TAOGLAS



Datasheet

Blade

Part No:
TD.95.6H31

Description:

Blade 868/915MHz Omnidirectional Dipole Terminal Mount Antenna

With N-Type Male Connector

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

IP67 Waterproof Rated

Connector: N-Type Male Connector

Dimensions: 228*Ø22.8mm

RoHS & Reach Compliant

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1. Introduction



The Taoglas Blade TD.95.6H31 is a high performance, omnidirectional terminal mount dipole antenna, designed for use with a multiple of SigFox / LoRA / ISM network applications. It covers both widely used frequencies of 868 and 915MHz. The TD.95 uses a robust IP67 rated PC/ABS enclosure, making it ideal for harsh outdoor applications. The TD.95 is a dipole antenna which means that this antenna performs well without a ground plane. It reaches efficiencies of at least 57% with 1dBi Gain whilst maintaining an Omni-directional pattern for constant reception/transmission.

Typical Applications Include:

- Remote Asset and Metering Monitoring
- Mesh Networks
- Digital Signage

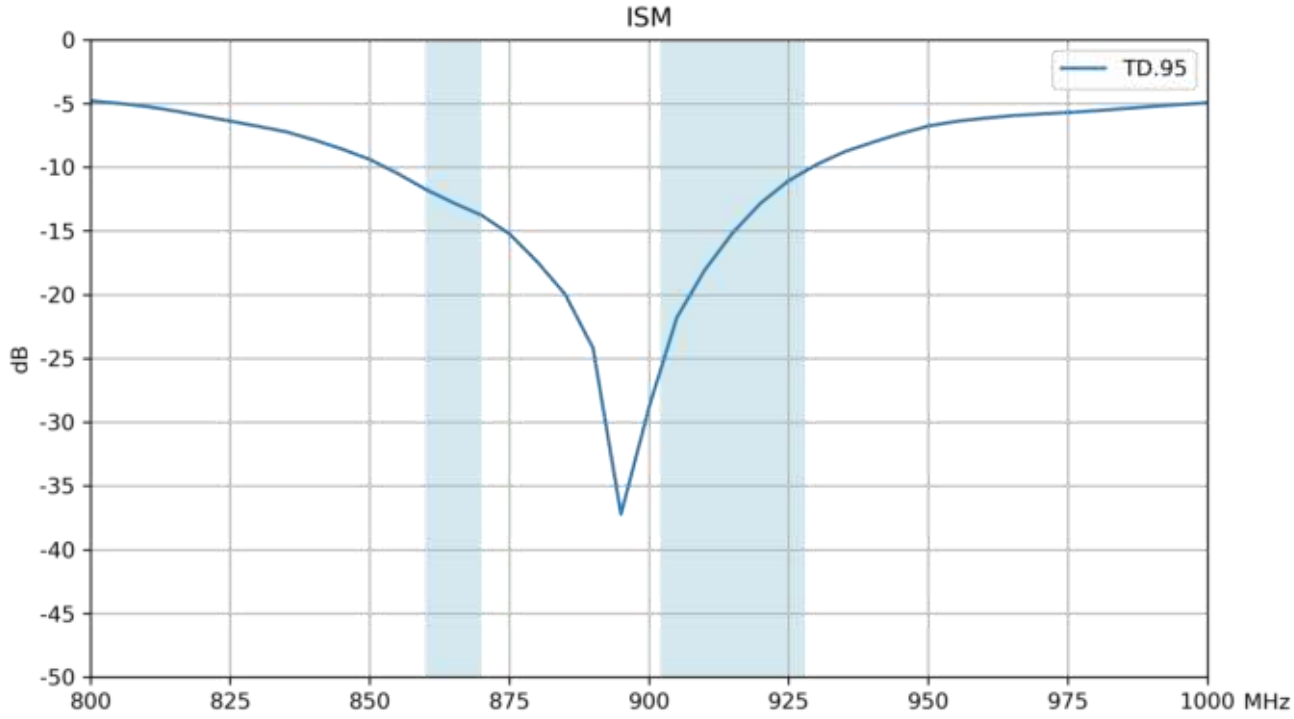
Measuring just 228mm in height and with a diameter of just 22.8mm, the TD.95 is also available in grey, TD.95.6H31G, for more inconspicuous installation. The TD.95 antenna is supplied with a direct mount N-Type connector, however, this can be customized subject to MOQ and NRE. For further information regarding customization or installation of this antenna, please contact your regional Taoglas customer support team.

2. Specifications

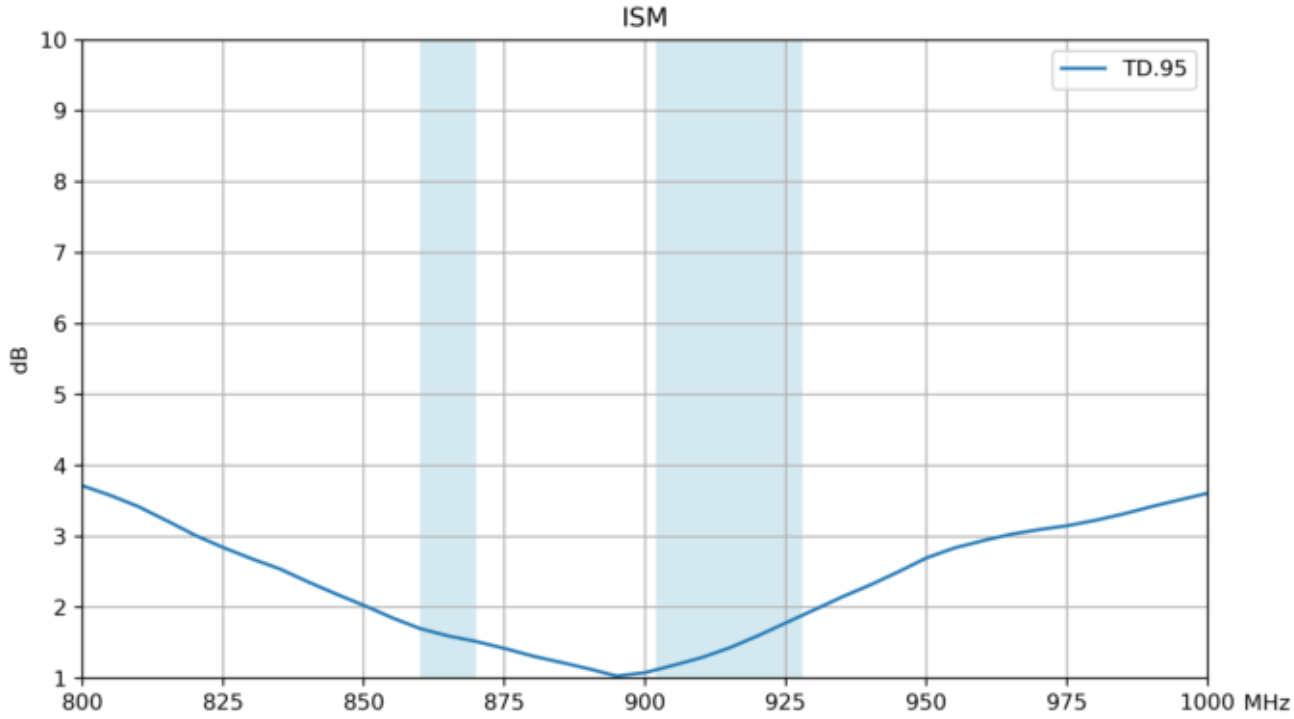
ISM Electrical		
Frequency (MHz)	**868**	**915**
Efficiency (%)		
Free Space	57.2	58.9
Average Gain (dB)		
Free Space	-2.43	-2.30
Peak Gain (dBi)		
Free Space	1.33	1.54
Impedance	50 Ω	
Polarization	Linear	
Radiation Pattern	Omni	
Max. input power	10W	
Mechanical		
Dimensions	228*22.8(mm)	
Weight	70g	
Waterproof Rating	IP67	
Material	PC/ABS	
Connector	N-Type(M)	
Environmental		
Temperature Range	-40°C to 85°C	
Humidity	Non-condensing 65°C 95% RH	

3. Antenna Characteristics

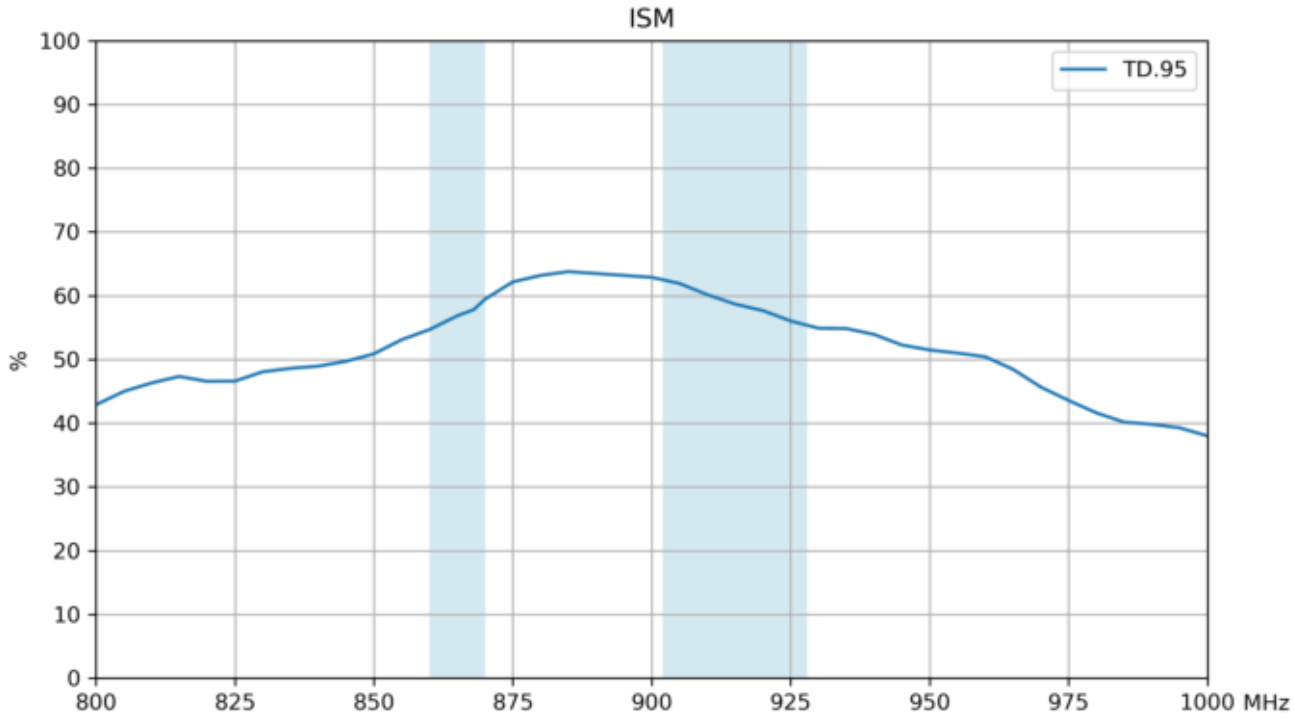
3.1 Return Loss



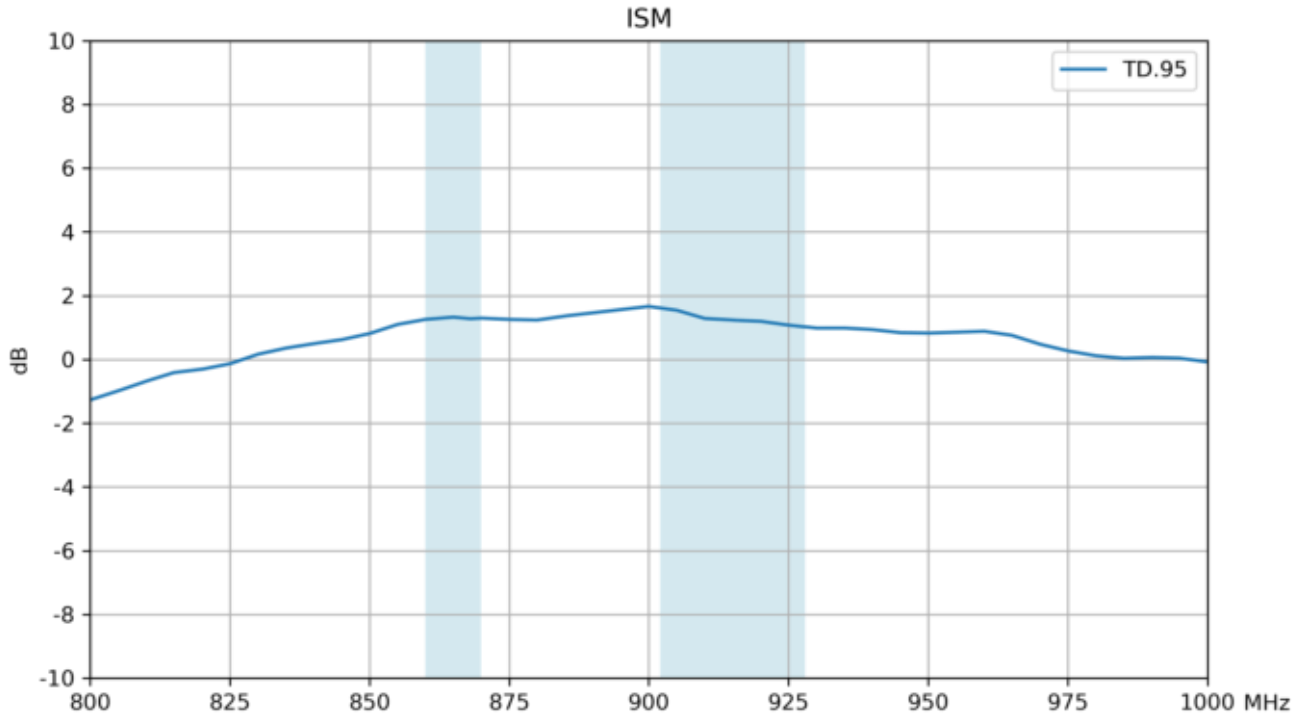
3.2 VSWR



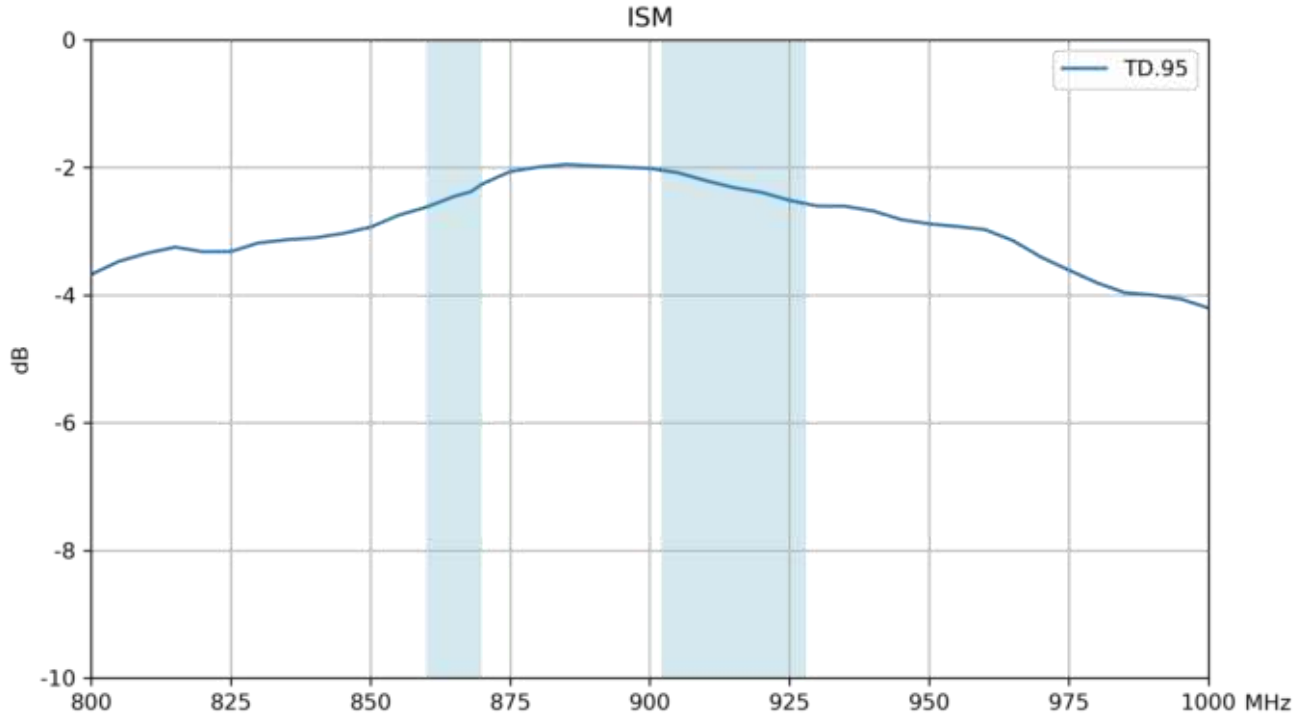
3.3 Efficiency



3.4 Peak Gain

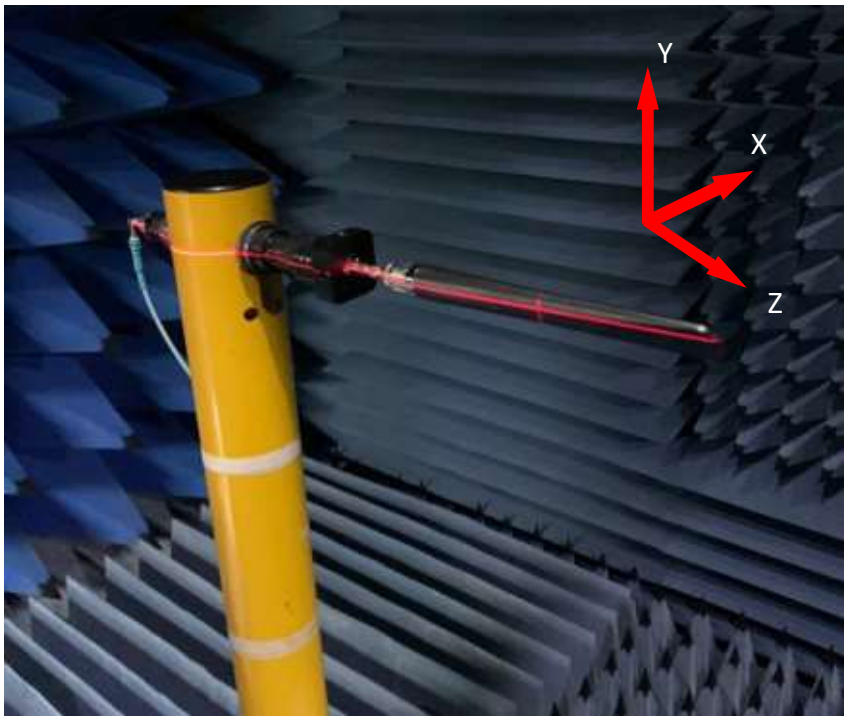


3.5 Average Gain

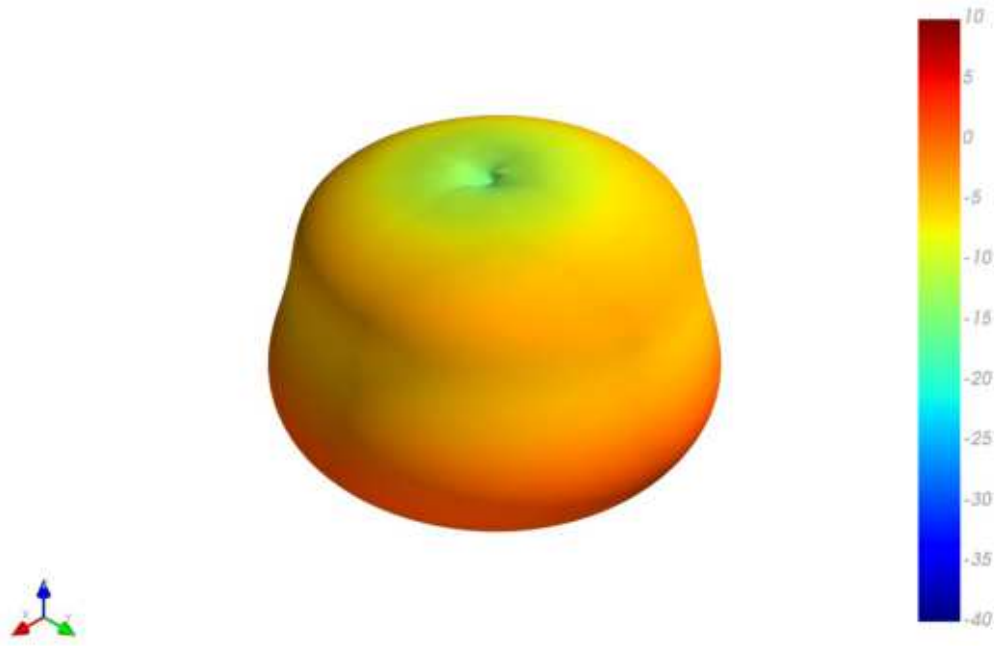


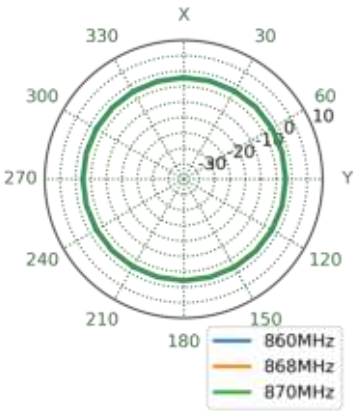
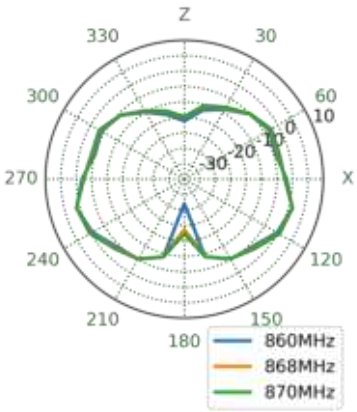
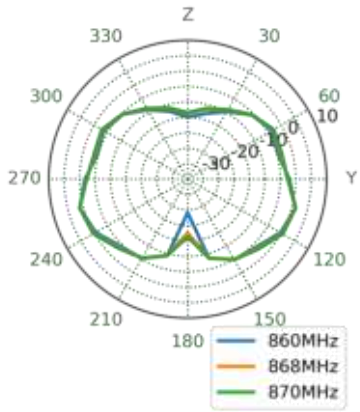
4. Radiation Patterns

4.1 Test Setup – Free Space

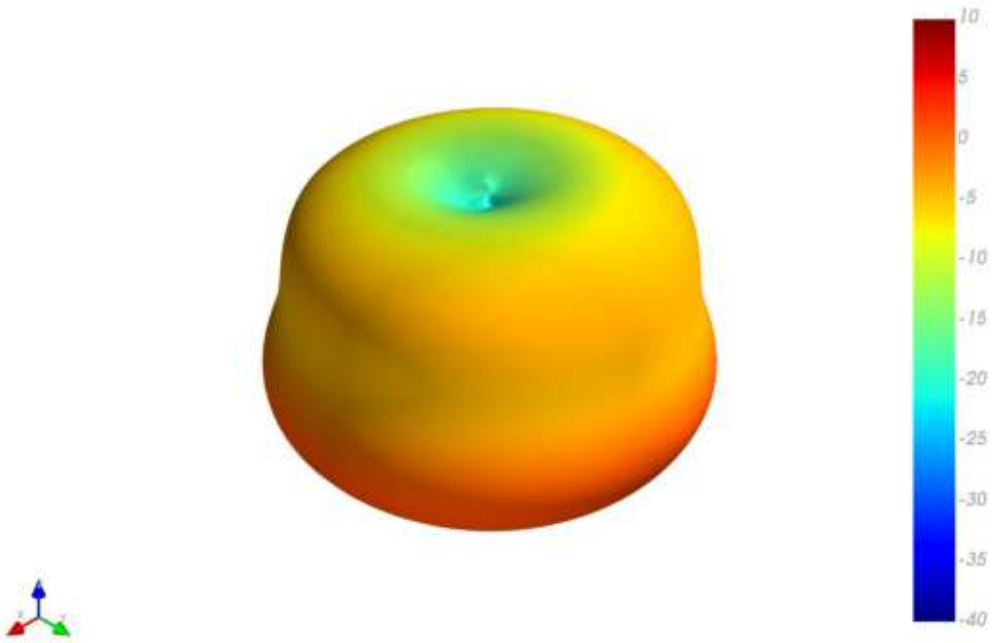


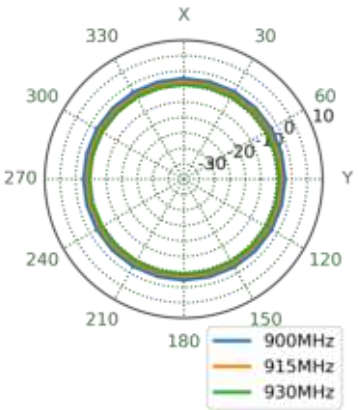
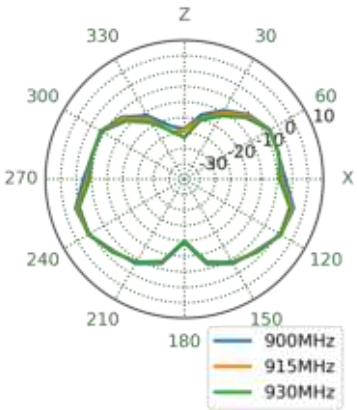
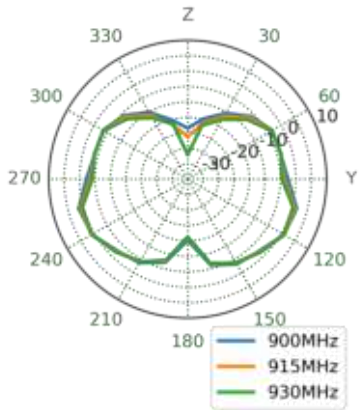
4.2 868MHz 3D and 2D Radiation Patterns



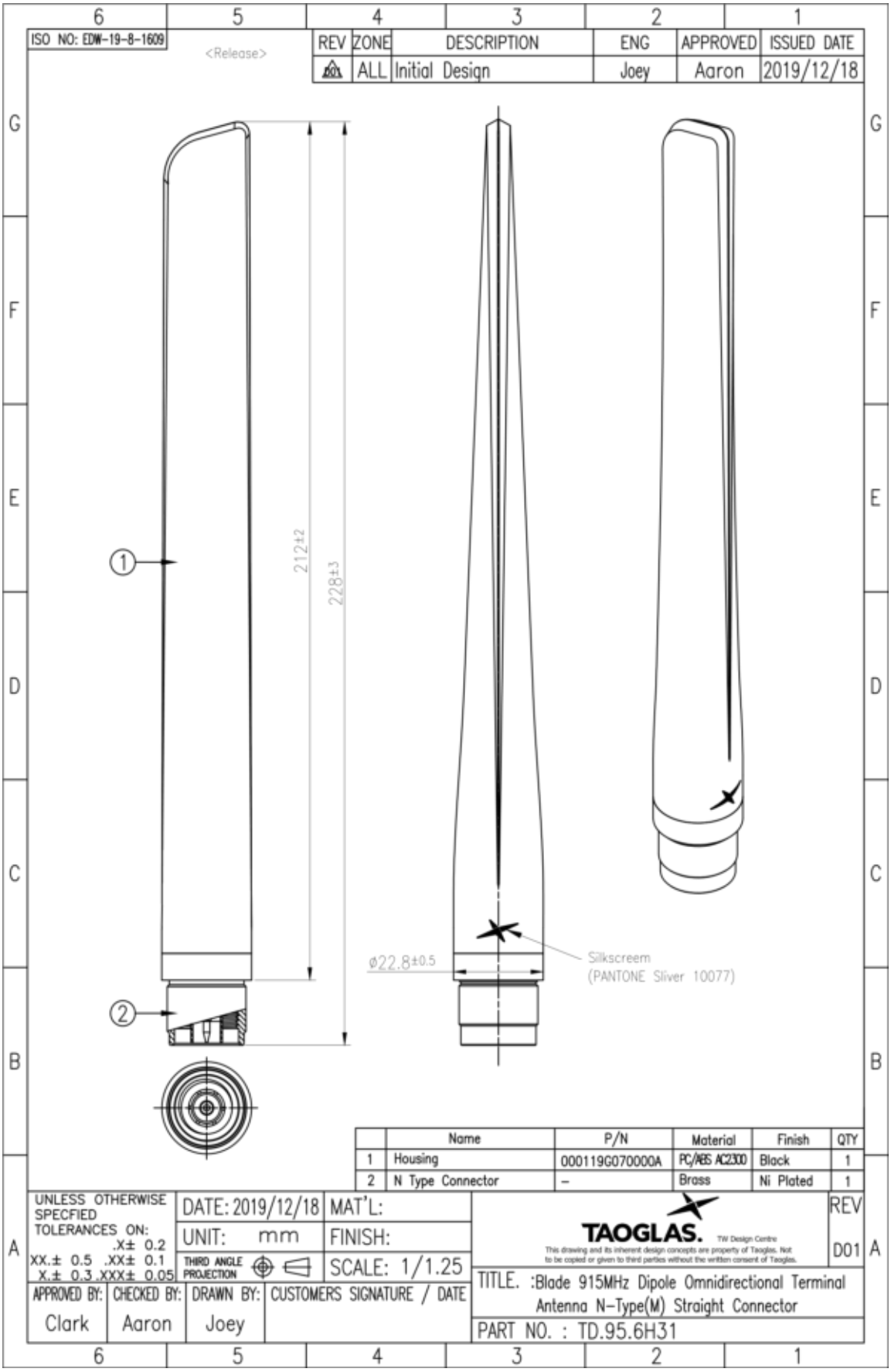
XY Plane	XZ Plane	YZ Plane
		

4.3 915MHz 3D and 2D Radiation Patterns

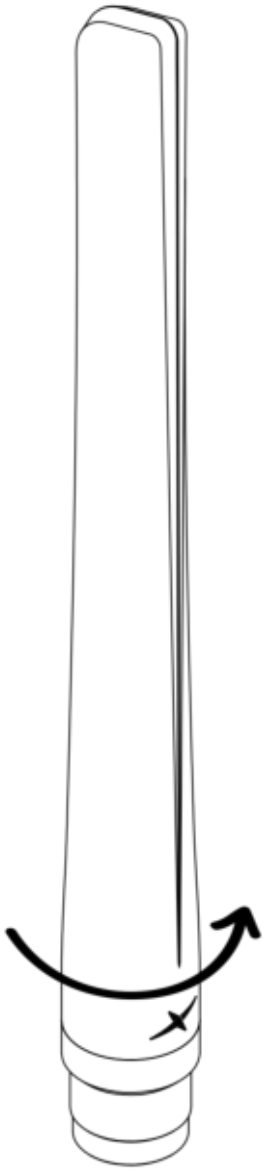


XY Plane	XZ Plane	YZ Plane
		

5. Mechanical Drawing (Units: mm)



6. Installation Instructions

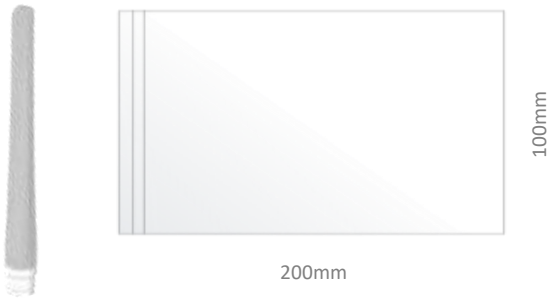


The recommended mounting torque for the TD.95 is 5 Nm.

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

7. Packaging

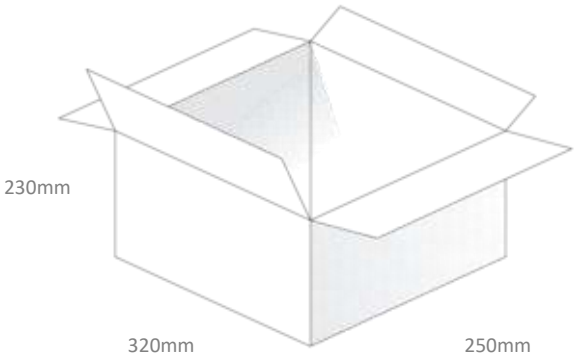
1pc TD.95.6H31 per PE Bag
Bag Dimension: 200*100mm
Weight: 70g



20pcs TD.95.6H31 per Large PE Bag
Bag Dimensions: 180*265mm
Weight: 1.4Kg



200pcs TD.95.6H31 per Carton
Dimensions: 320*250*230mm
Weight: 14Kg



Changelog for the datasheet

SPE-20-8-072 – TD.95.6H31

Revision: B (Current Version)	
Date:	2020-06-18
Notes:	Initial Release
Author:	Cesar Sousa

Previous Revisions

Revision: A (Original First Release)	
Date:	2020-06-18
Notes:	Initial Release
Author:	Jack Conroy

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