



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* \varnothing 22.8mm
RoHS & Reach Compliant

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1. Introduction



The Taoglas Blade TD.95.6H31 is a high performance, Omnidirectional Terminal mount Dipole Antenna 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.

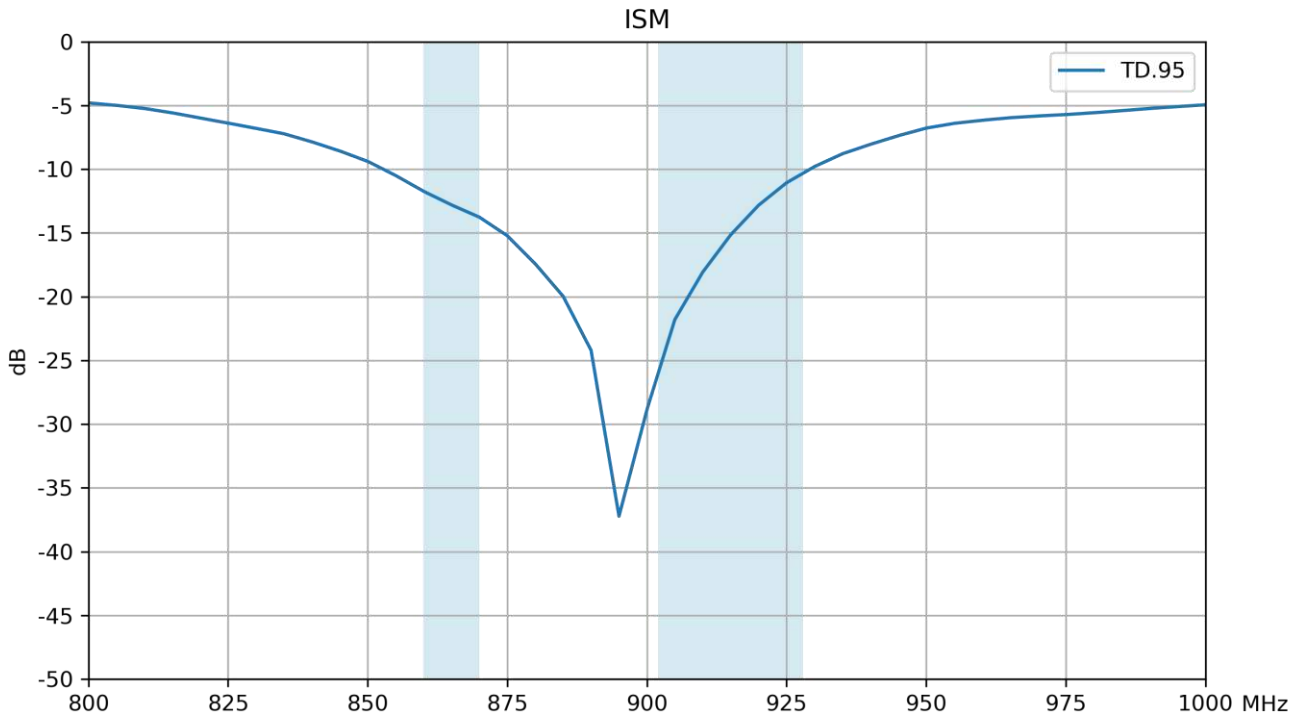
The TD.95.6H31 antenna is supplied with a Direct mount N-Type connector, however this can be customized subject to MOQ and NRE. For further information regarding customization or installation of this antenna, please contact your regional Taoglas customer support team.

2. Specifications

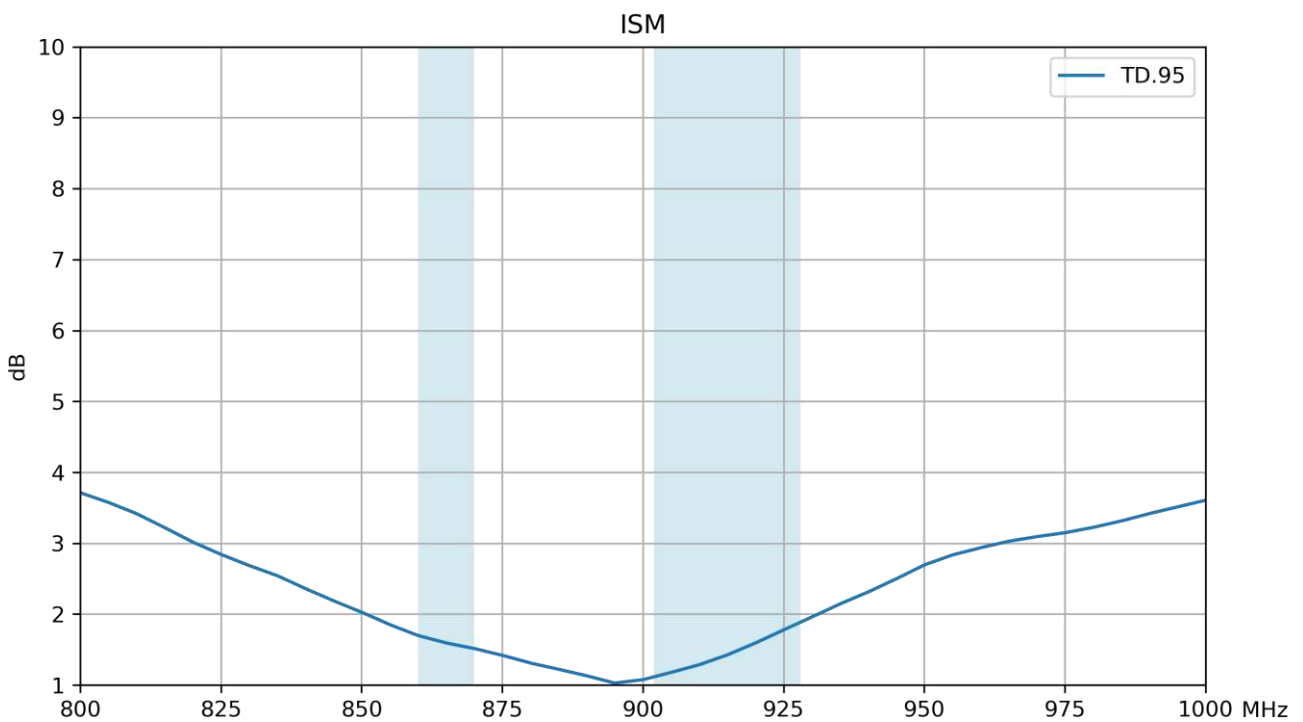
ISM Electrical		
Frequency (MHz)	868	915
Efficiency (%)		
Free Space	57.2	58.9
Average Gain (dB)		
Free Space	-2.43	-2.30
Peak Gain (dBi)		
Free Space	1.33	1.54
Impedance	50 Ω	
Polarization	Linear	
Radiation Pattern	Omni	
Max. input power	10W	
Mechanical		
Dimensions	228*22.8(mm)	
Weight	70g	
Material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

3. Antenna Characteristics

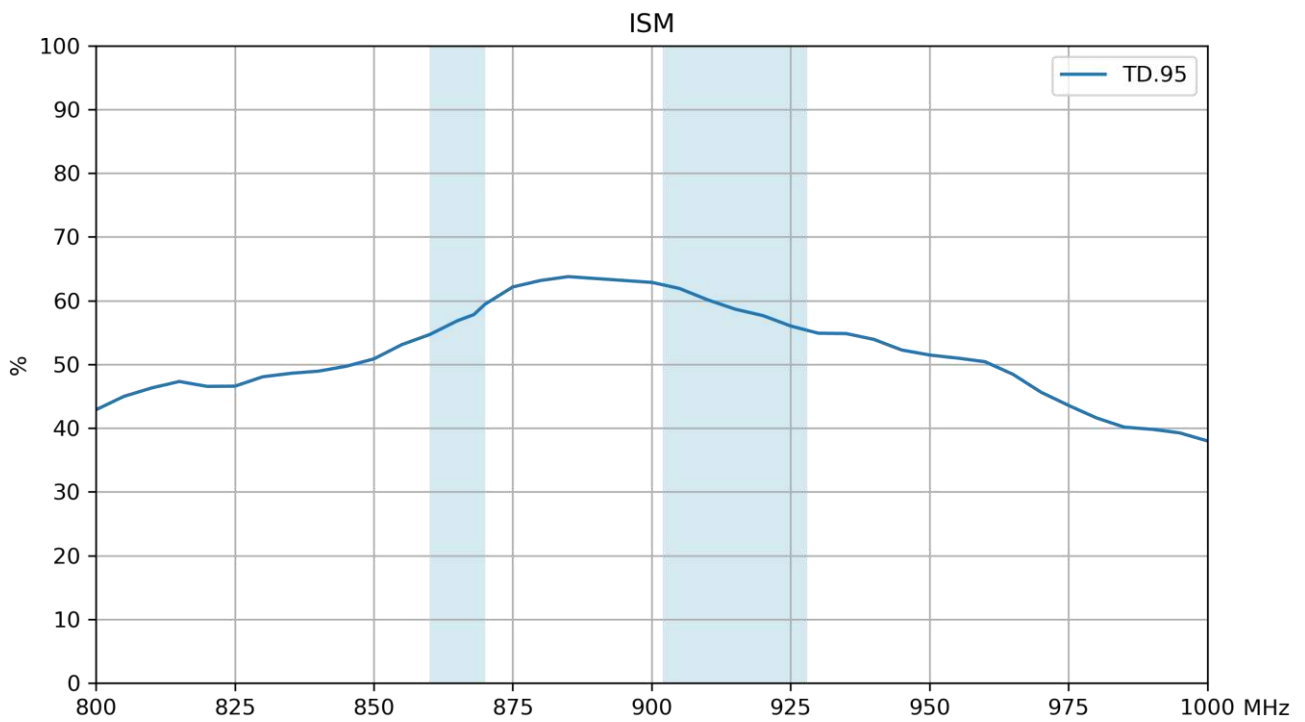
3.1 Return Loss



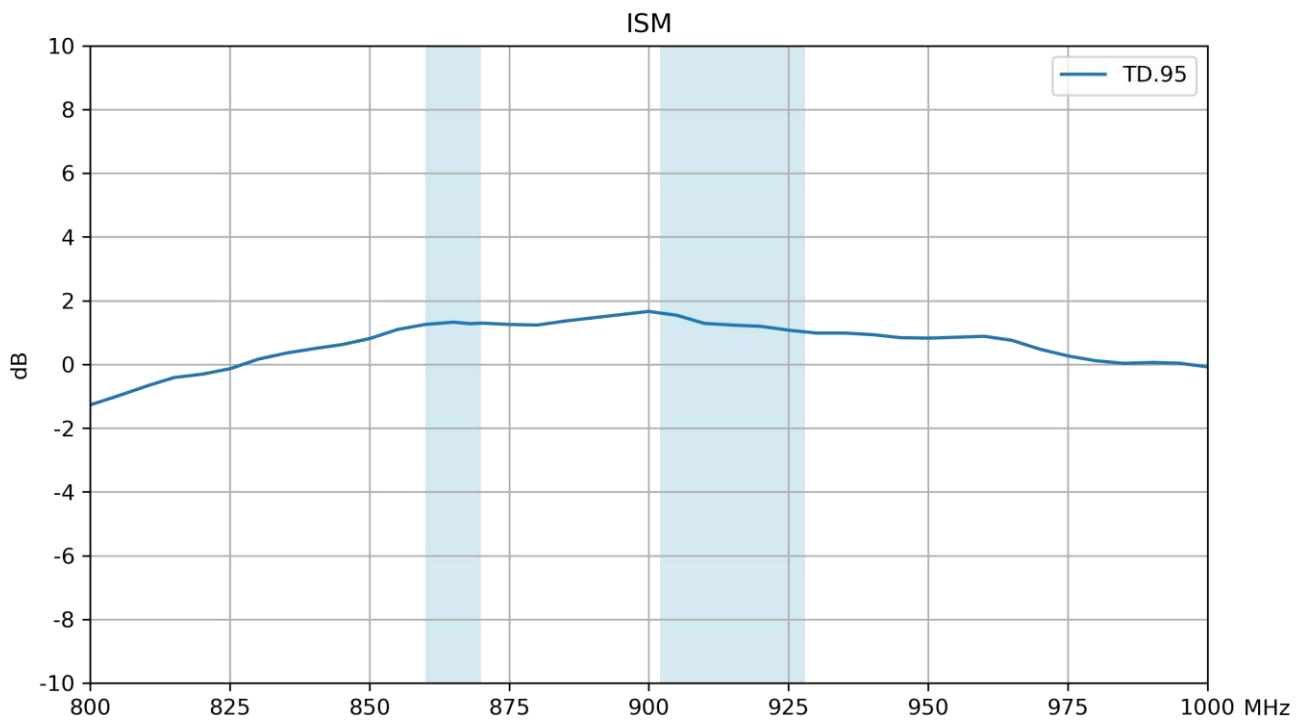
3.2 VSWR



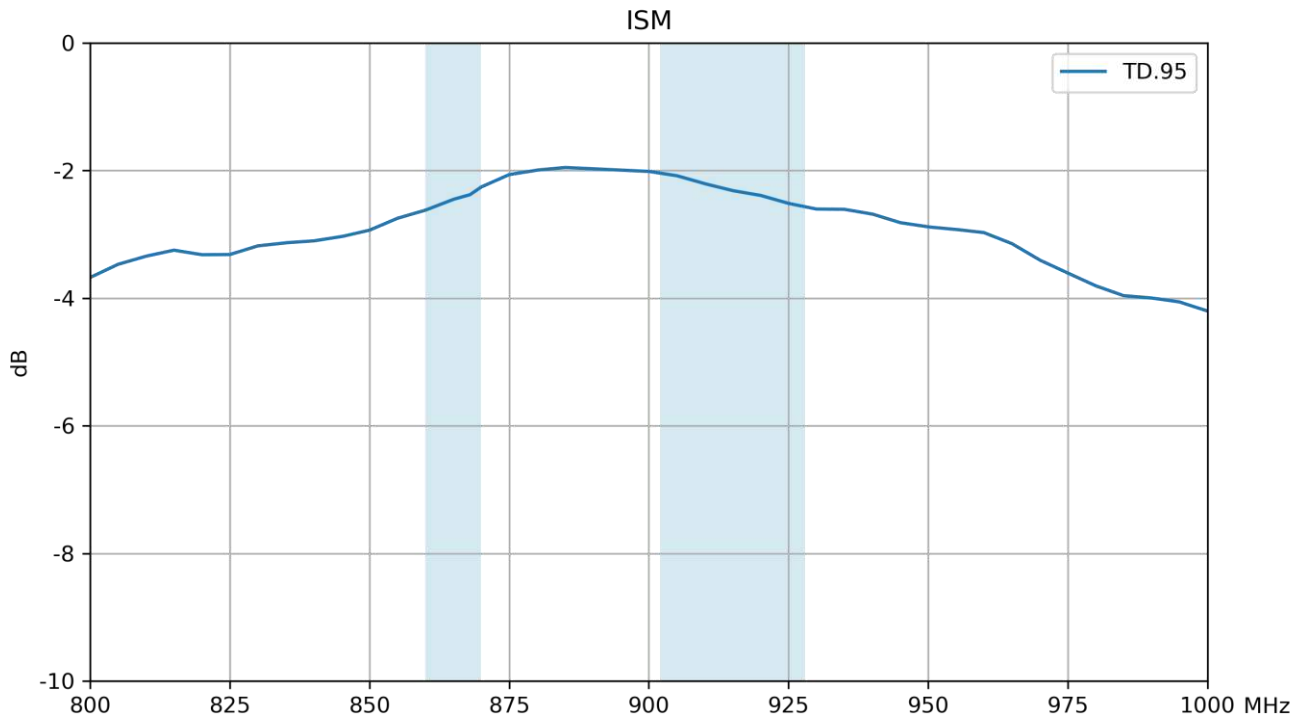
3.3 Efficiency



3.4 Peak Gain



3.5 Average Gain

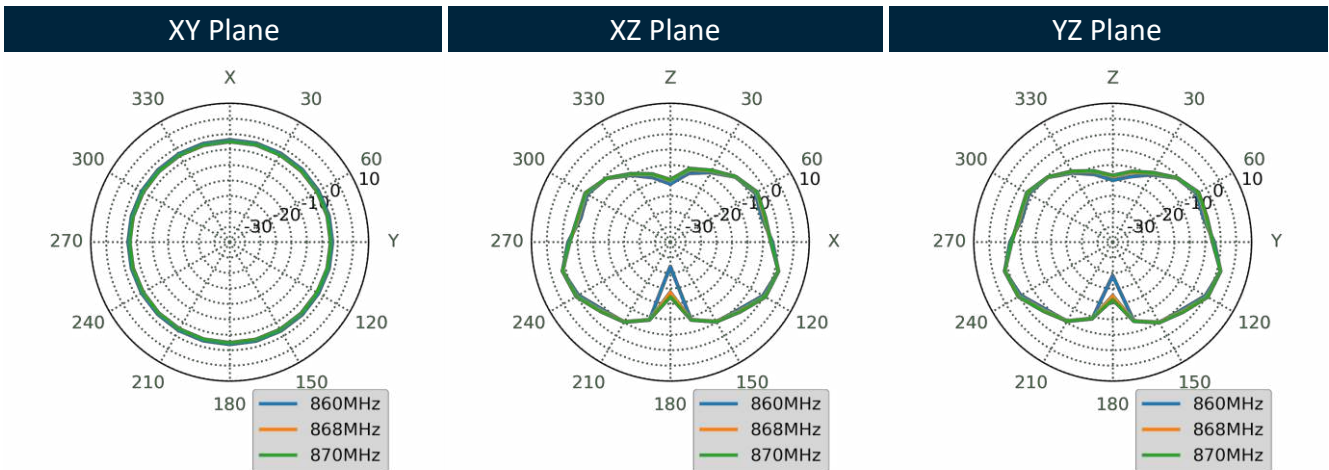
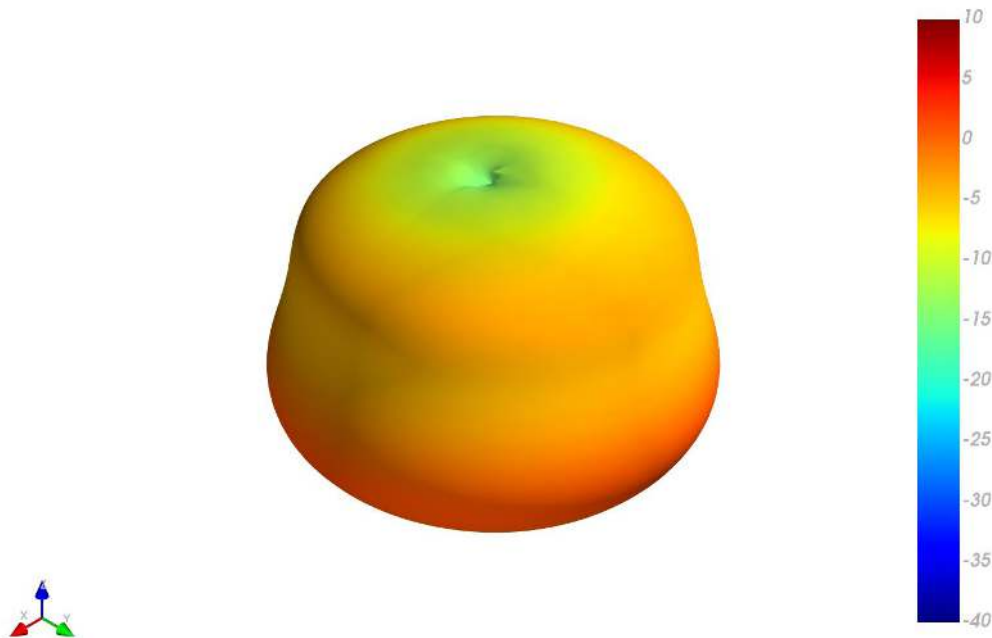


4. Radiation Patterns

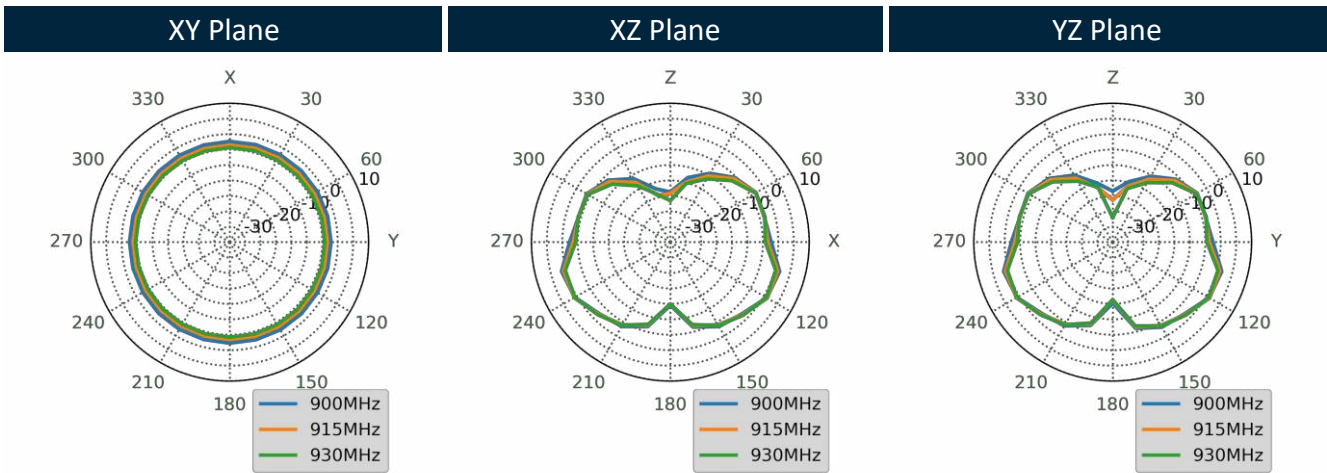
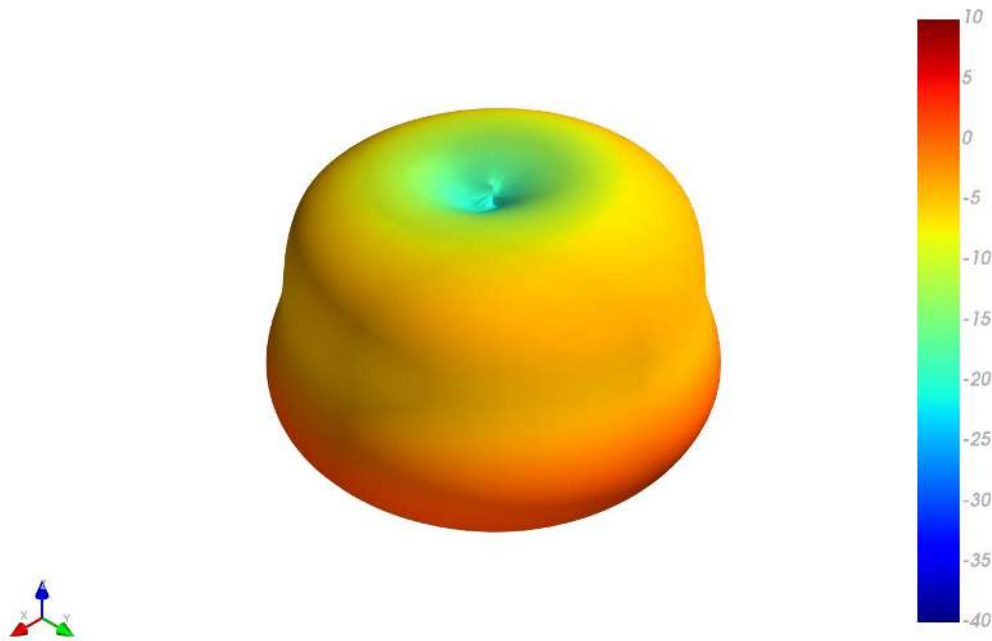
4.1 Test Setup – Free Space



4.2 868MHz 3D and 2D Radiation Patterns



4.3 915MHz 3D and 2D Radiation Patterns



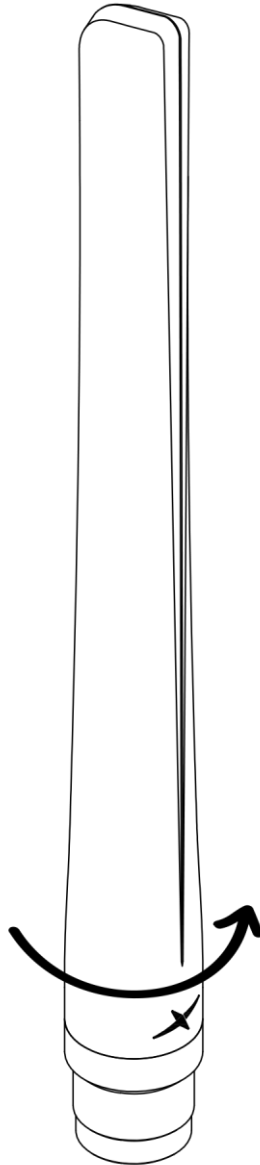
5. Mechanical Drawing (Units: mm)

6	5	4	3	2	1				
ISO NO: EDW-19-8-1609		<Release>		REV	ZONE	DESCRIPTION	ENG	APPROVED	ISSUED DATE
		ALL		Initial Design	Joey	Aaron	2019/12/18		

Name	P/N	Material	Finish	QTY
1 Housing	000119G070000A	PC/ABS AC2300	Black	1
2 N Type Connector	-	Brass	Ni Plated	1

UNLESS OTHERWISE SPECIFIED TOLERANCES ON: .X± 0.2 XX± 0.1 X.± 0.3 .XXX± 0.05	DATE: 2019/12/18	MAT'L:	 <small>TV Design Centre This drawing and its inherent design concepts are property of Taoglas. Not to be copied or given to third parties without the written consent of Taoglas.</small>	REV D01
	UNIT: mm	FINISH:		
THIRD ANGLE PROJECTION	SCALE: 1/1.25	TITLE: :Blade 915MHz Dipole Omnidirectional Terminal Antenna N-Type(M) Straight Connector		
APPROVED BY: Clark	CHECKED BY: Aaron	DRAWN BY: Joey	PART NO. : TD.95.6H31	
CUSTOMERS SIGNATURE / DATE				

6. Installation Instructions

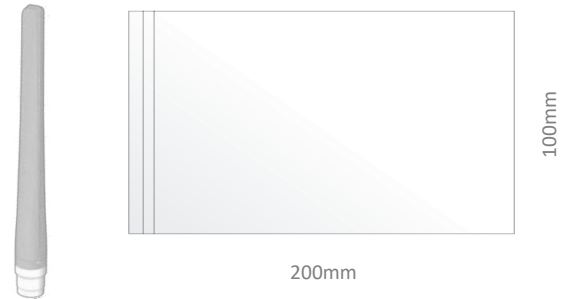


The recommended mounting torque for the TD.95 is 5 Nm.

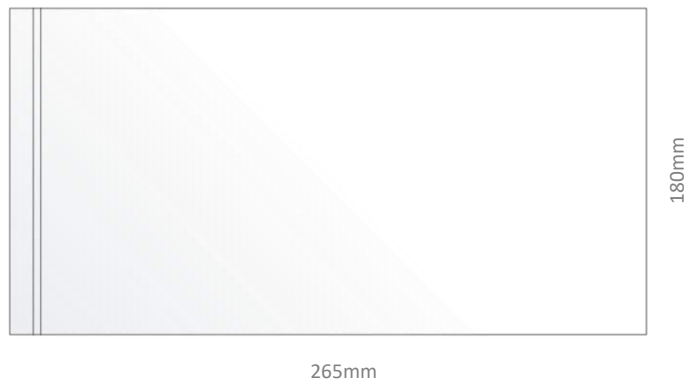
The maximum torque that can be applied is 15 Nm.
Anything in excess of this value may cause damage to the product.

7. Packaging

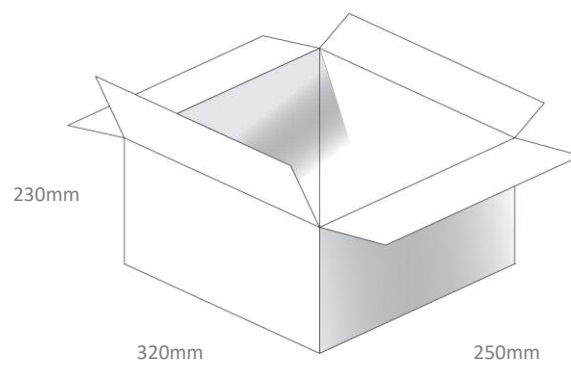
1pc TD.95.6H31 per PE Bag
 Bag Dimension: 200*100mm
 Weight: 70g



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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