



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
Connector: N-Type Male Connector
Dimensions: 228*Ø22.8mm
RoHS & Reach Compliant

1. Introduction	3
2. Specifications	4
3. Antenna Characteristics	5
4. Radiation Patterns	8
5. Mechanical Drawing	11
6. Installation Instructions	12
7. Packaging	13
Changelog	14

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1. Introduction



The Taoglas Blade TD.95.6H31 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 gray, for this gray version the part number is: **TD.95.6H31G**. This antenna can also be supplied without the Taoglas logo – please contact Taoglas for information regarding this.

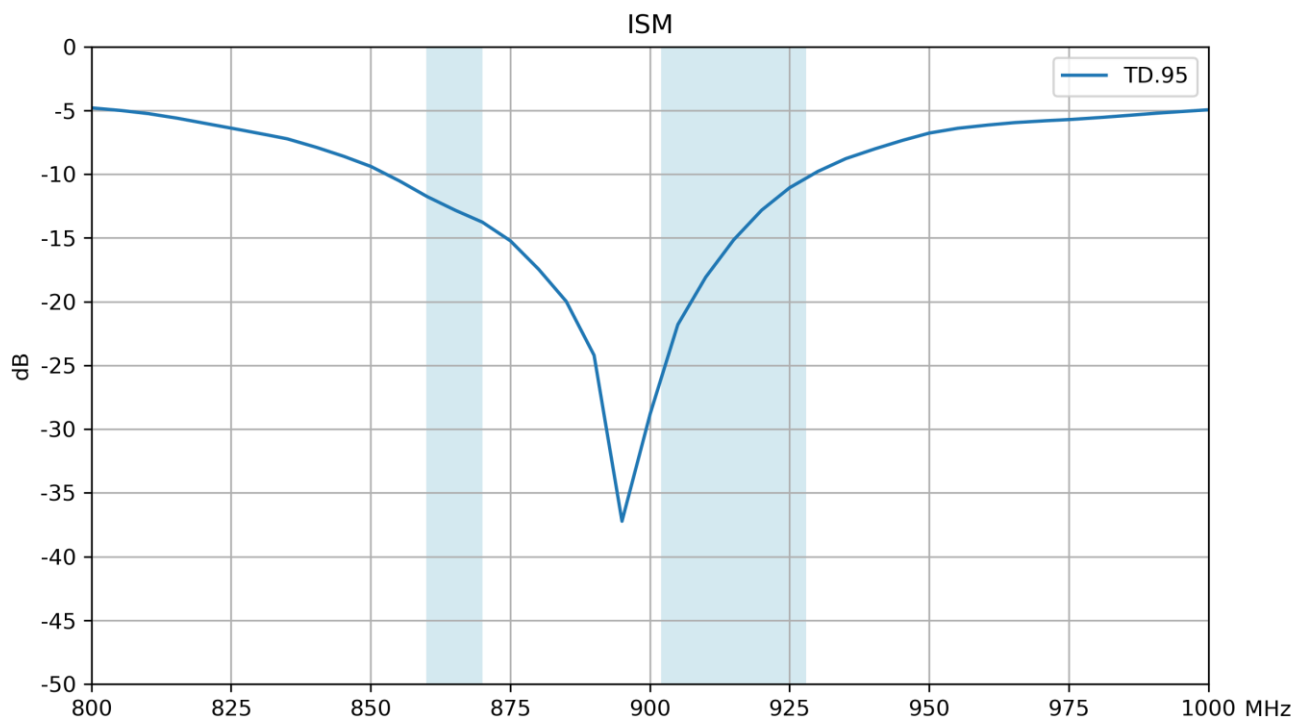
The TD.95.6H31 antenna is supplied with a Direct mount N-Type connector, however this can be customized subject to MOQ and NRE. For further information regarding customization or installation of this antenna, please contact your regional Taoglas customer support team.

2. Specifications

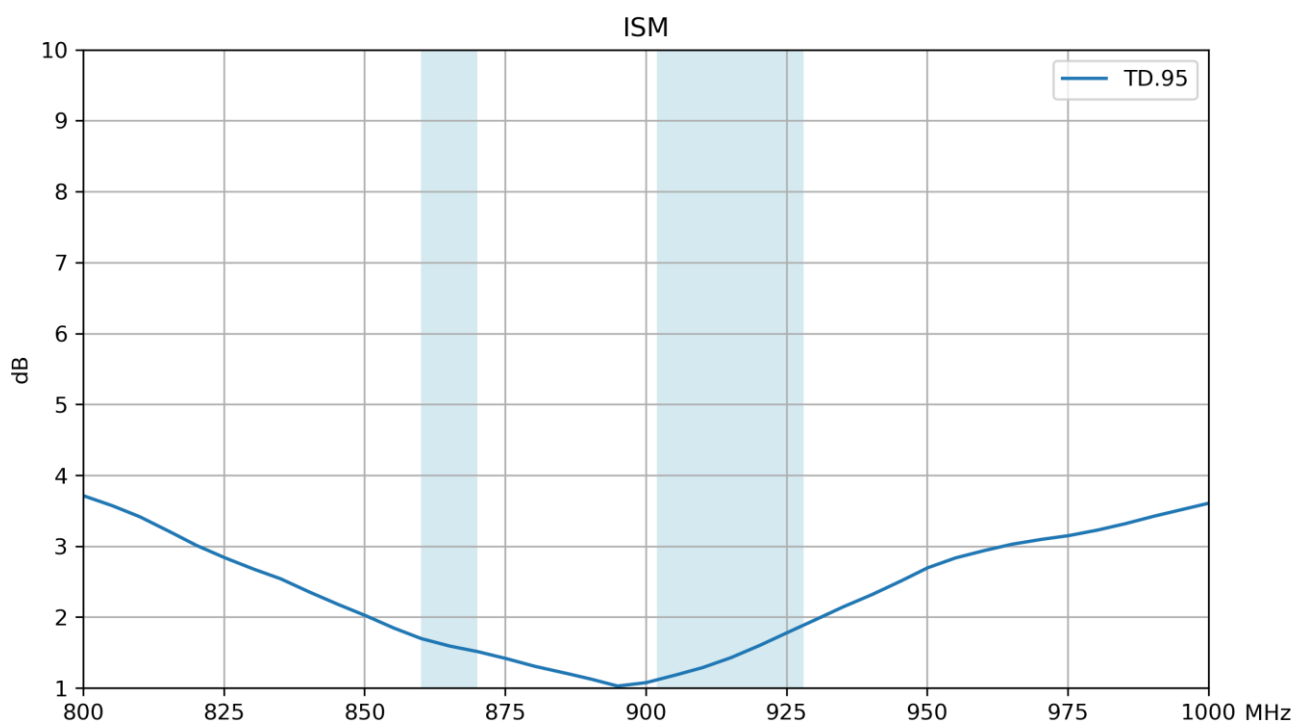
ISM Electrical		
Frequency (MHz)	868	915
Efficiency (%)		
Free Space	57.2	58.9
Average Gain (dB)		
Free Space	-2.43	-2.30
Peak Gain (dBi)		
Free Space	1.33	1.54
Impedance	50 Ω	
Polarization	Linear	
Radiation Pattern	Omni	
Max. input power	10W	
Mechanical		
Dimensions	228*22.8(mm)	
Weight	70g	
Material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

3. Antenna Characteristics

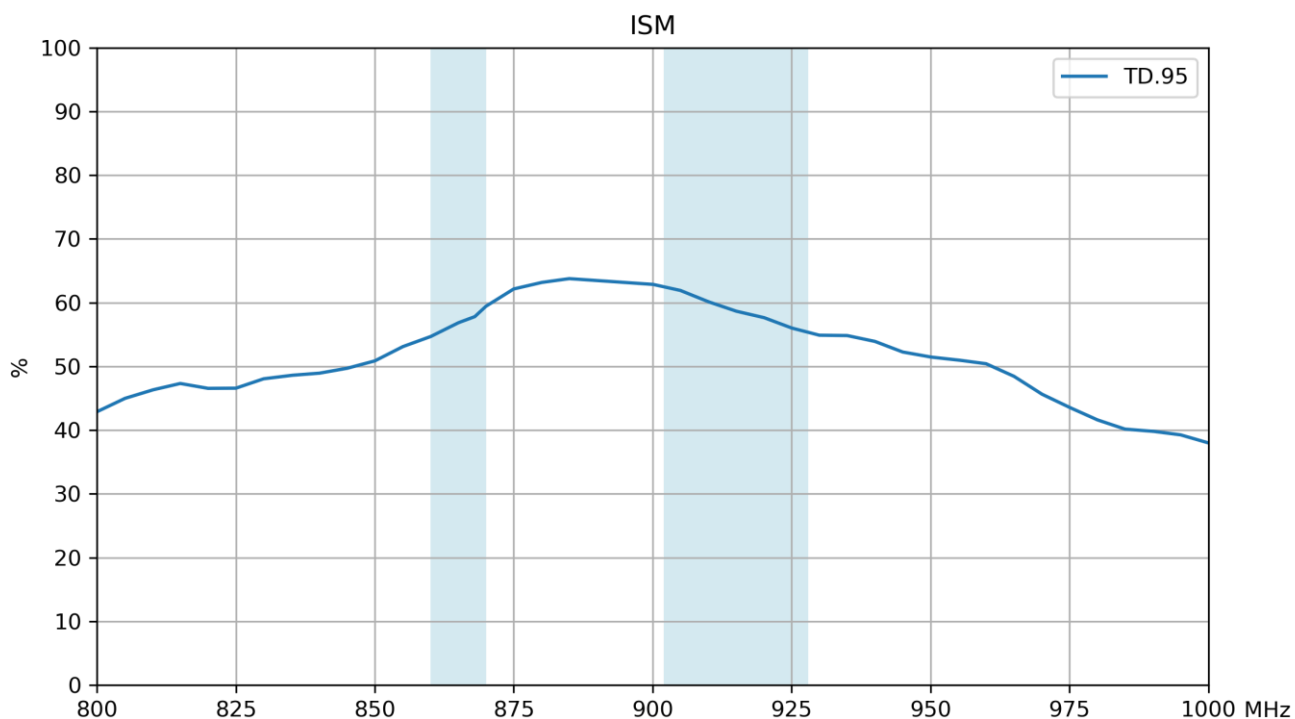
3.1 Return Loss



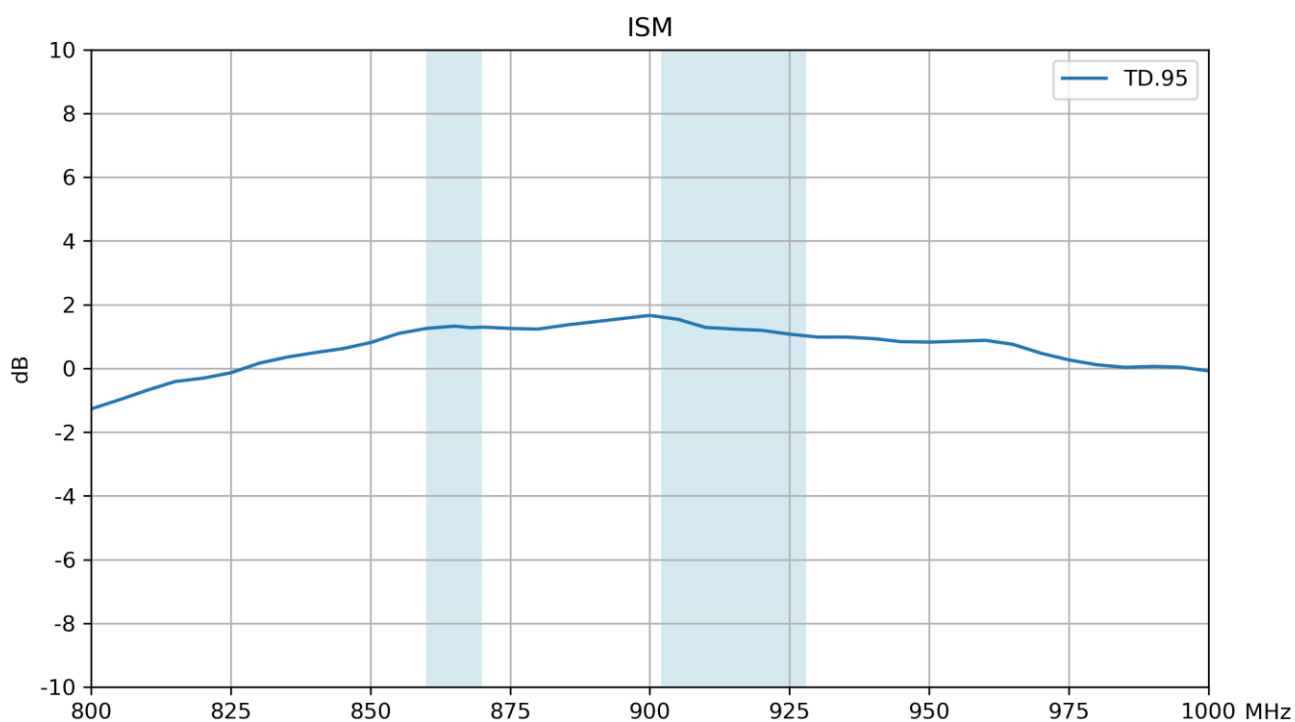
3.2 VSWR



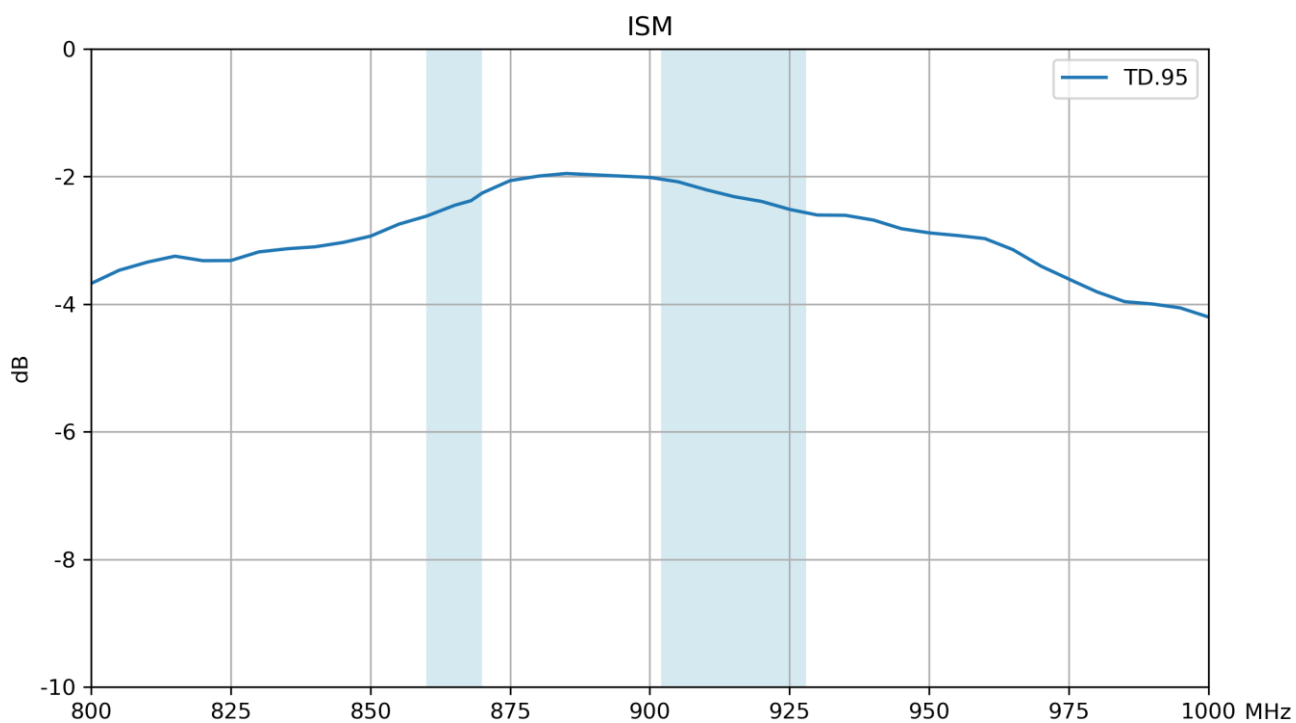
3.3 Efficiency



3.4 Peak Gain



3.5 Average Gain

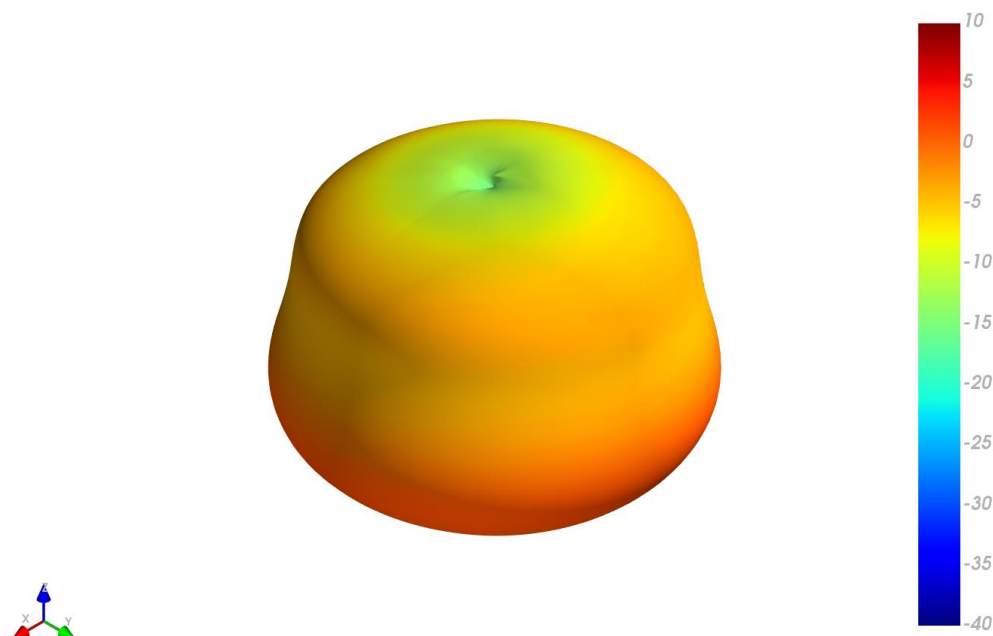


4. Radiation Patterns

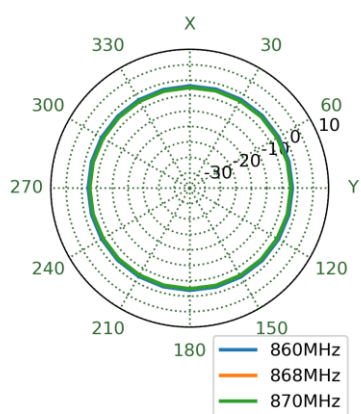
4.1 Test Setup – Free Space



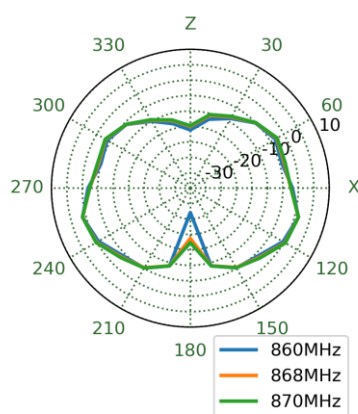
4.2 868MHz 3D and 2D Radiation Patterns



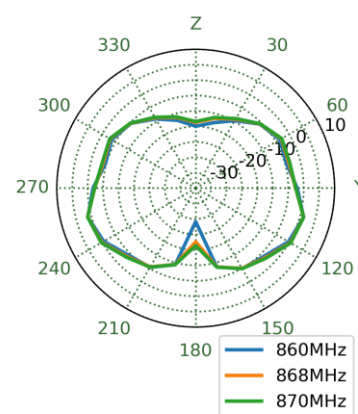
XY Plane



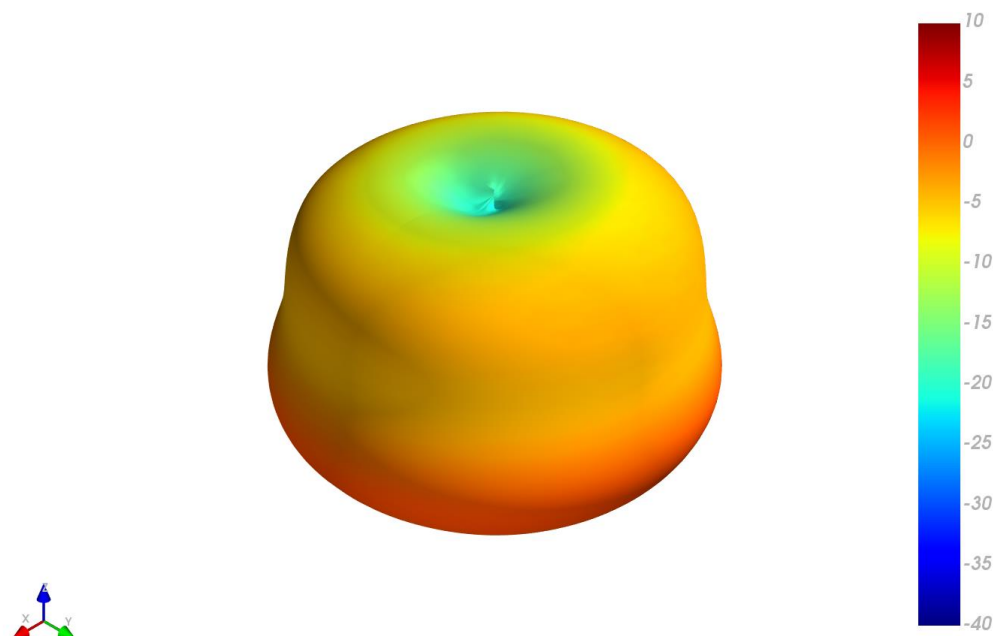
XZ Plane



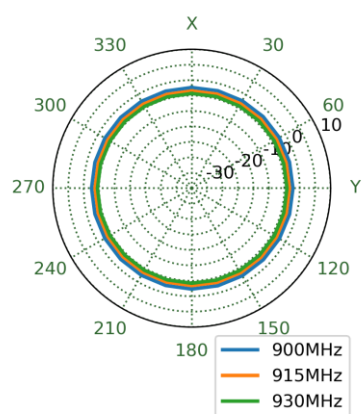
YZ Plane



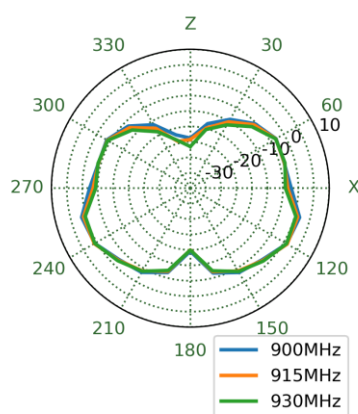
4.3 915MHz 3D and 2D Radiation Patterns



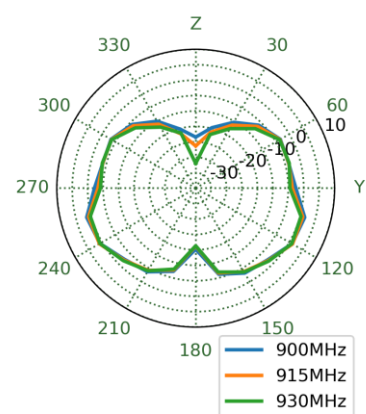
XY Plane



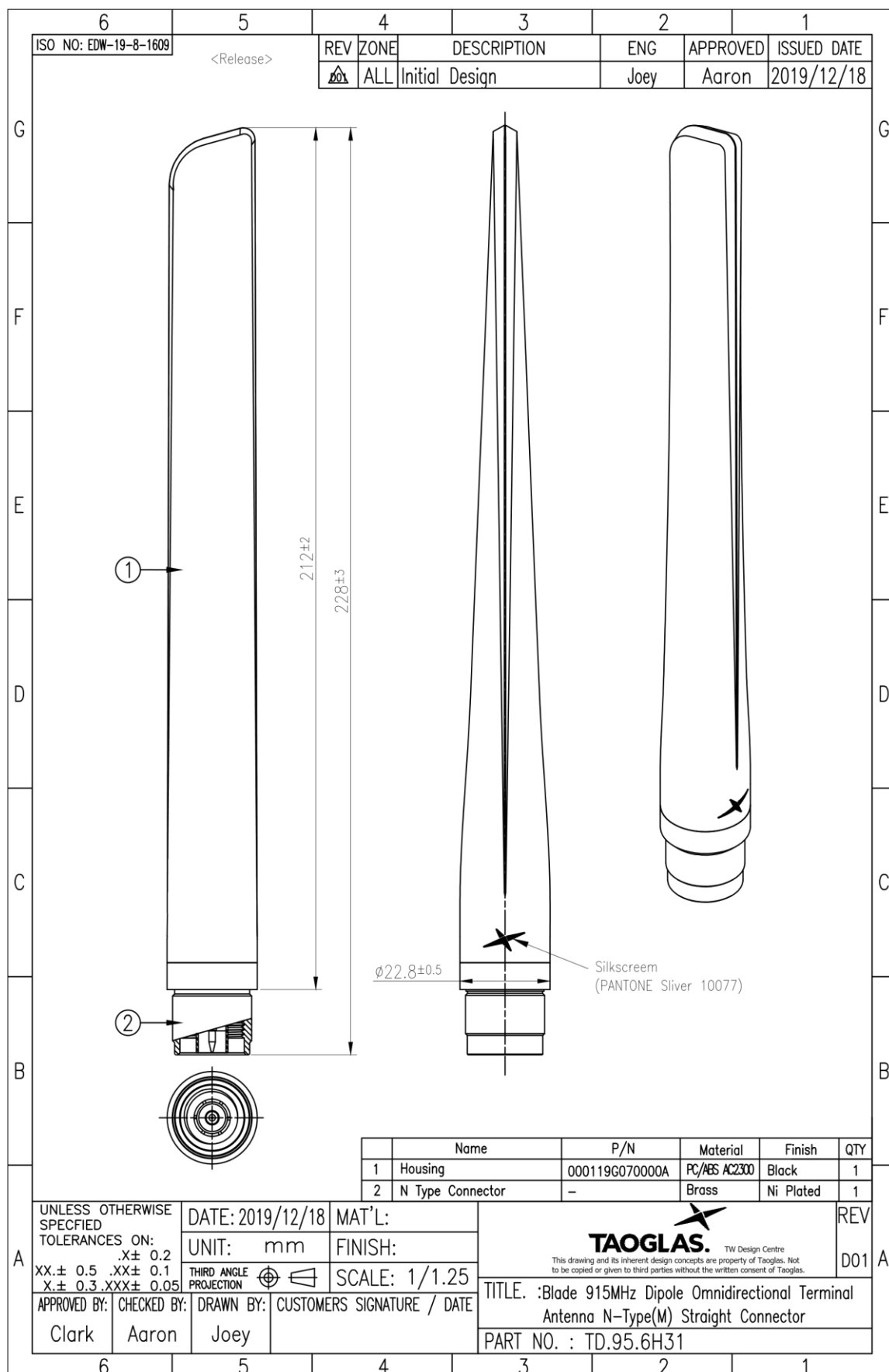
XZ Plane



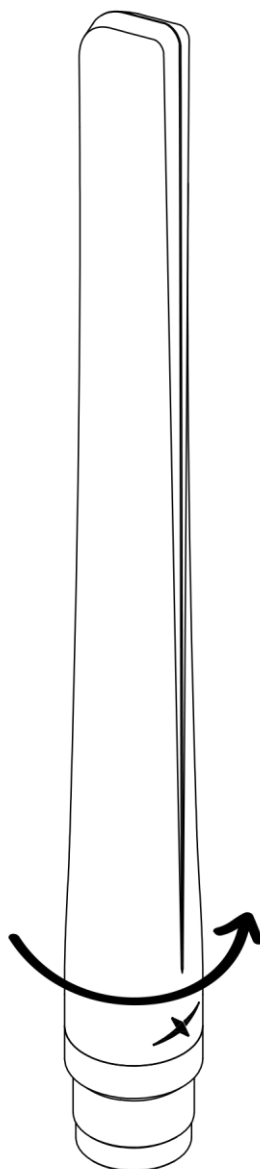
YZ Plane



5. Mechanical Drawing (Units: mm)



6. Installation Instructions

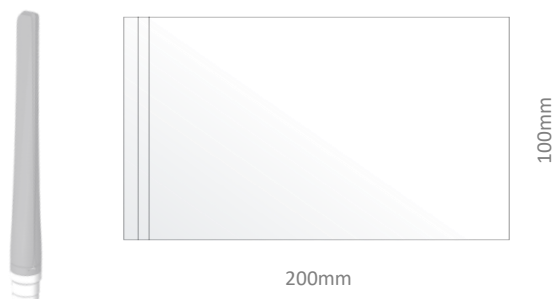


The recommended mounting torque for the TD.95 is 5 Nm.

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

7. Packaging

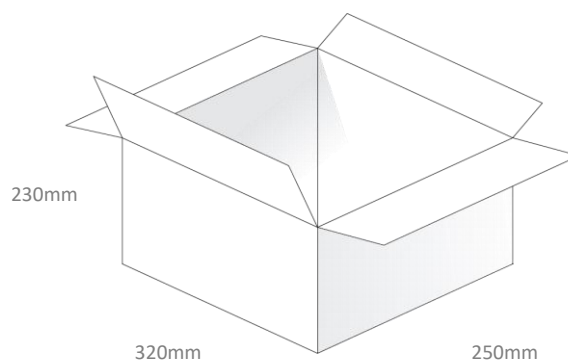
1pc TD.95.6H31 per PE Bag
Bag Dimension: 200*100mm
Weight: 70g



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

Previous Revisions



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