



# TAOGLAS®



# Datasheet

## Blade

**Part No:**  
TD.95.6H31G

### Description:

Blade 868/915MHz Omnidirectional Dipole Terminal Mount Antenna  
With N-Type Male Connector in gray

### Features:

Covers Sigfox/LoRA/ISM Frequencies: 868 and 915 MHz  
Mechanically Robust for Indoor/Outdoor Applications  
Omnidirectional Dipole (Ground Plane Independent) Antenna  
PC/ABS Enclosure  
Connector: N-Type Male Connector  
Dimensions: 228\* $\varnothing$ 22.8mm  
RoHS & Reach Compliant

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# 1. Introduction



The Taoglas Blade TD.95.6H31G is a high performance, Omnidirectional Terminal mount Dipole Antenna for use with SigFox/LoRA/ISM network applications. It covers both widely used SigFox/LoRA/ISM frequencies of 868 and 915MHz. The TD.95 uses a robust PC/ABS enclosure, ideal for outdoor applications. The TD.95 is a dipole antenna; thus, this antenna performs well without a ground plane - at least >57% efficiency and 1dBi Gain while also maintaining an Omni-directional pattern for constant reception/transmission.

Typical Applications Include:

- Remote Monitoring
- Digital Signage
- Mesh Networks
- Vending Machines

The TD.95.6H31 can be supplied in black, for this black version the part number is: **TD.95.6H31**. This antenna can also be supplied without the Taoglas logo – please contact Taoglas for information regarding this.

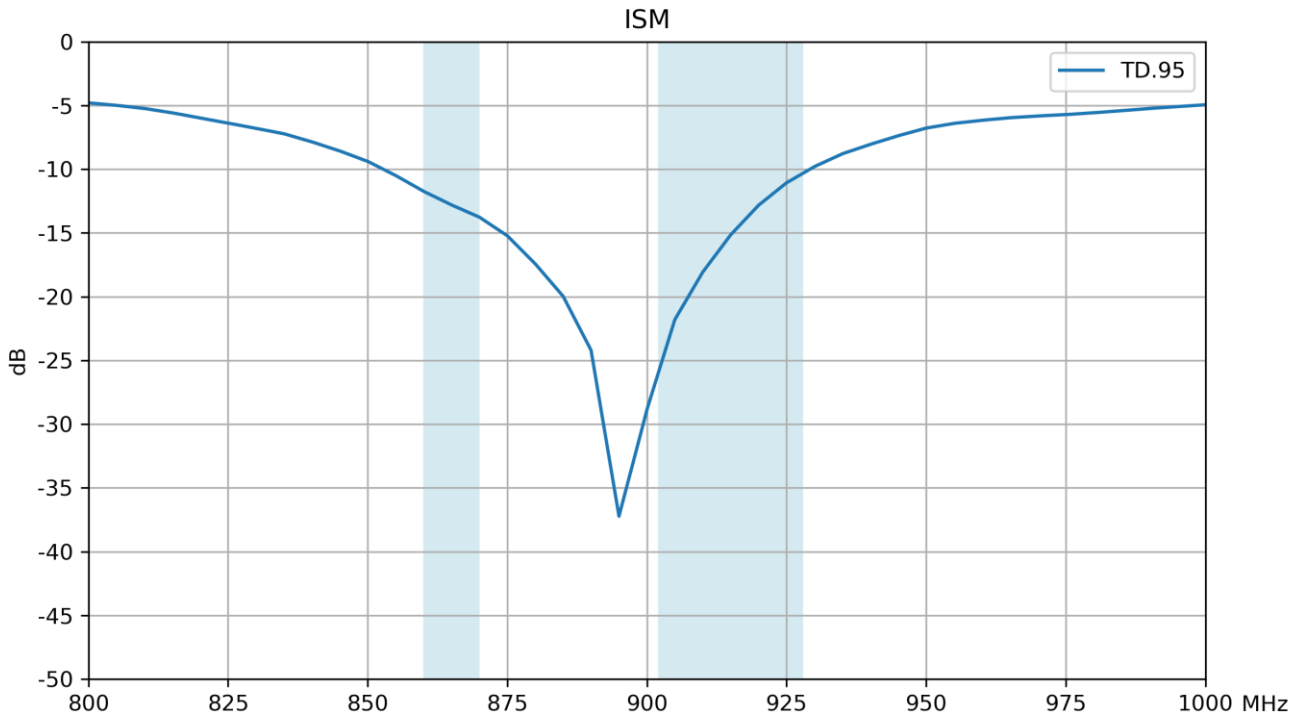
The TD.95.6H31 antenna is supplied with a Direct mount N-Type connector, however this can be customized subject to MOQ and NRE. For further information regarding customization or installation of this antenna, please contact your regional Taoglas customer support team.

## 2. Specifications

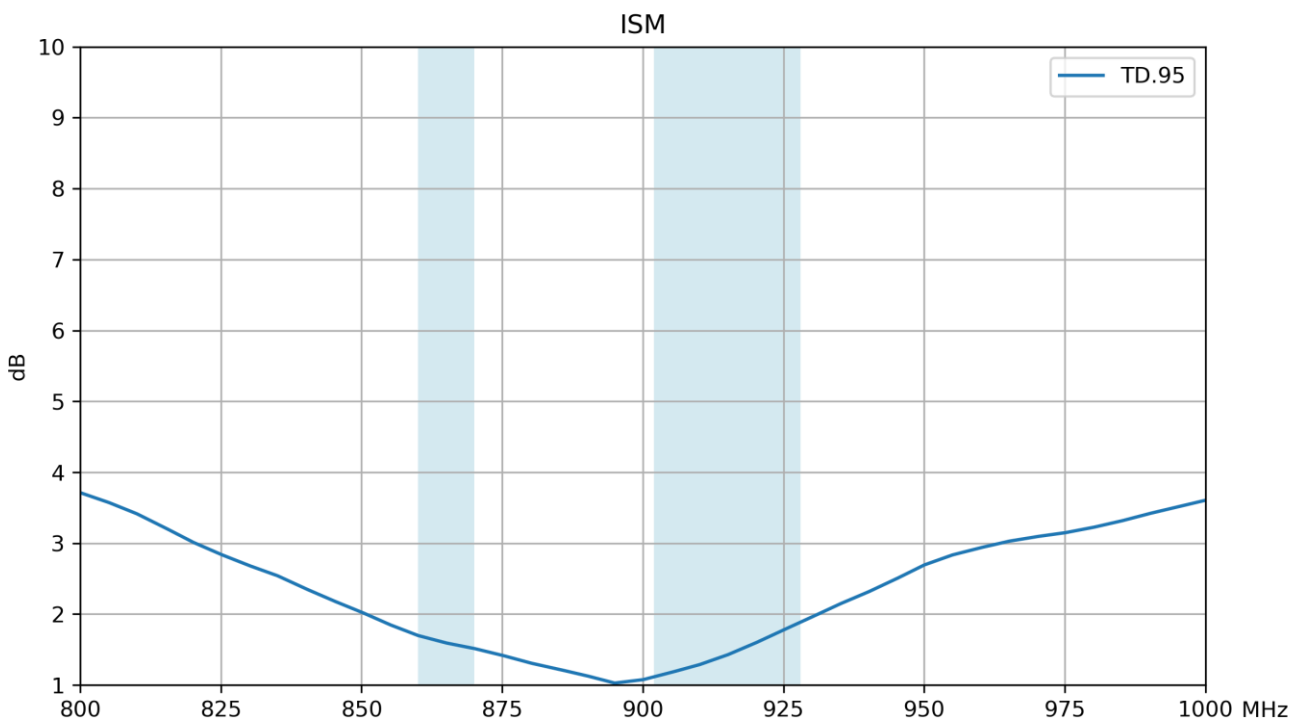
ISM		
Frequency (MHz)	868	915
Efficiency (%)		
Free Space	57.2	58.9
Average Gain (dB)		
Free Space	-2.43	-2.30
Peak Gain (dBi)		
Free Space	1.33	1.54
Impedance	50 Ω	
Polarization	Linear	
Radiation Pattern	Omni	
Max. input power	10W	
Mechanical		
Dimensions	228*22.8(mm)	
Weight	70g	
Material	Gray PC/ABS	
Connector	N-Type(M)	
Environmental		
Temperature Range	-40°C to 85°C	
Humidity	Non-condensing 65°C 95% RH	

### 3. Antenna Characteristics

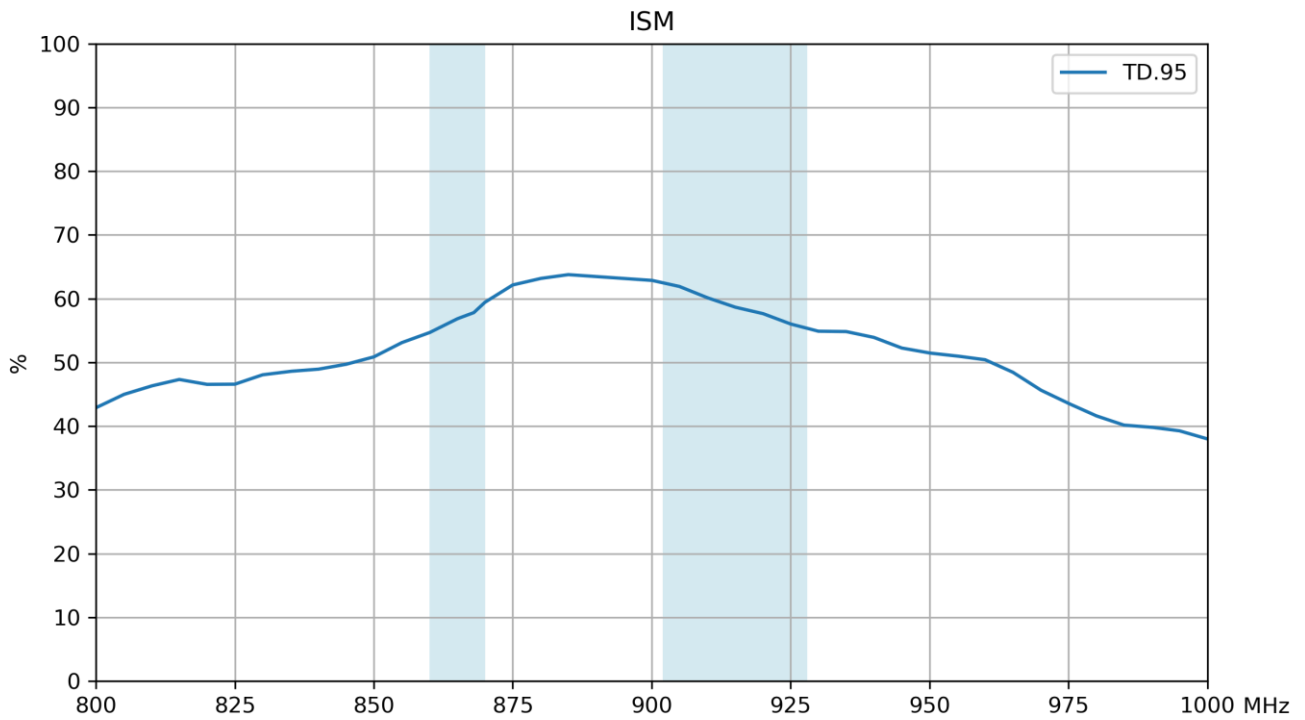
#### 3.1 Return Loss



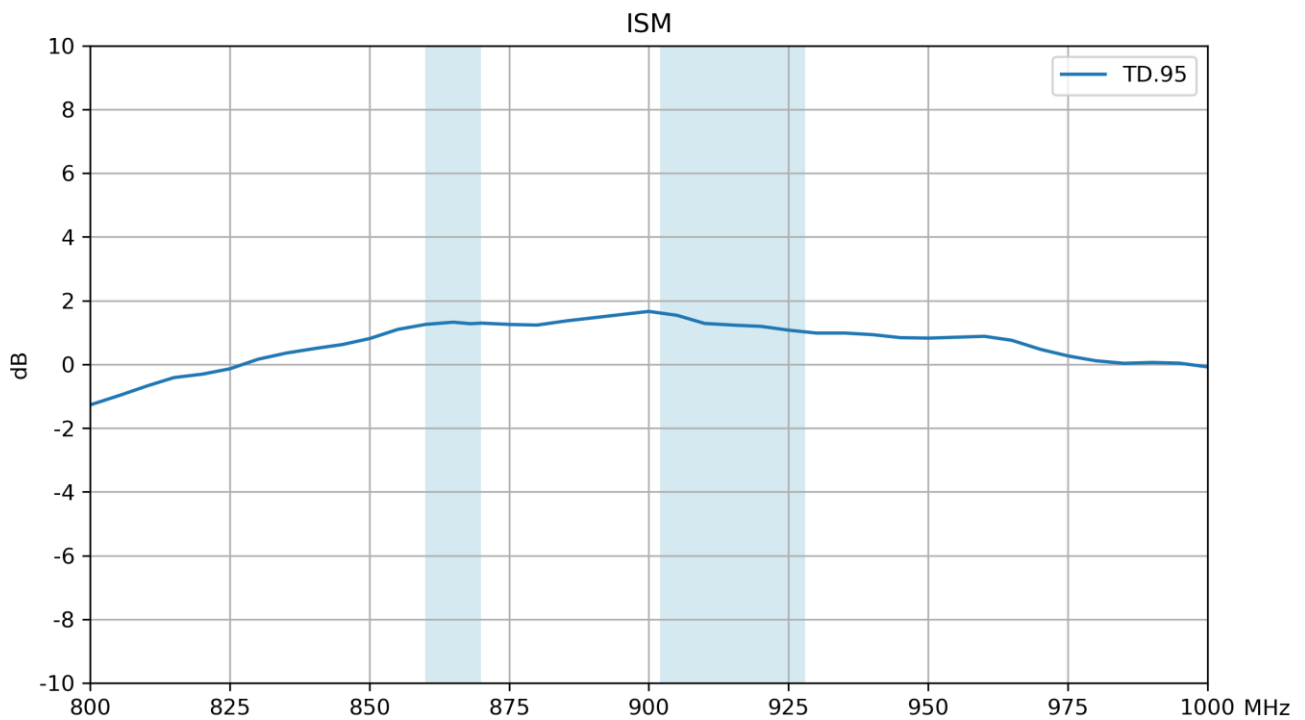
#### 3.2 VSWR



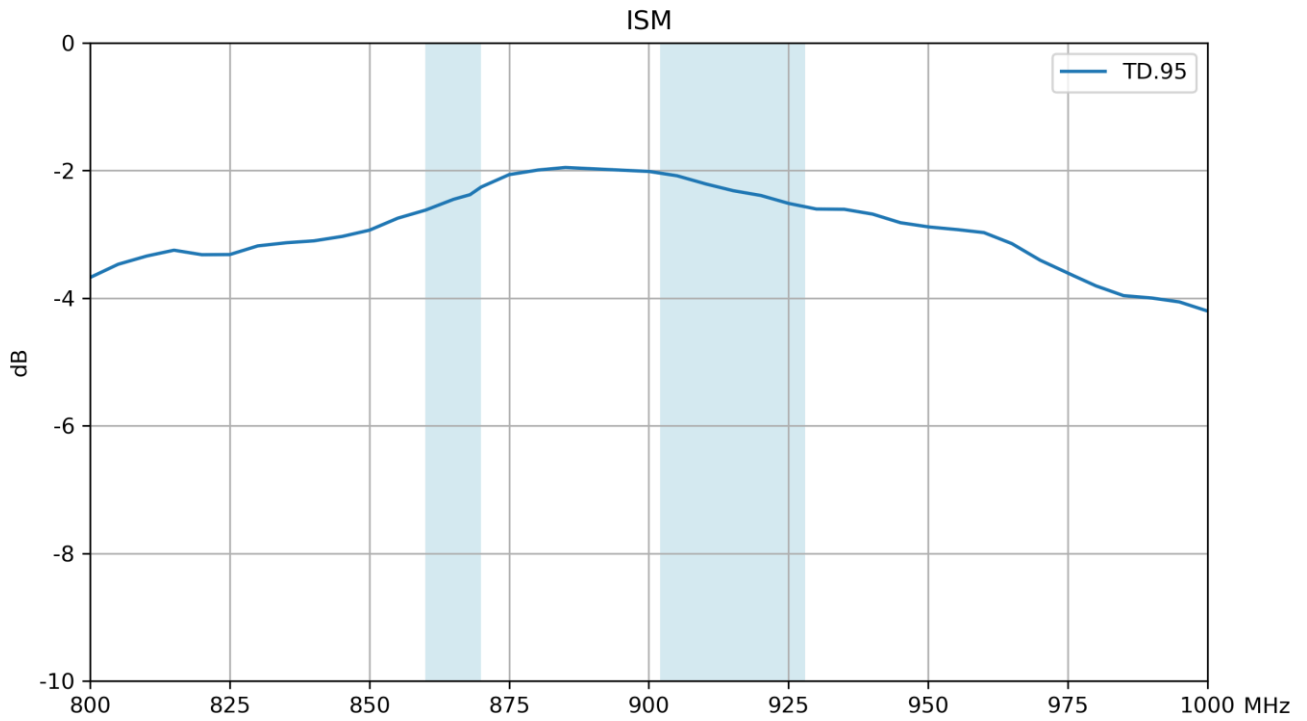
### 3.3 Efficiency



### 3.4 Peak Gain



### 3.5 Average Gain



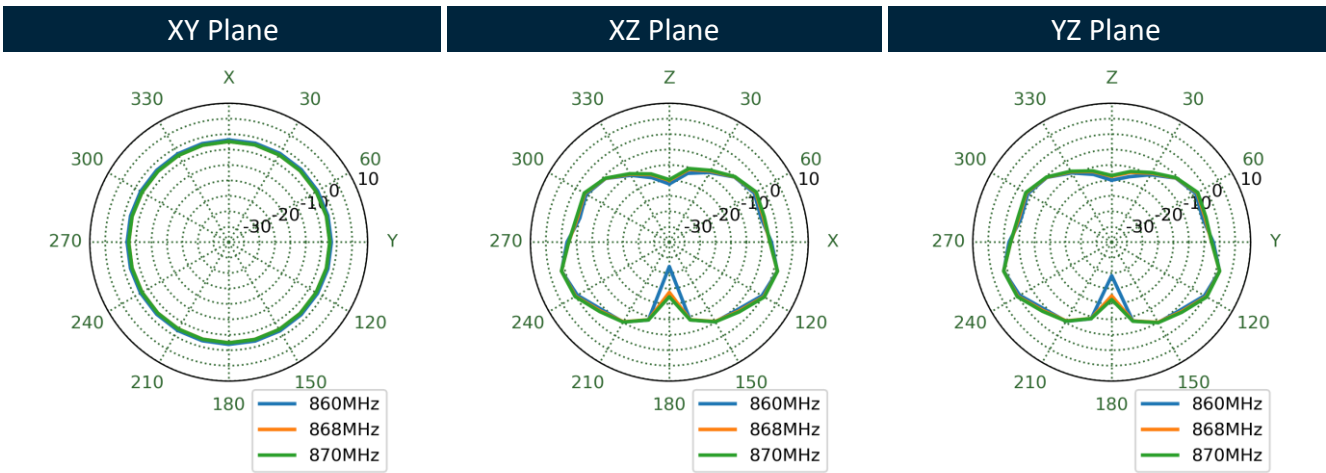
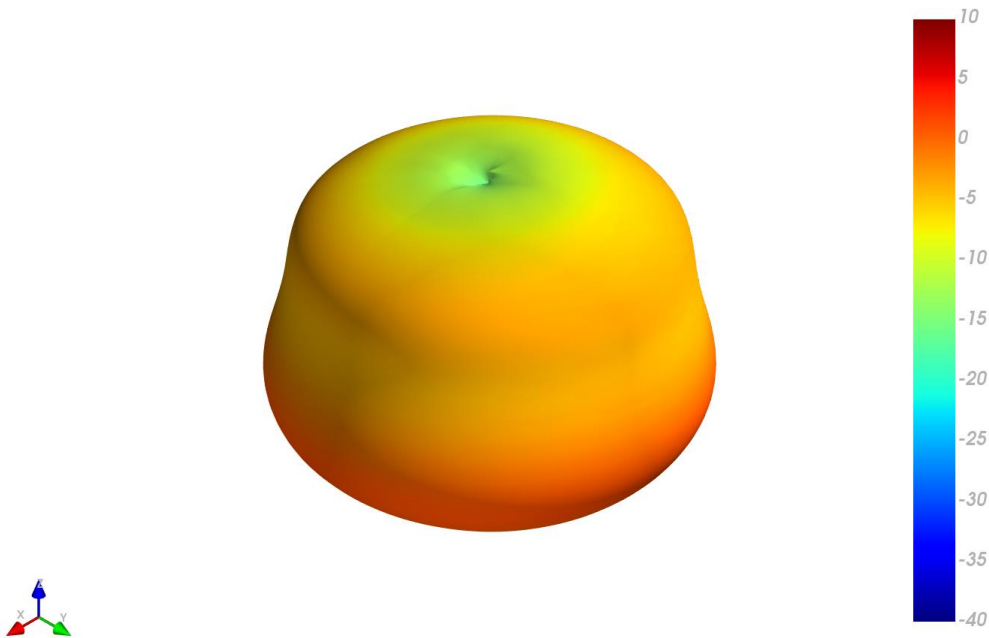
## 4. Radiation Patterns

### 4.1 Test Setup – Free Space

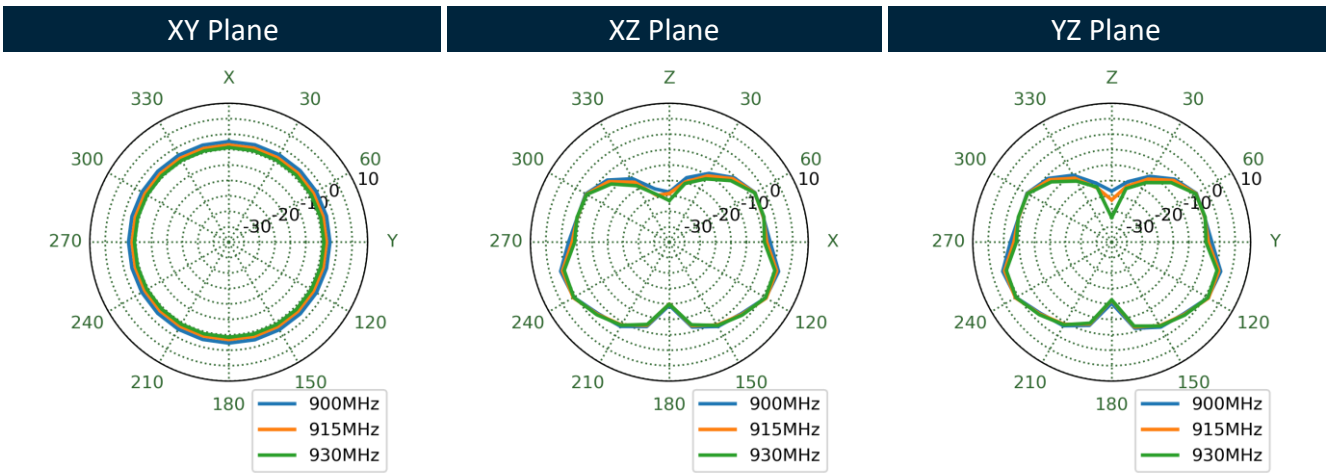
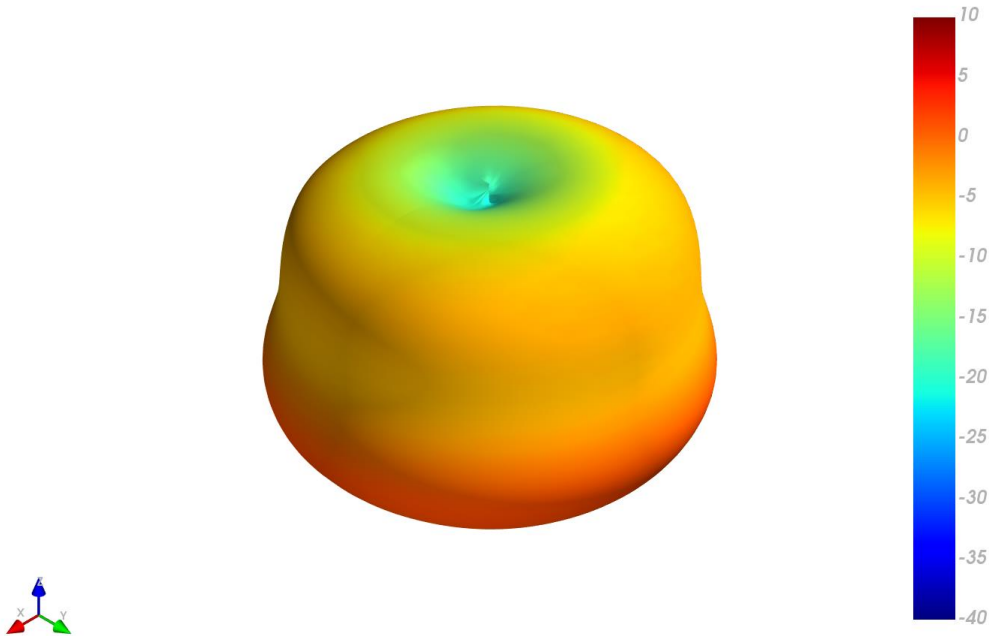




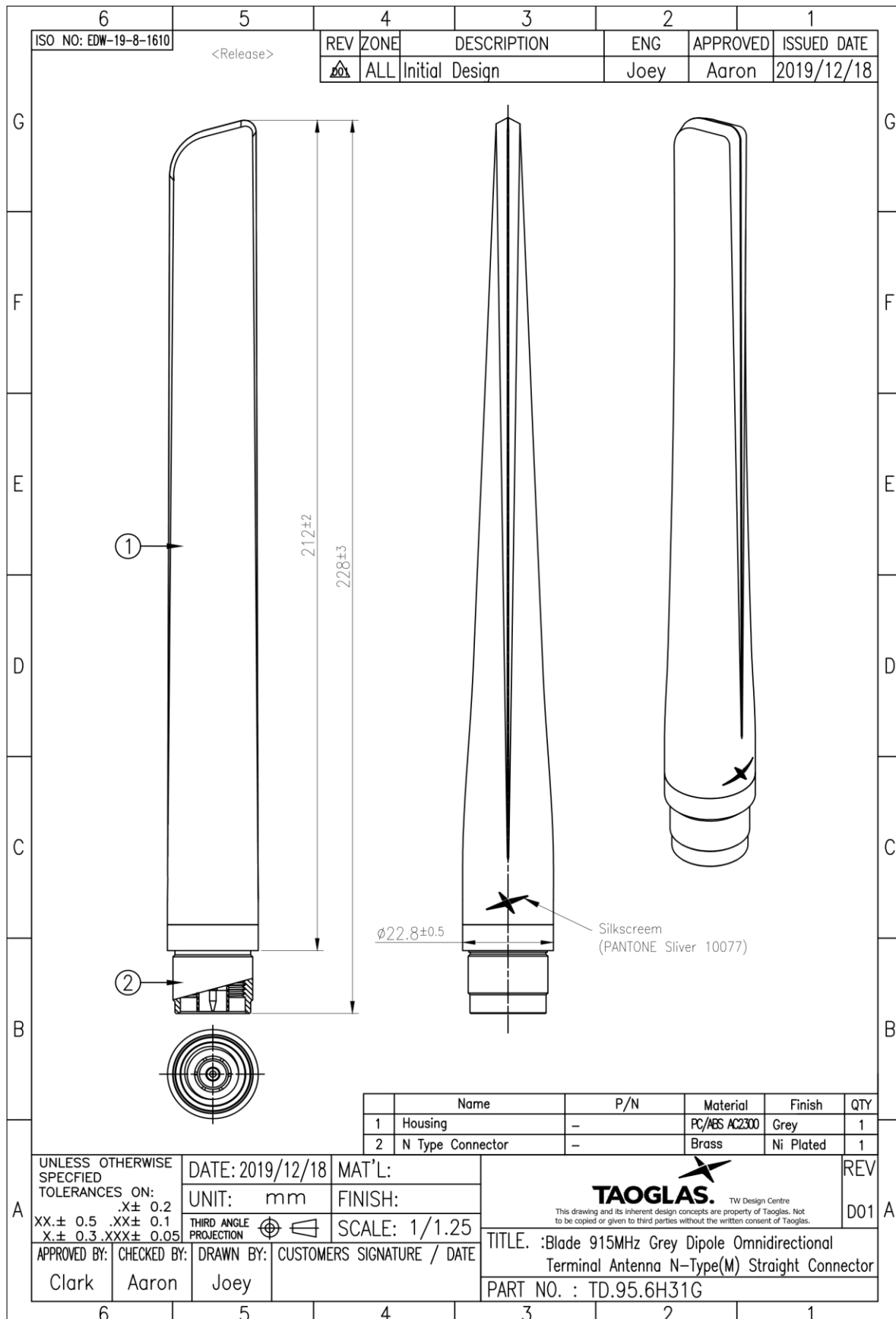
4.2 868MHz 3D and 2D Radiation Patterns



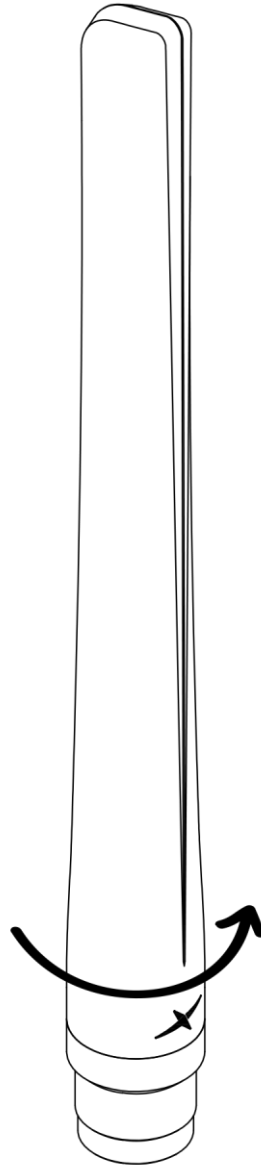
4.3 915MHz 3D and 2D Radiation Patterns



# 5. Mechanical Drawing (Units: mm)



## 6. Installation Instructions

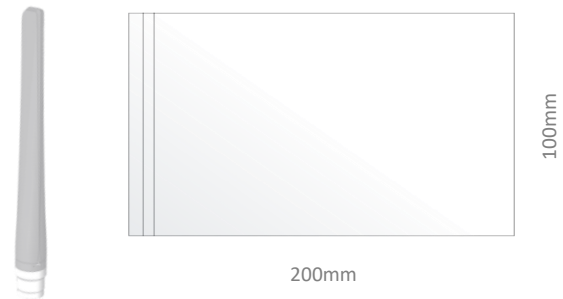


The recommended mounting torque for the TD.95 is 5 Nm.

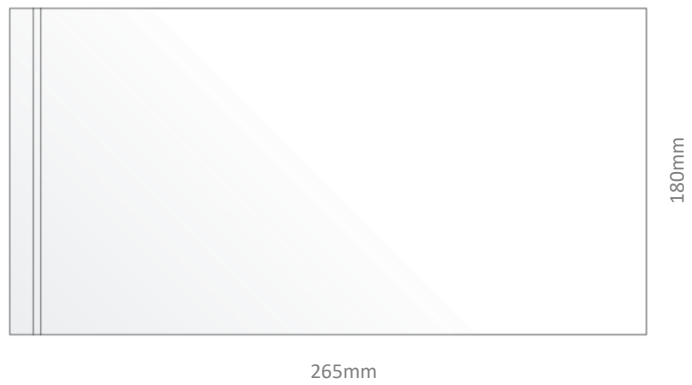
The maximum torque that can be applied is 15 Nm.  
Anything in excess of this value may cause damage to the product.

## 7. Packaging

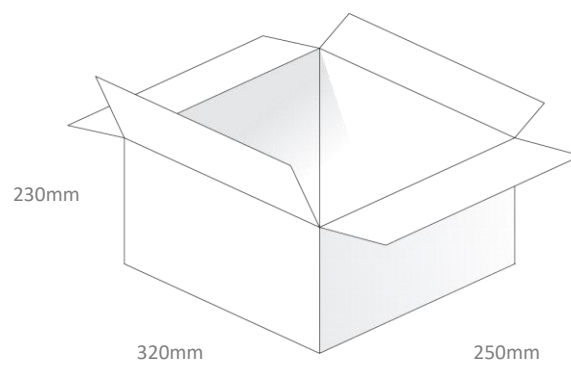
1pc TD.95.6H31G per PE Bag  
 Bag Dimension: 200\*100mm  
 Weight: 70g



20pcs TD.95.6H31G per Large PE Bag  
 Bag Dimensions: 180\*265mm  
 Weight: 1.4Kg



200pcs TD.95.6H31G per Carton  
 Dimensions: 320\*250\*230mm  
 Weight: 14Kg



Changelog for the datasheet

**SPE-20-8-090 – TD.95.6H31G**

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

Date:	2020-06-18
Notes:	Initial Release
Author:	Jack Conroy

**Previous Revisions**
