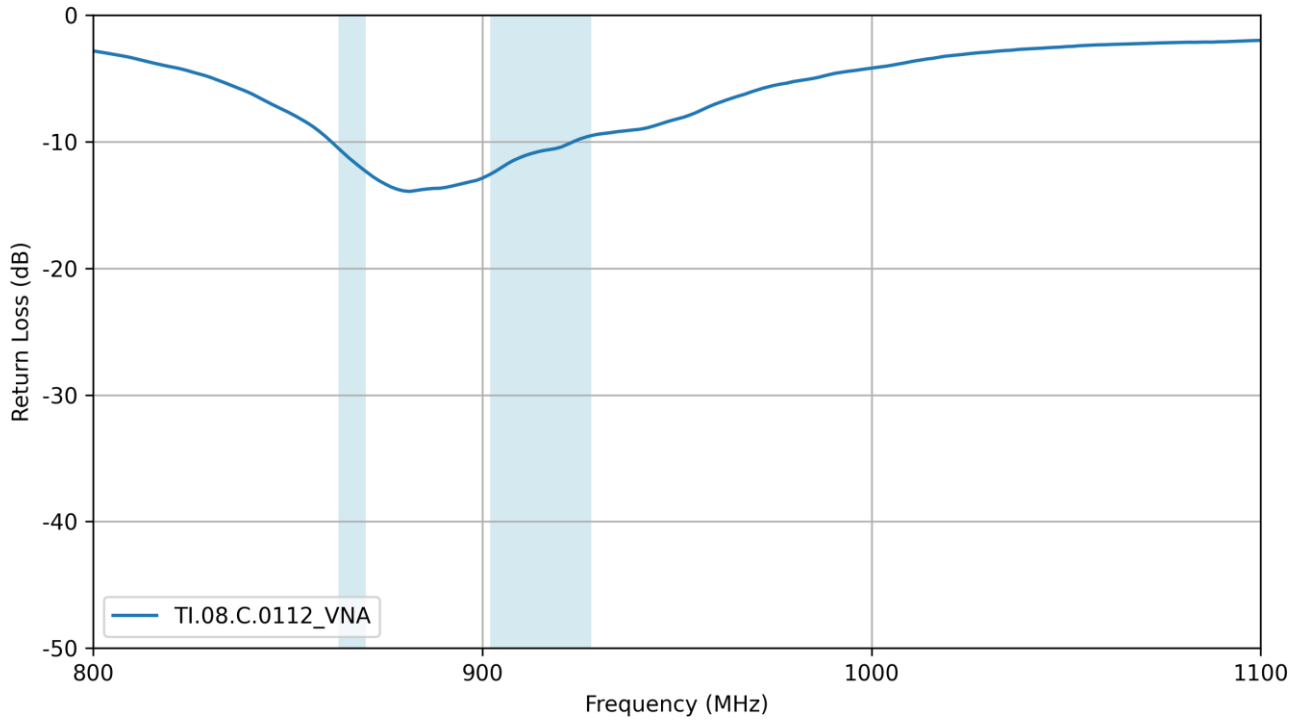
Electrical								
Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	Polarization	Radiation Pattern	Input power
868MHz	863-870	69.1	-1.60	2.47	50 Ω	Linear	Omni	50 W
915MHz	902-928	71.9	-1.43	2.91				

Mechanical	
Height	53 ± 2 mm
Diameter	Ø7 ± 0.2 mm
Width	17 ± 0.8 mm
Casing	TPU
Connector	SMA(M) RA

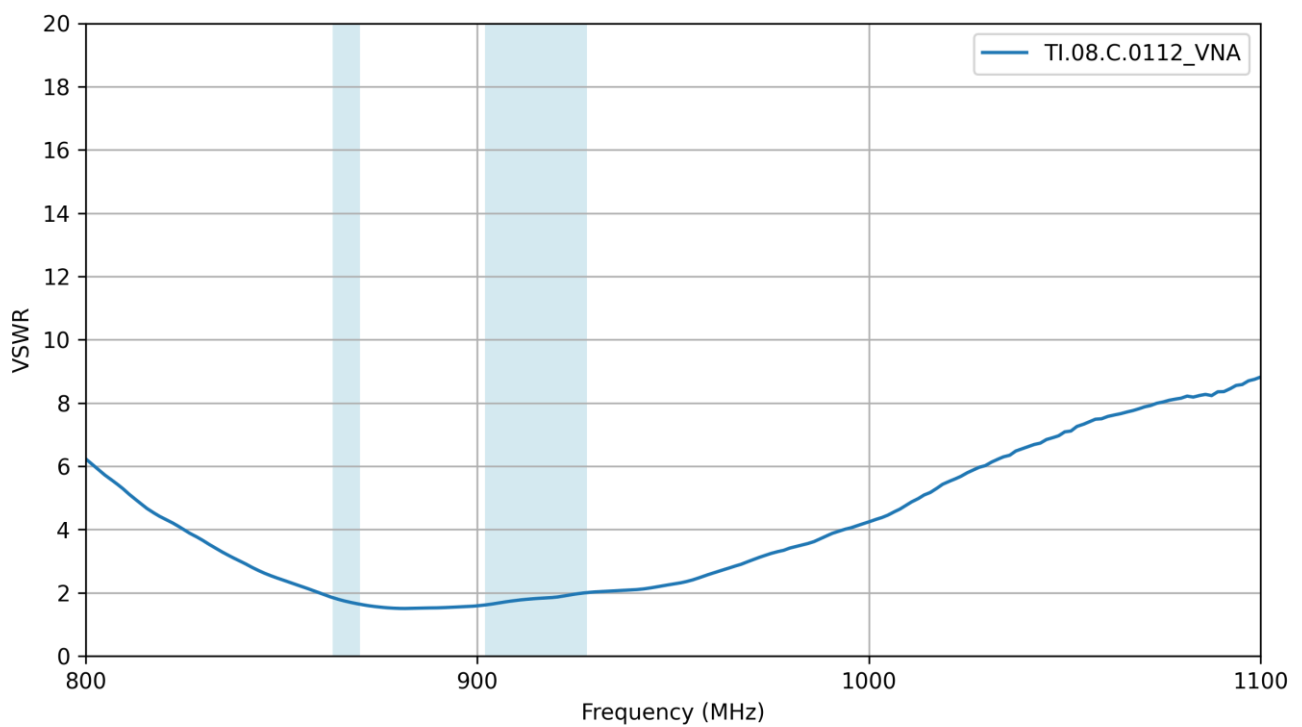
Environmental	
Temperature Range	-40°C to 70°C

### 3. Antenna Characteristics

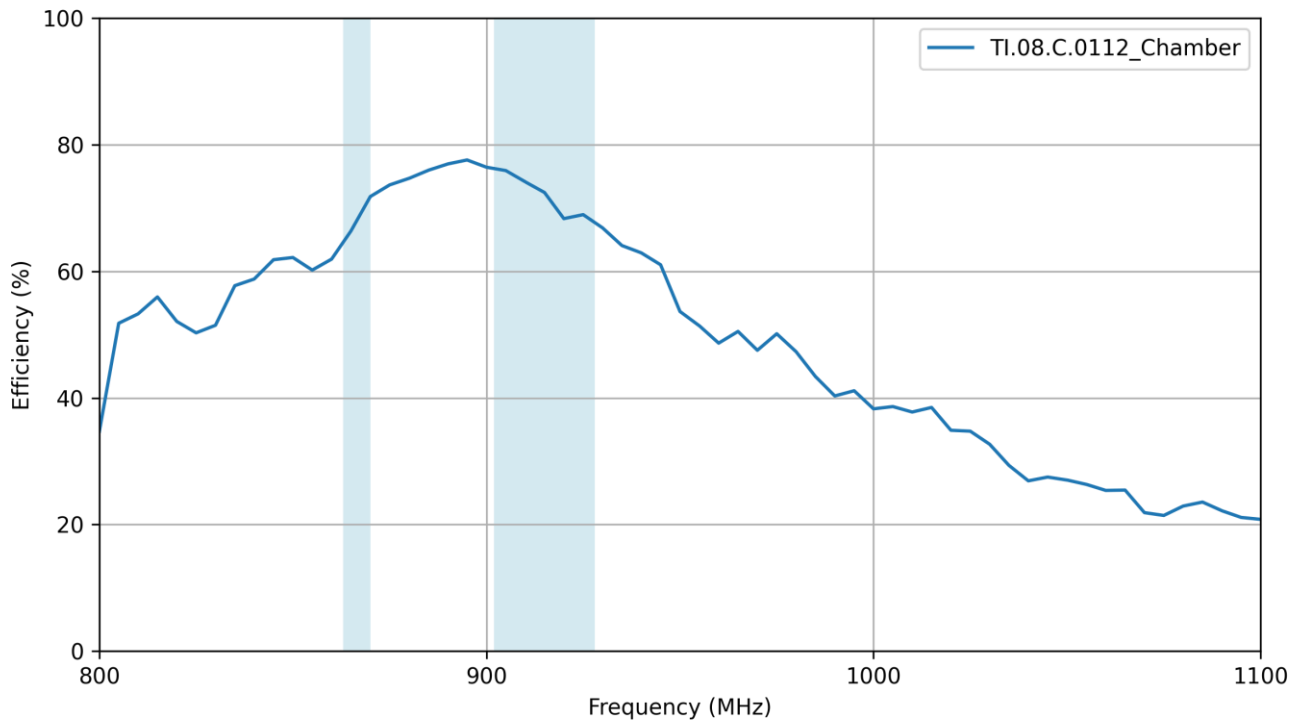
#### 3.1 Return Loss



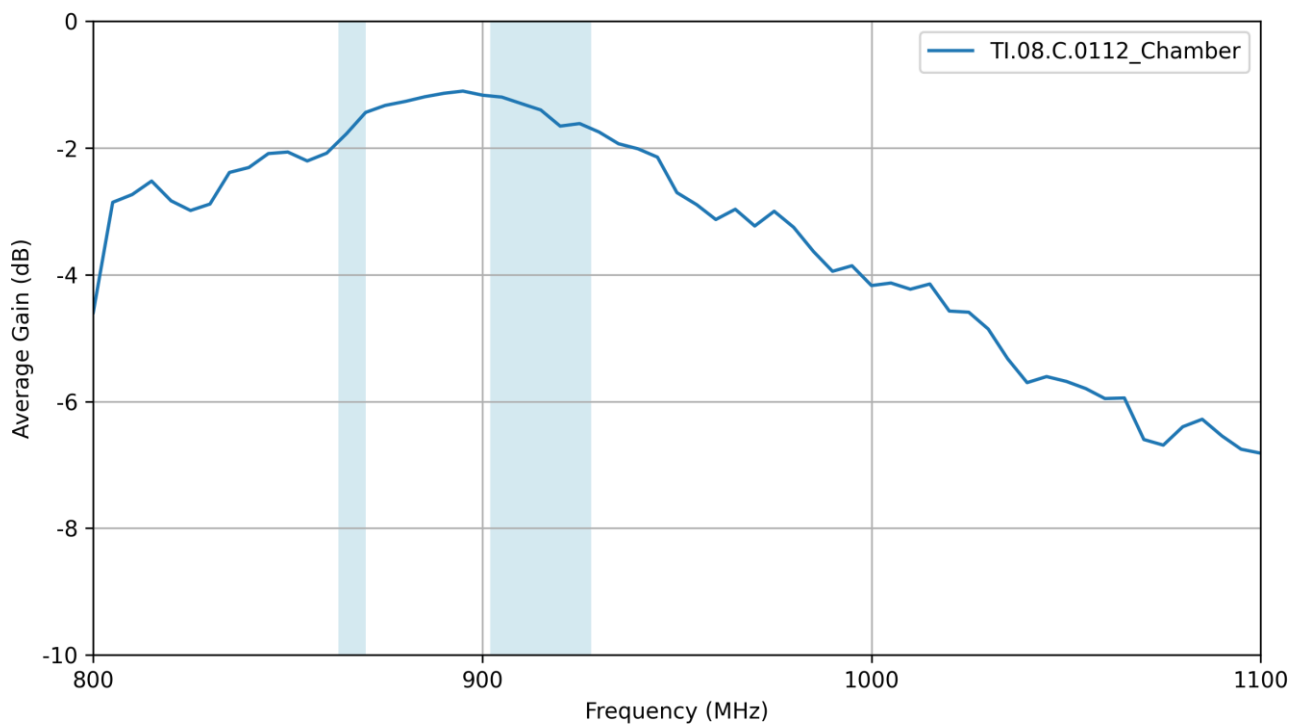
#### 3.2 VSWR



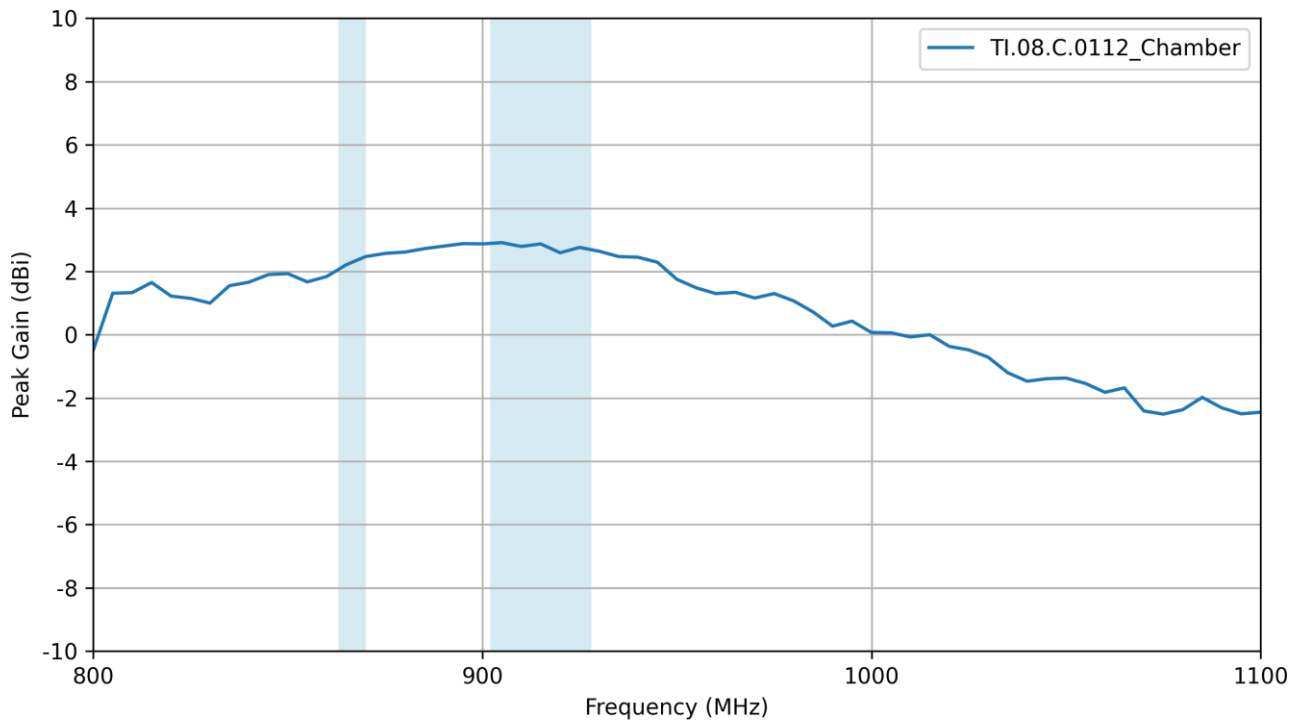
### 3.3 Efficiency



### 3.4 Average Gain

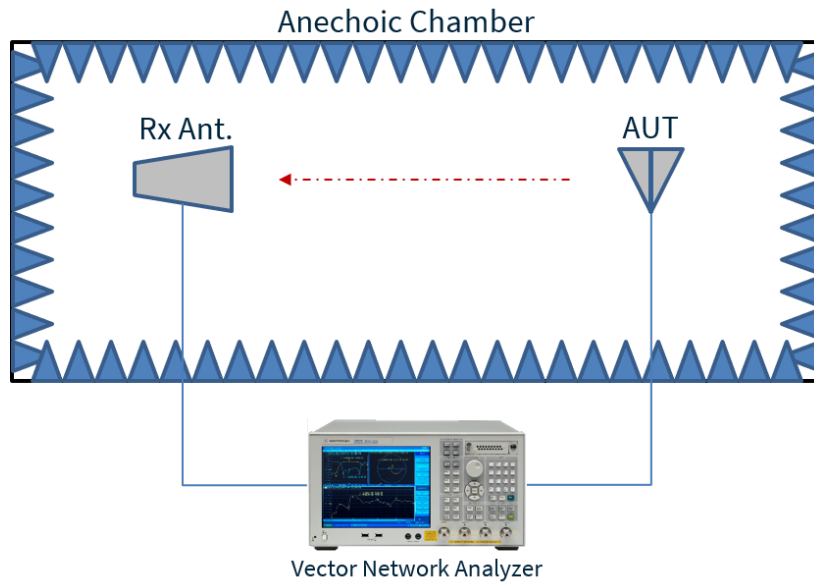


### 3.5 Peak Gain



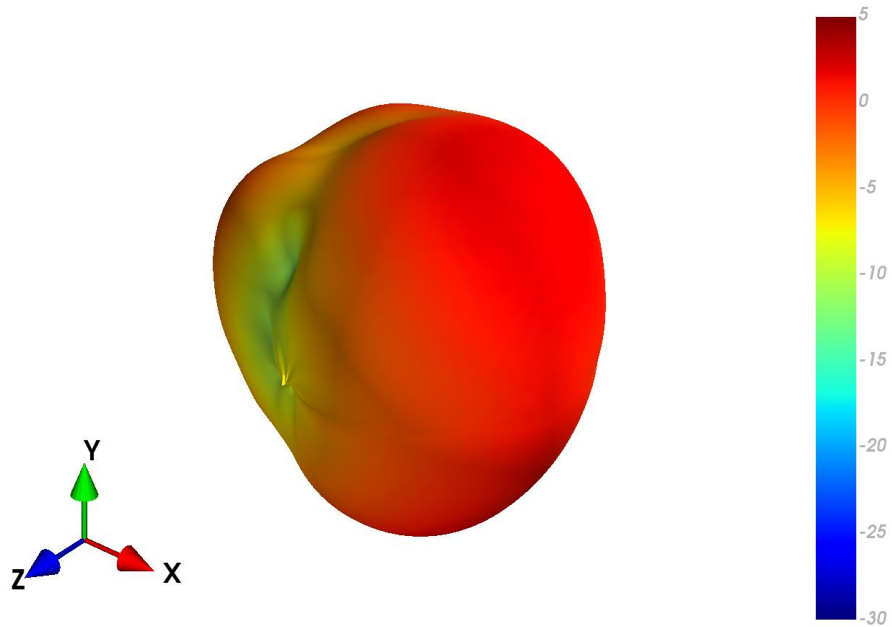
## 4. Radiation Patterns

### 4.1 Test Setup

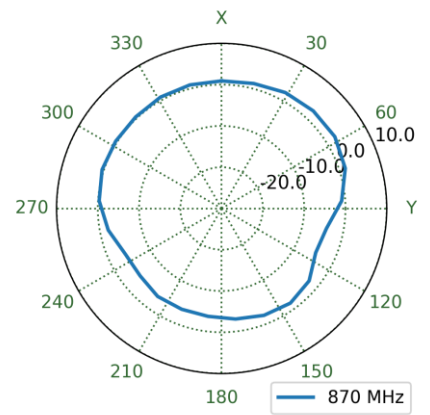
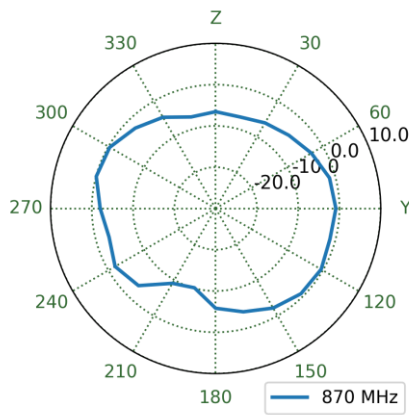
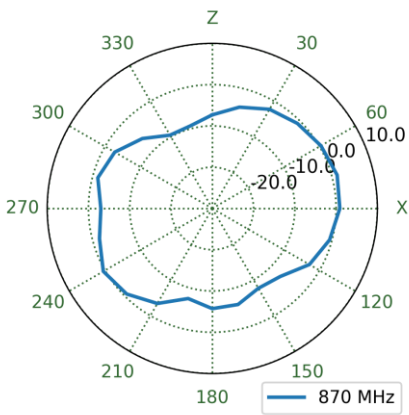




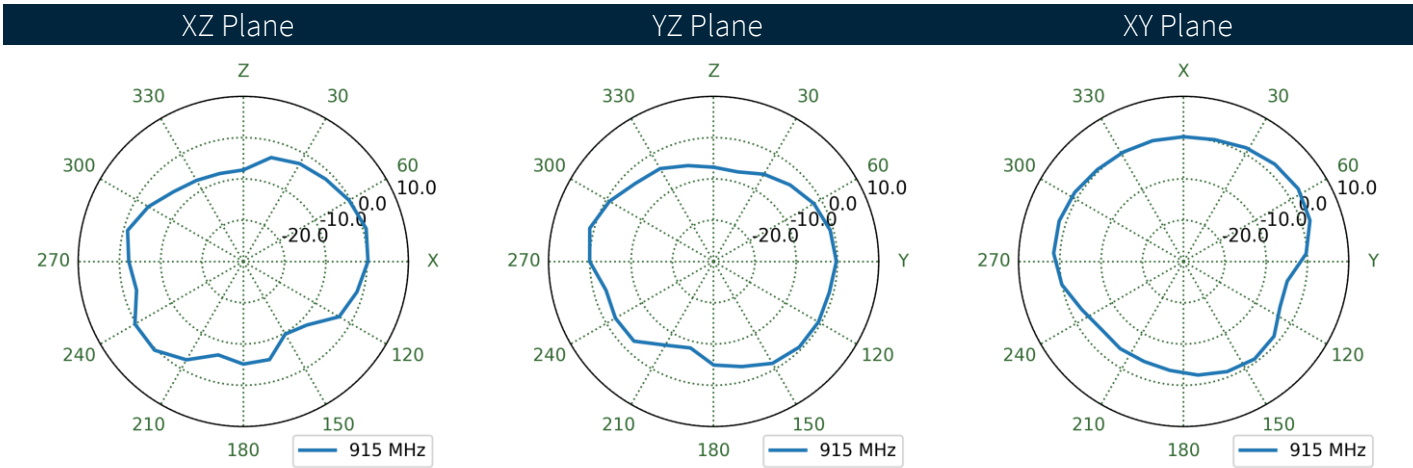
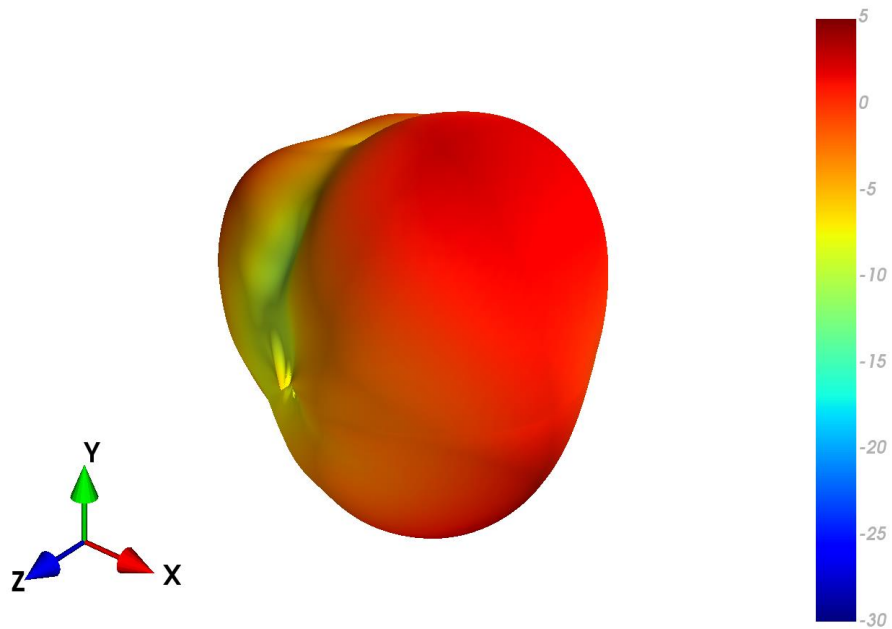
4.2 TI.08.C.0112\_Chamber Patterns at 868 MHz



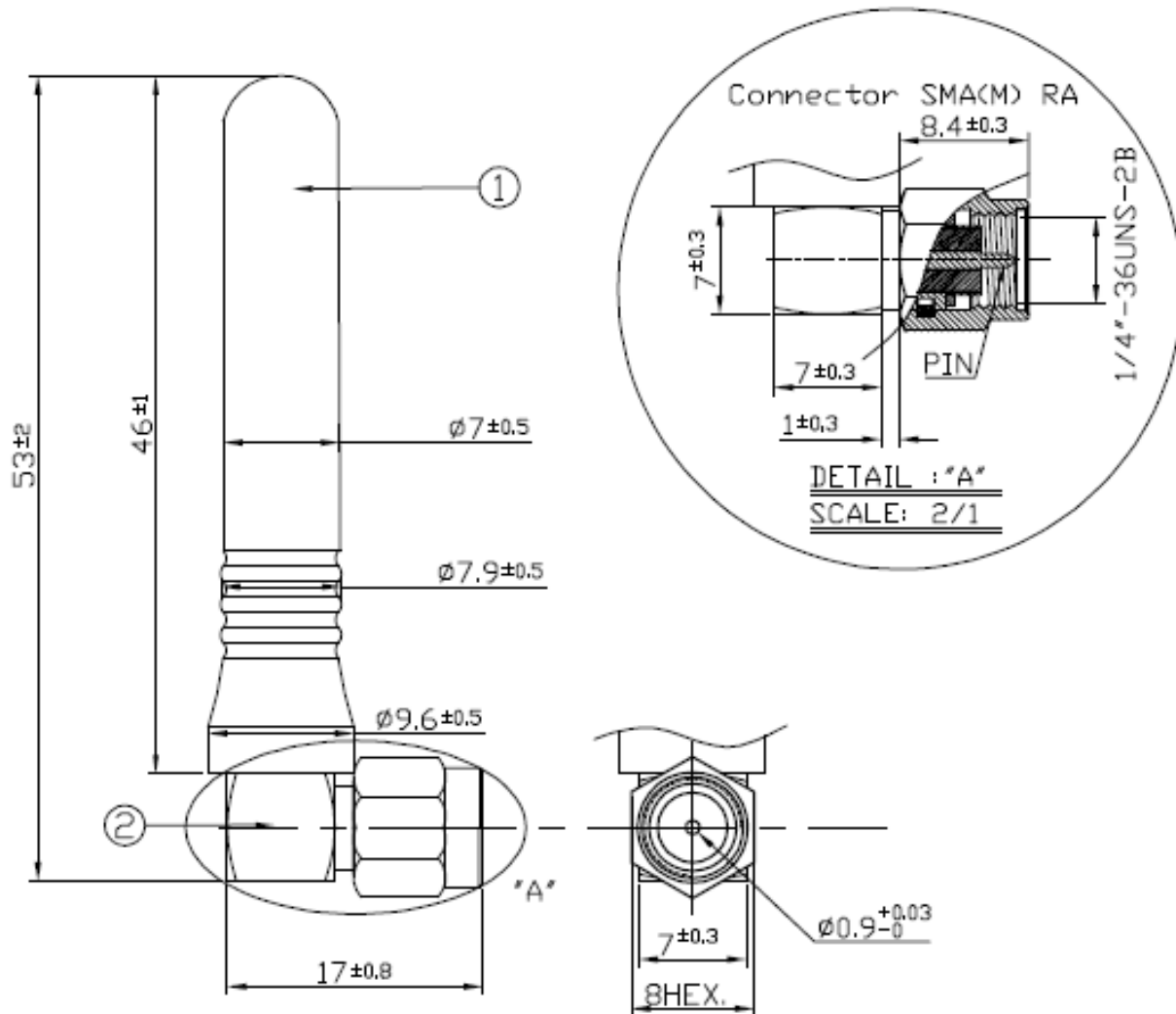
XZ Plane                      YZ Plane                      XY Plane



4.3 TI.08.C.0112\_Chamber Patterns at 915 MHz



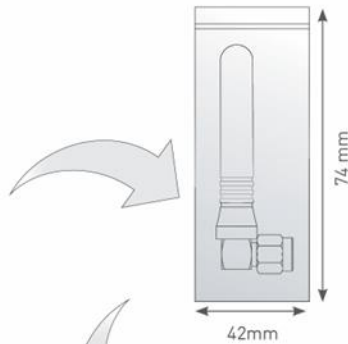
## 5. Mechanical Drawing



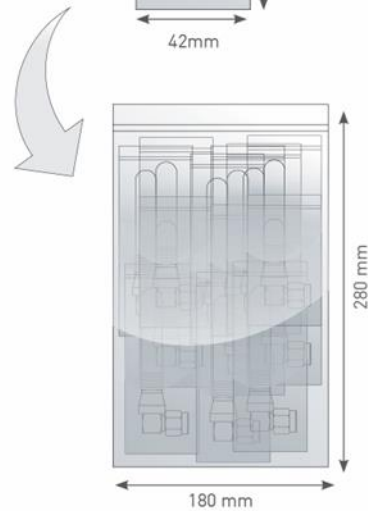
	Name	P/N	Material	Finish	QTY
①	Antenna Cover	000111G000002A	TPU	Black	1
②	SMA(M) RA	210211G010002A	Brass	Gold	1

## 6. Packaging

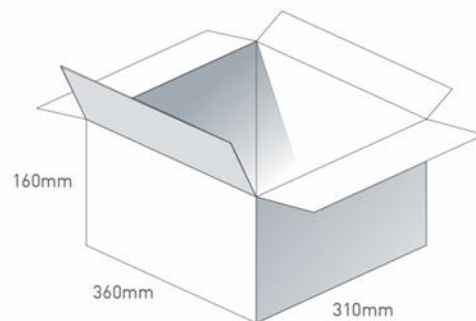
1 pcs TI.08.C.0112 per PE Bag  
 PE Bag Dimensions - 42\*74mm  
 Weight - 7.5g



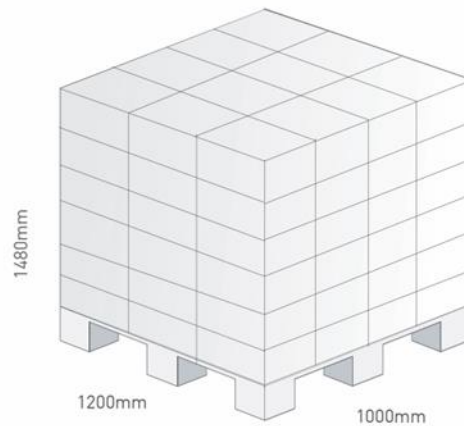
100 PE Bags per Large PE Bag  
 100 pcs TI.08.C.0112 per Large PE Bag  
 Large PE Dimensions - 180\*280mm  
 Weight - 0.761kg



15 Large PE bags per carton  
 1500 pcs TI.08.C.0112 per carton  
 Carton Dimensions - 360\*310\*160mm  
 Weight - 12kg



Pallet Dimensions 1200mm\*1000mm\*1480mm  
 72 Cartons per Pallet  
 9 Cartons per layer  
 8 Layers



Changelog for the datasheet

**SPE-11-8-039 – TI.08.C.0112**

**Revision: D (Current Version)**

Date:	2022-12-09
Changes:	Full datasheet update
Changes Made by:	Gary West

**Previous Revisions**

**Revision: C**

Date:	2019-04-02
Changes:	Added new introduction and data
Changes Made by:	Jack Conroy

**Revision: B**

Date:	2011-11-15
Changes:	Packaging amended
Changes Made by:	Aine Doyle

**Revision: A (Original First Release)**

Date:	2011-07-16
Notes:	
Author:	Aine Doyle