



Antenna Datasheet

Product OC: YE0006AA

Version: 0.1

Date: 2026-04-14

Status: Released

Product Name: 4G Magnetic Mount Whip Monopole External Antenna

Key Features:

Frequency Band: 5855–5925 MHz

Dimensions: Φ 30 mm $\times$ 318 mm

Efficiency: Up to 8 %

RoHS Compliant

IP65

Overview

This Quectel external 4G antenna covers main 4G LTE bands and is compatible with 3G/2G/LPWA bands as well. The external antenna is barely influenced by the internal environment of devices, giving a much better performance in efficiency, radiation and gain whilst providing an optimized solution for a customer product. Quectel also offers flexible installation with custom cable length and connector options.

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1 Specification

Test Condition: Free Space

1.1. Electrical

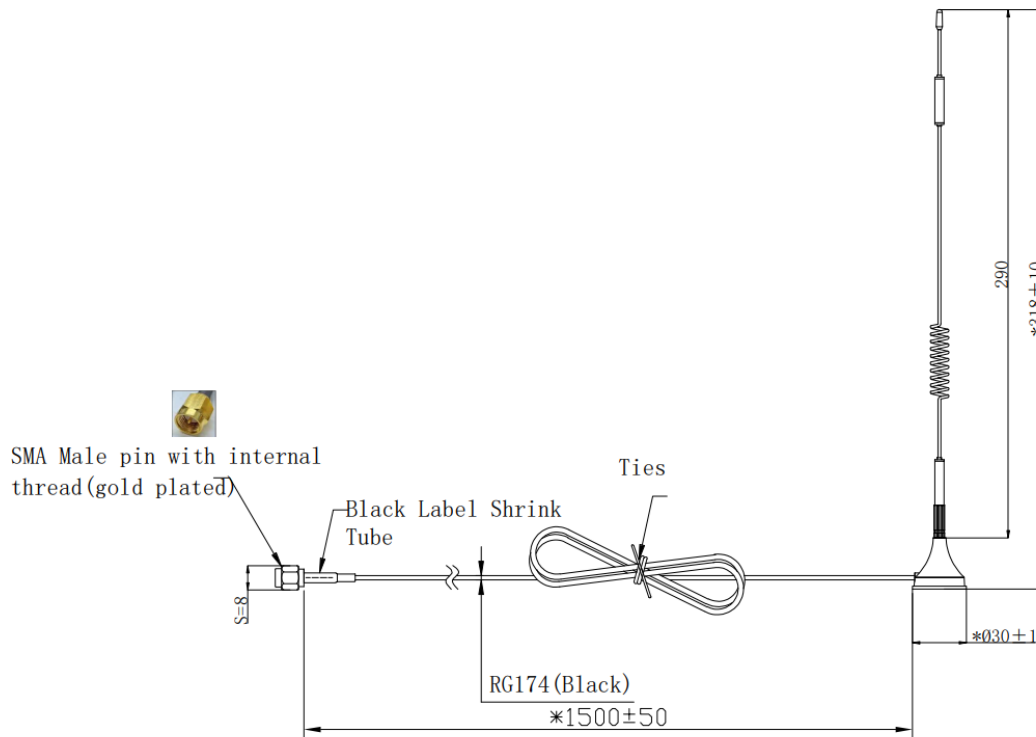
Electrical	
Frequency Range	5855–5925 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 1.7
Peak Gain	-3.7 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	Φ 30 mm $\times$ 318 mm
Material & Color	Carbon Steel & Black
Cable Type & Color & Length	RG 174 & Black & 1500 mm
Connector Type	SMA Male
Mounting Type	Magnet
Weight	Typ. 41.8 g
Environmental	
Operation Temperature	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$

Storage Temperature	-40 °C to +85 °C
Ingress Protection (IP) Rating	IP65
RoHS Compliant	Yes

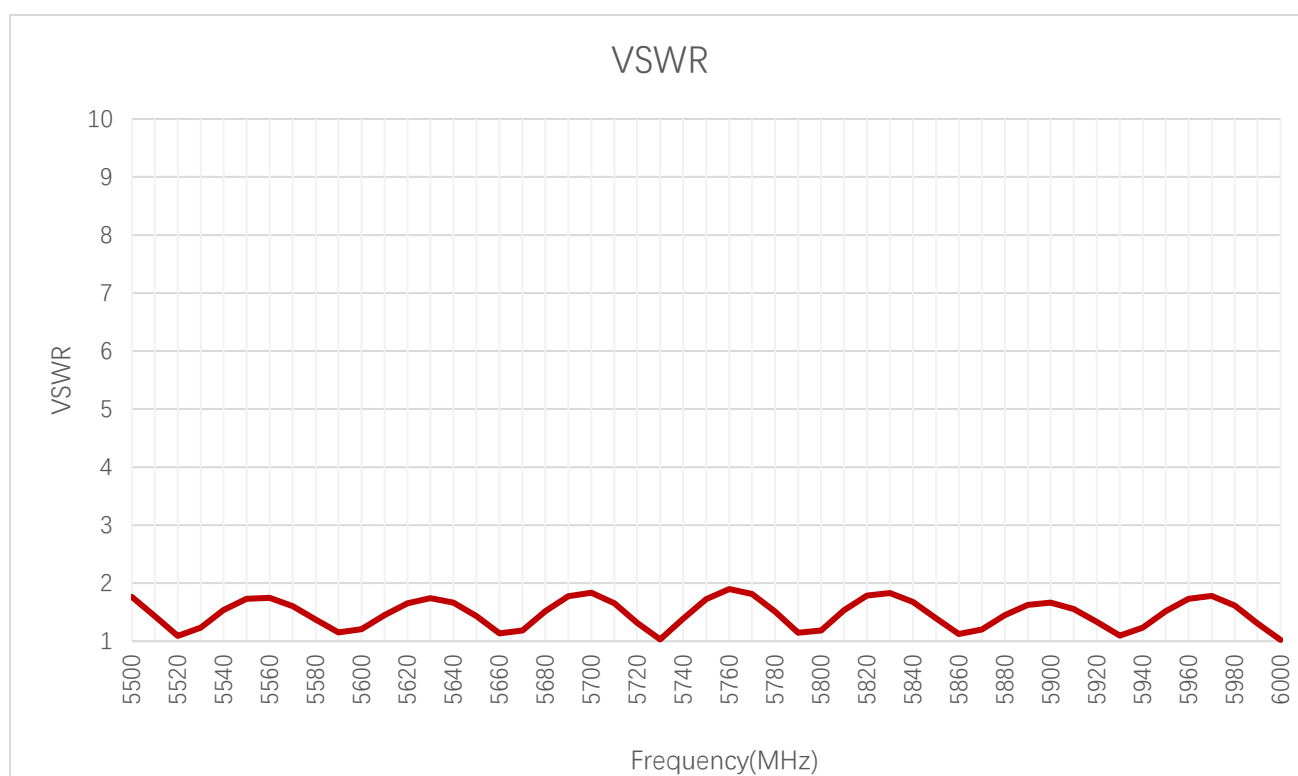
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

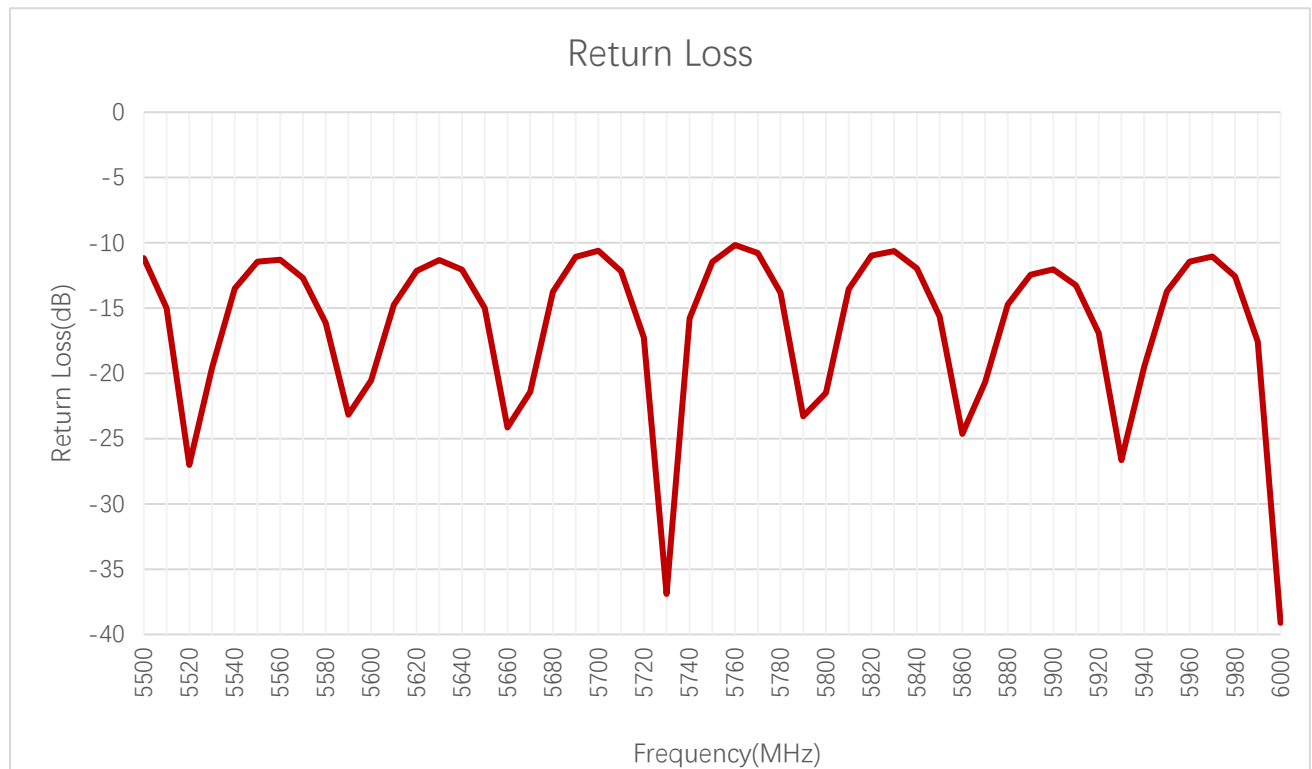
3.1.1. VSWR



VSWR

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
VSWR	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2350	2450	2600	2690	5850	5860	5900	5930
VSWR	-	-	-	-	-	-	1.4	1.1	1.7	1.1

3.1.2. Return Loss

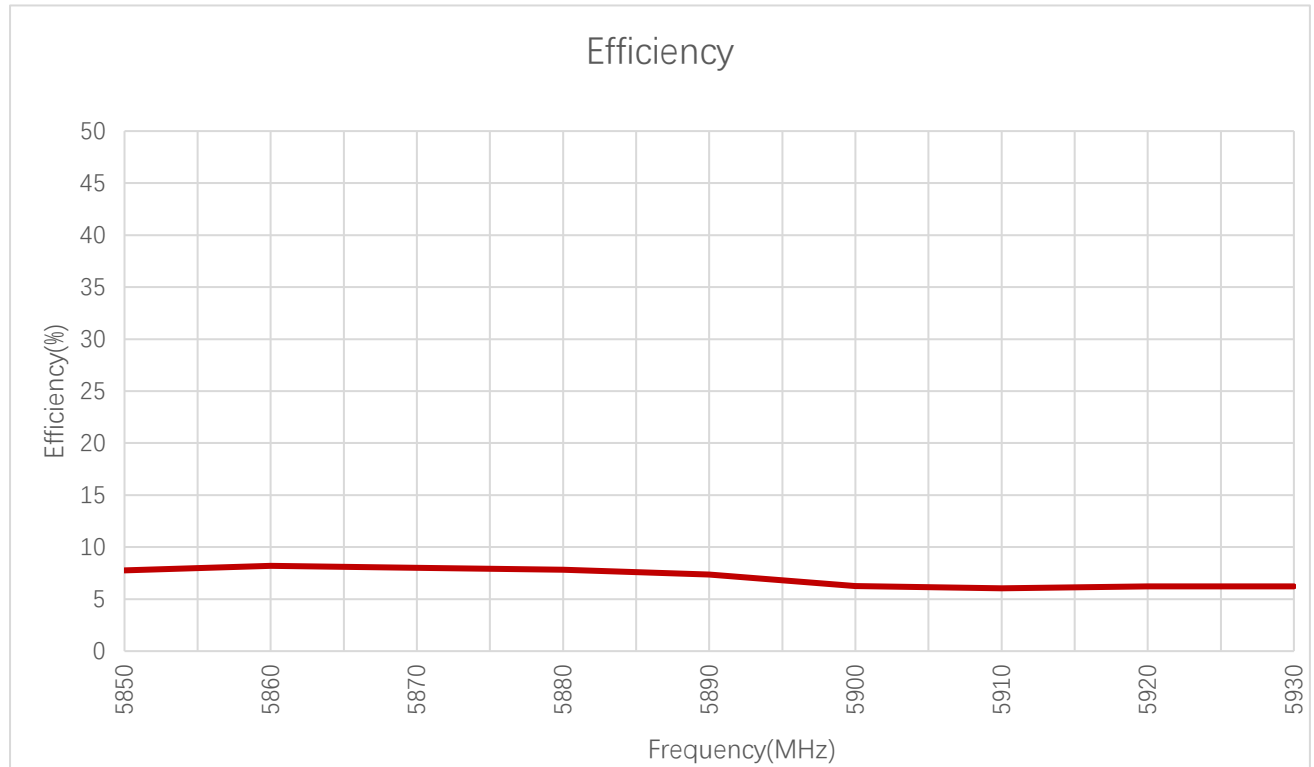


Return Loss (dB)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Return Loss (dB)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2350	2450	2600	2690	5850	5860	5900	5930
Return Loss (dB)	-	-	-	-	-	-	-15.6	-24.6	-12.0	-26.7

3.2. Radiation Performance Test

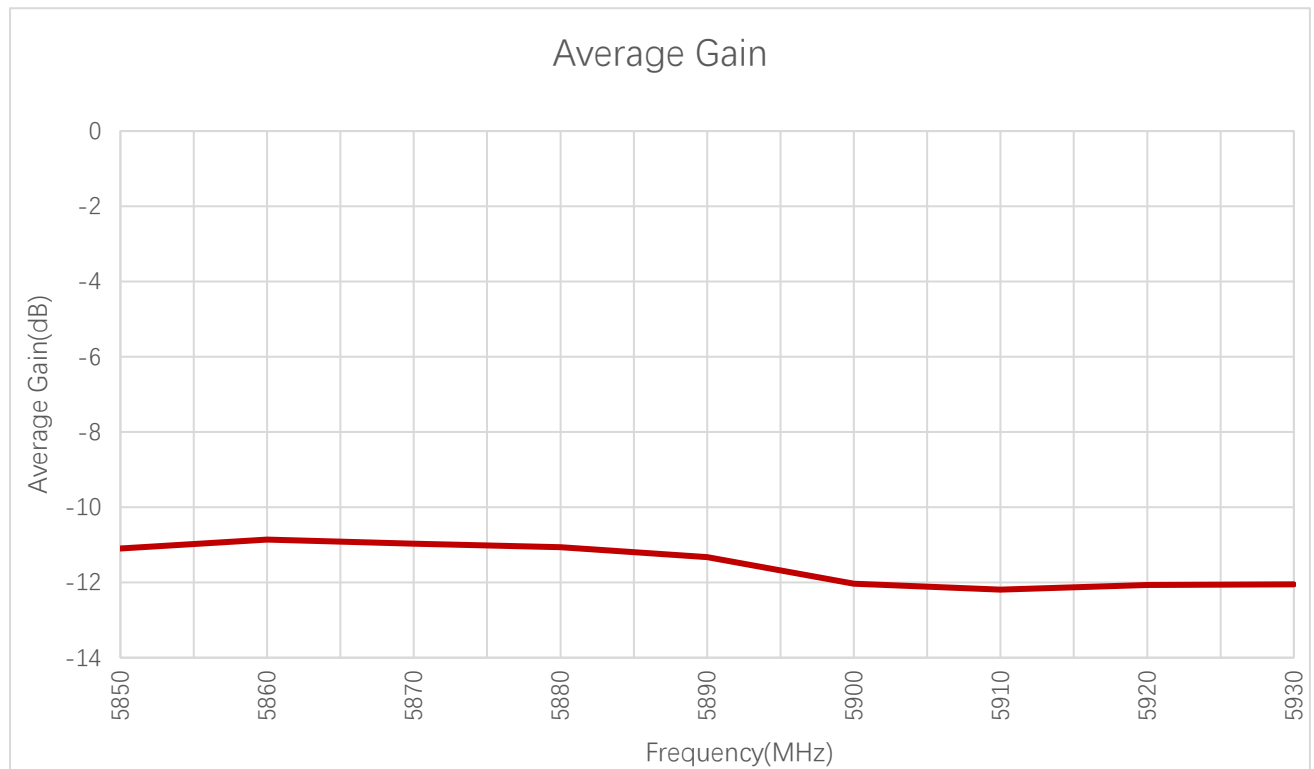
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Efficiency (%)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2350	2450	2600	2690	5850	5860	5900	5930
Efficiency (%)	-	-	-	-	-	-	7.8	8.2	6.3	6.2

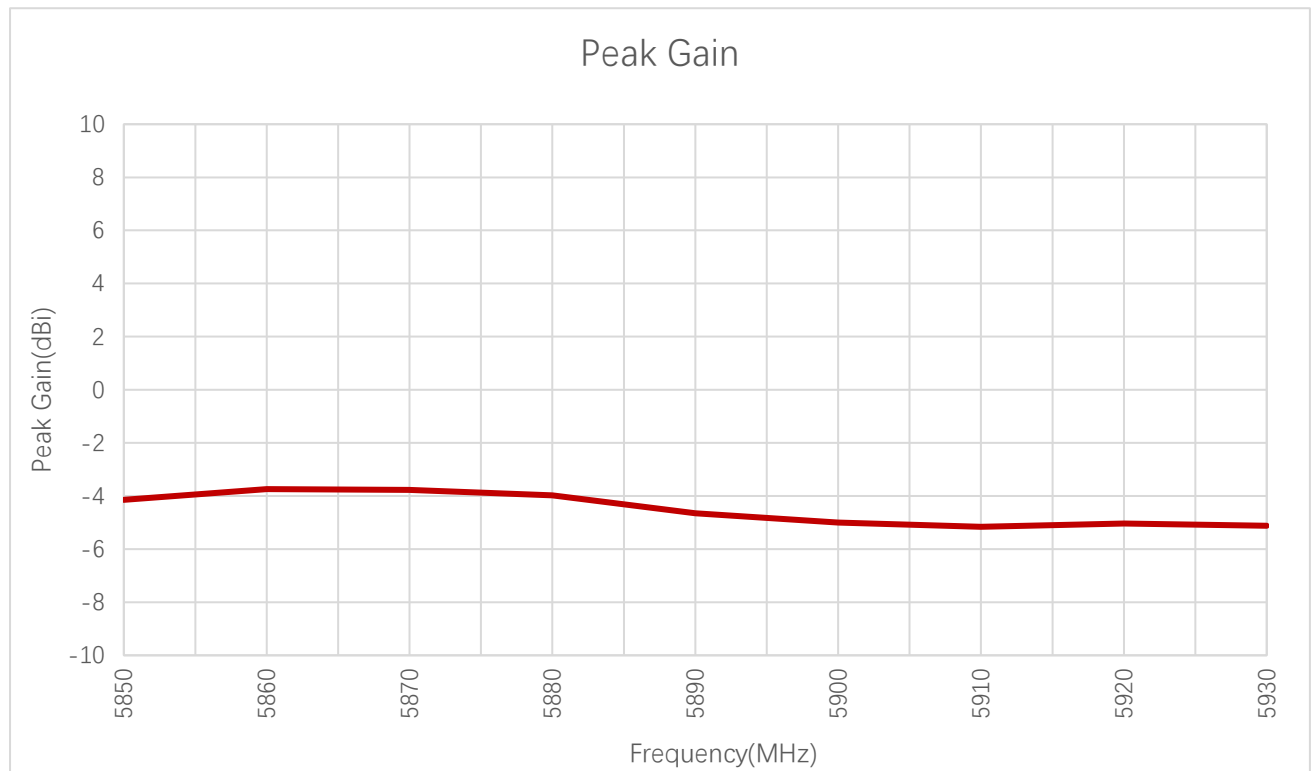
3.2.2. Average Gain



Average Gain (dB)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Average Gain (dB)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2350	2450	2600	2690	5850	5860	5900	5930
Average Gain (dB)	-	-	-	-	-	-	-11.1	-10.9	-12.0	-12.1

3.2.3. Peak Gain

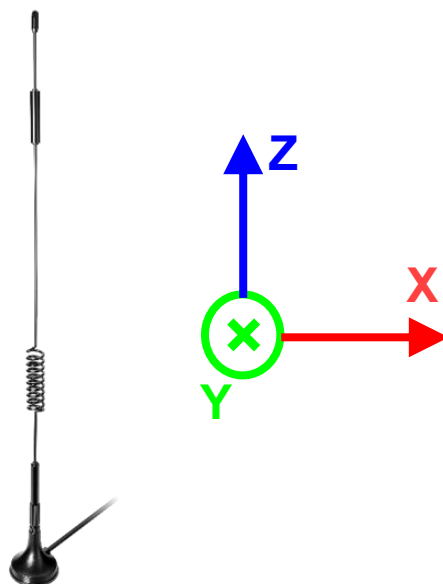


Peak Gain (dBi)

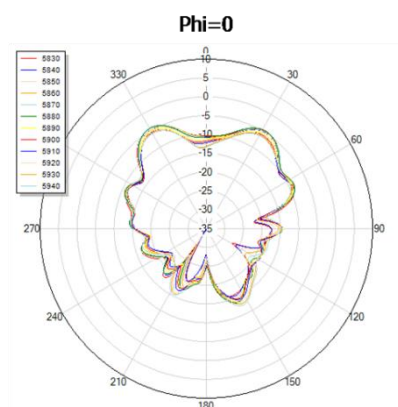
Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Peak Gain (dBi)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2350	2450	2600	2690	5850	5860	5900	5930
Peak Gain (dBi)	-	-	-	-	-	-	-4.2	-3.7	-5.0	-5.1

3.2.4. 2D Radiation Pattern

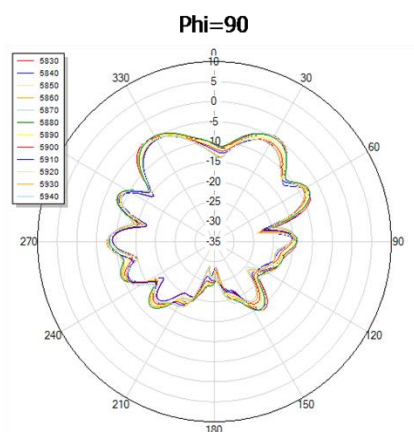
- Test Condition: Free Space



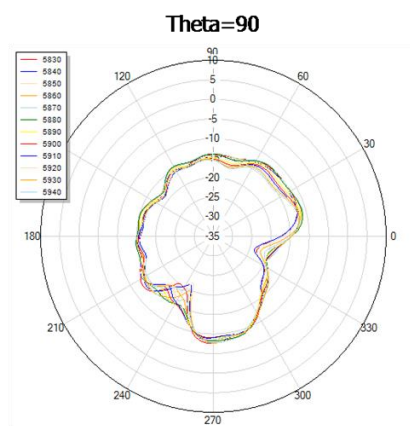
E1 – XOZ Plane (Phi 0 deg)



E2 – YOZ Plane (Phi 90 deg)

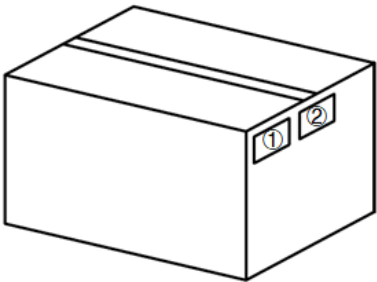
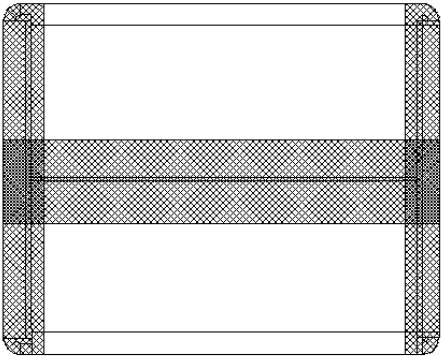


H – XOY Plane (Theta 90 deg)



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		1 pc antenna product in a PE bag.
		50 pcs antenna products in a big PE bag.
3		(6 PCS PE Bags / Carton Box) (300 PCS Antennas / Carton Box) <u>Carton Size:</u> <u>L × W × H = 370 × 370 × 295 mm</u>

4		Position for Attaching Labels ① Carton Label ② Quality Label
5		Sealing Cartons H-shaped sealing cartons

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Or our local offices. For more information, please visit:

<https://www.quectel.com/contact/>.

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Revision History

Version	Date	Author	Note
-	2026-04-14	Omid Ji/ Lucky Feng/ Allow Xu/ Rainey Liao	Creation of the document
0.1	2026-04-14	Omid Ji/ Lucky Feng/ Allow Xu/ Rainey Liao	First official release



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