

Antenna Datasheet

Product OC: Y0BYB0CA0EA

Version: 1.0

Date: 2025-12-17

Product Name: WIFI PCB Antenna

Key Features:

Frequency Band: 2400–2500 MHz, 5150–5850 MHz

Dimensions: 40 mm × 18.5 mm

Efficiency: Up to 64.89 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

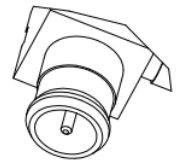
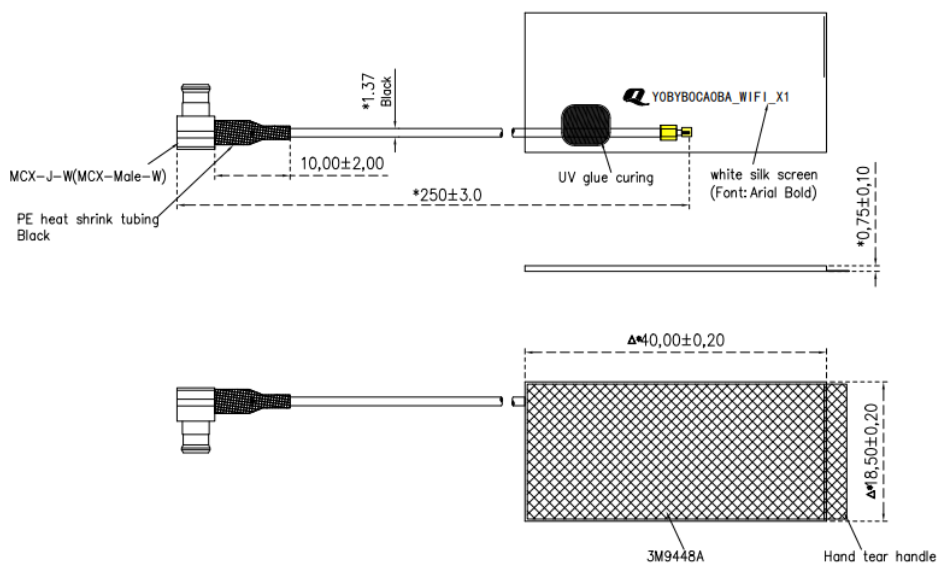
1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 2.1
Peak Gain	≤ 5.3 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	40 mm × 18.5 mm
Material & Color	PCB & Black
Cable type & color & length	Φ 1.37 & Black & 250 mm
Connector type	MCX-Male-W
Weight	Typ. 3.22 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS Compliant	Yes

2 Drawing



Detail A
Ratio: 3:1

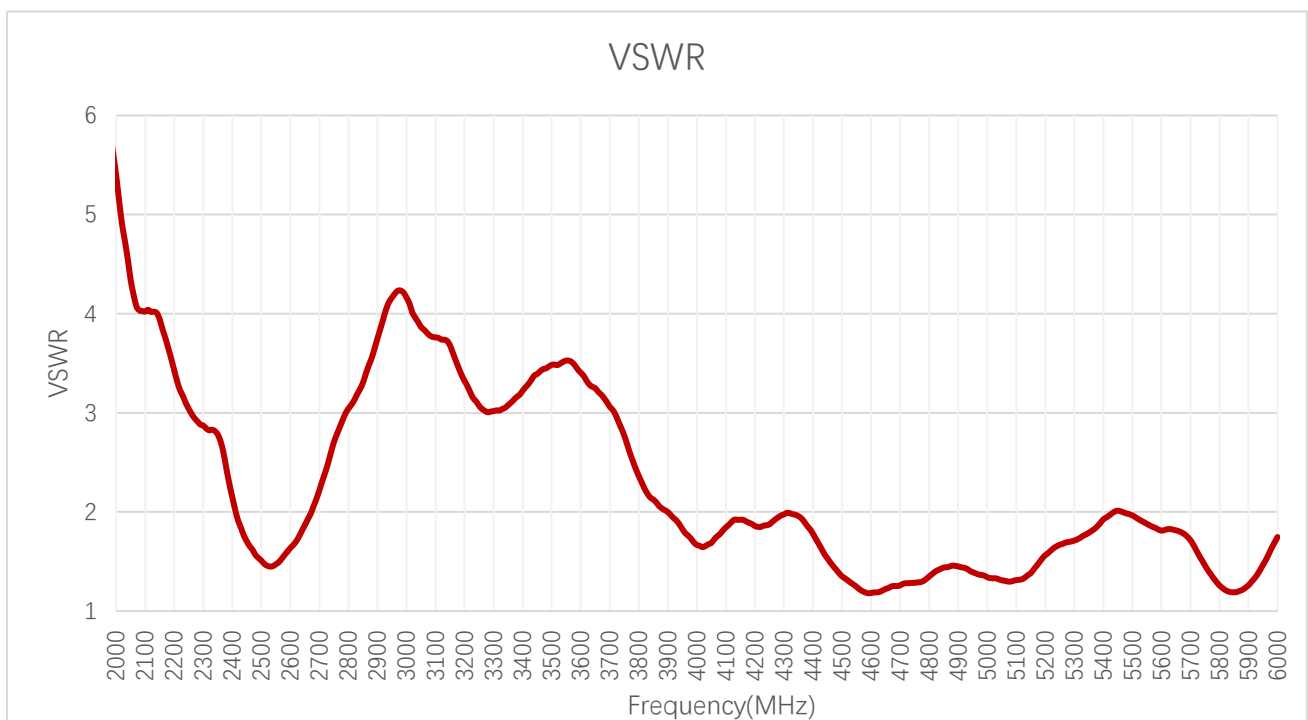


View Detail A

3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

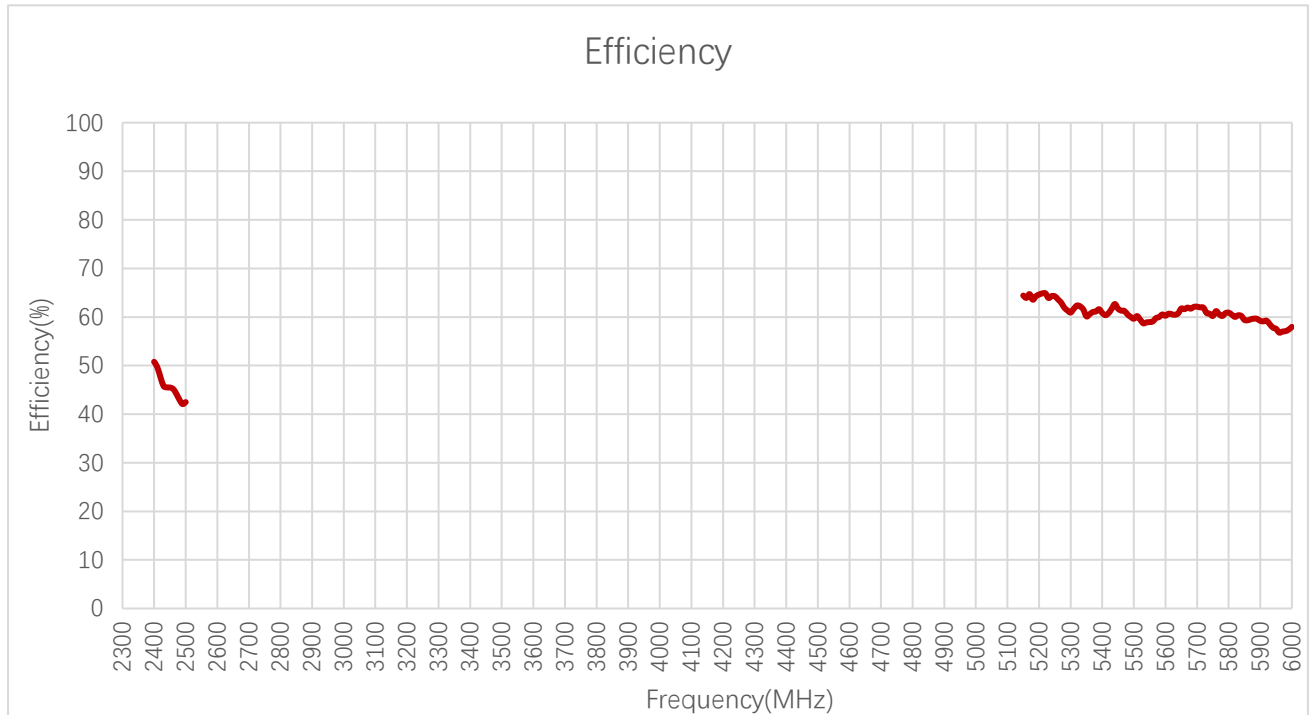


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	2.1	1.7	1.5	1.4	2.0	1.2	-	-	-

3.2. Radiation Performance Test

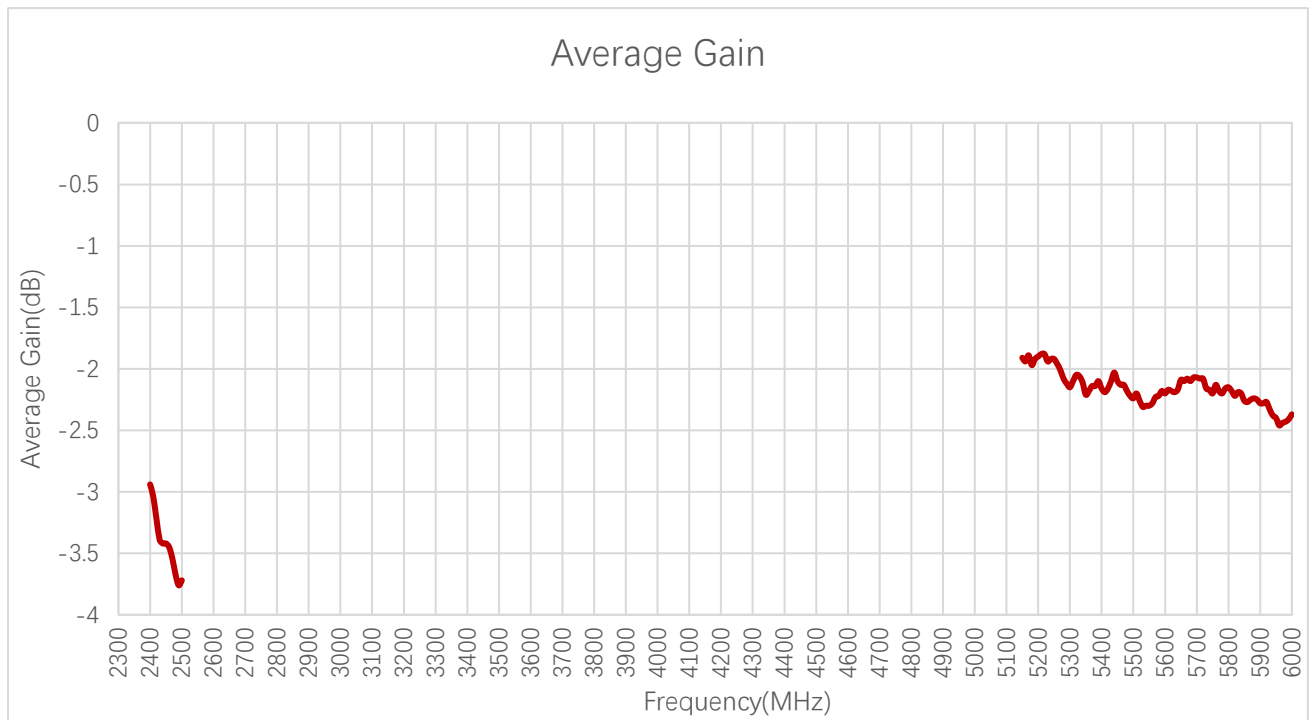
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency	50.8	45.5	42.5	64.4	59.6	59.4	-	-	-

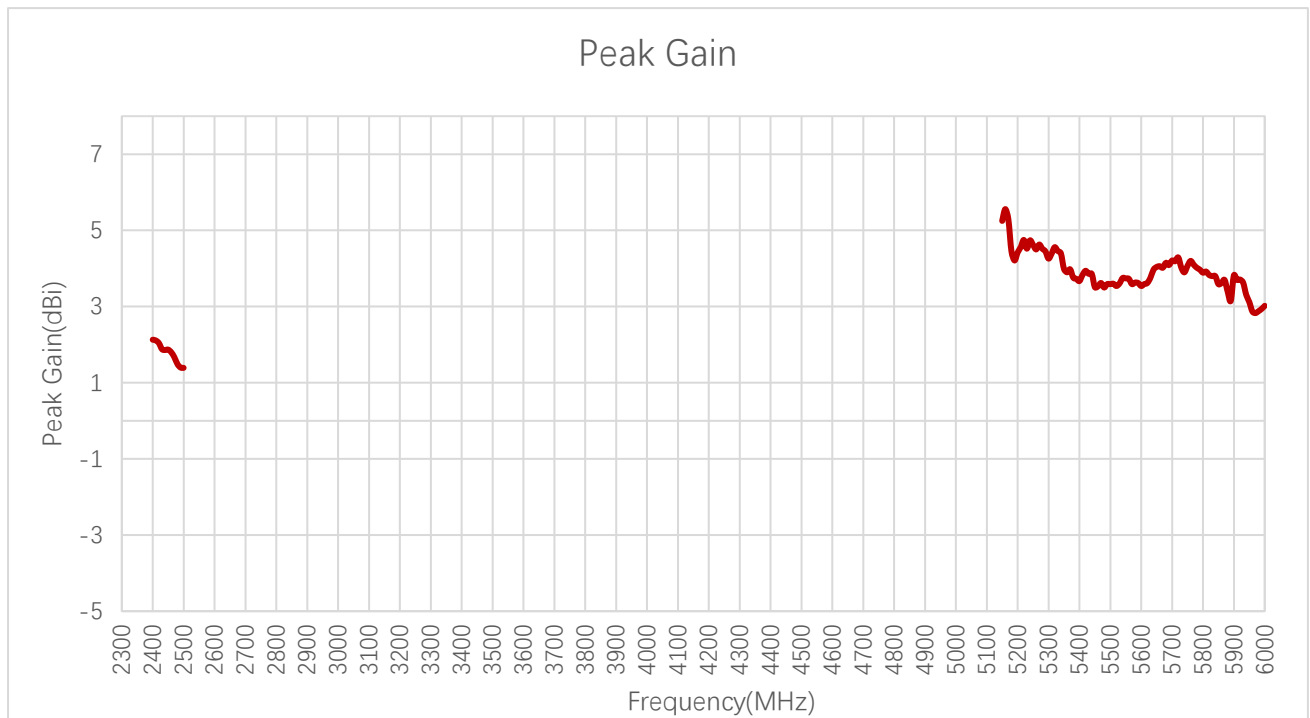
3.2.2. Average Gain



Average Gain (dB)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Average Gain	-2.9	-3.4	-3.7	-1.9	-2.2	-2.3	-	-	-

3.2.3. Peak Gain

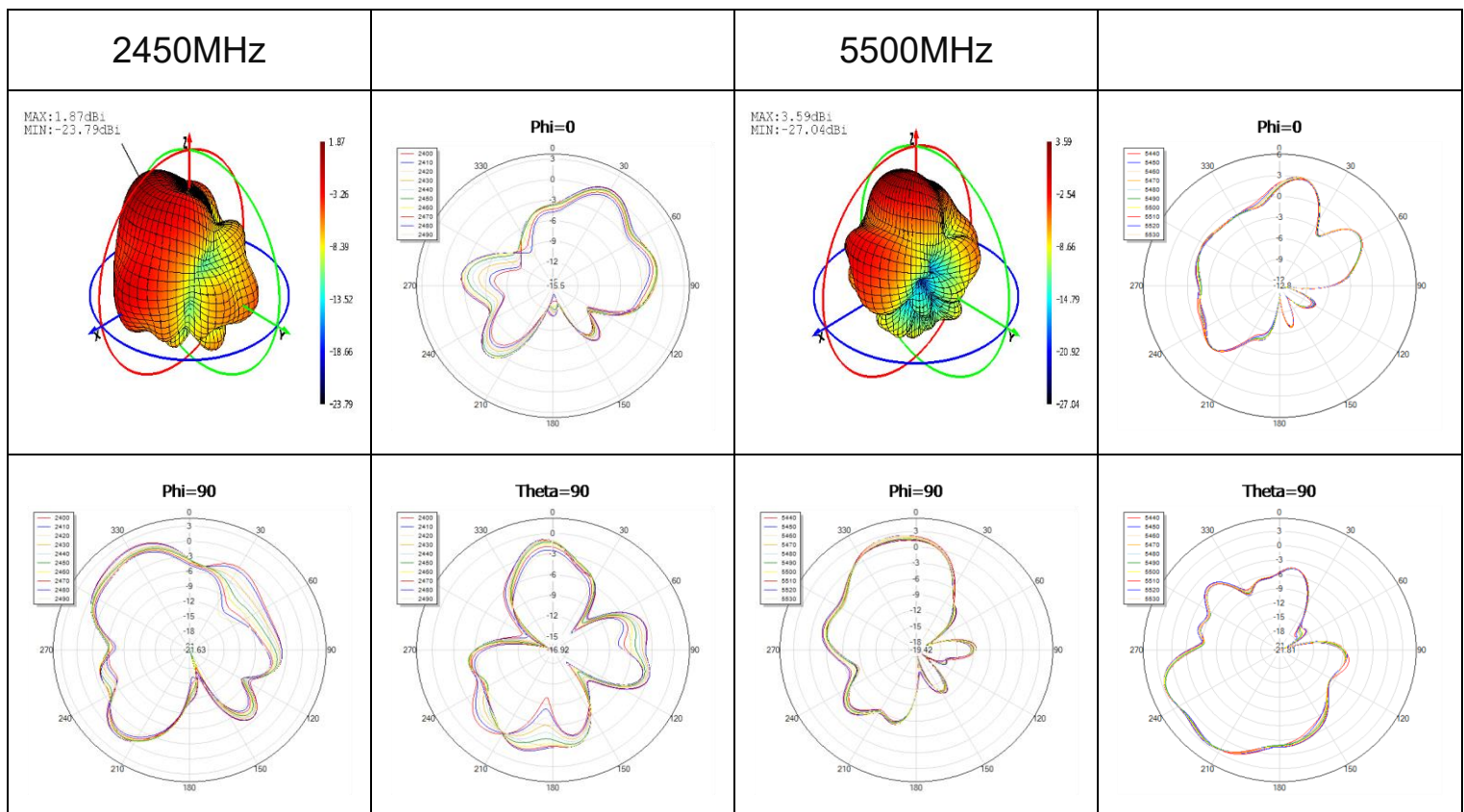
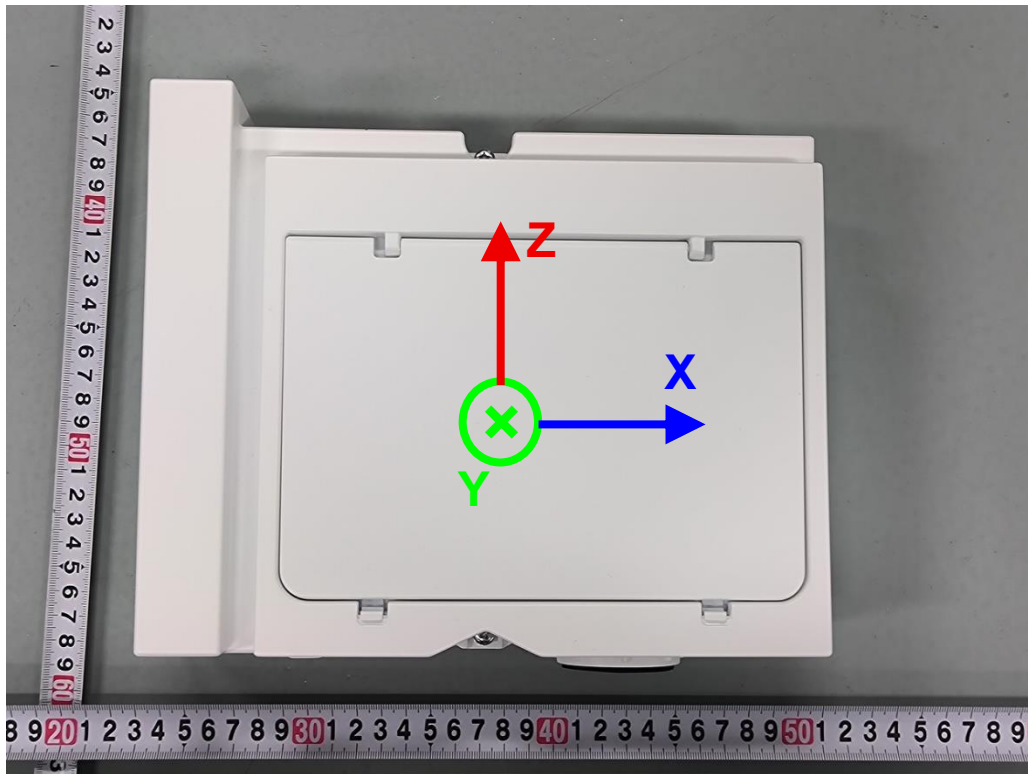


Peak Gain (dBi)

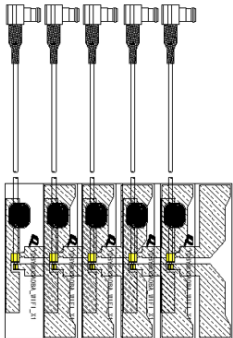
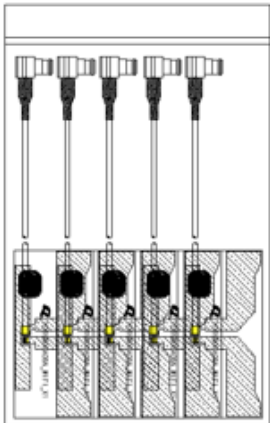
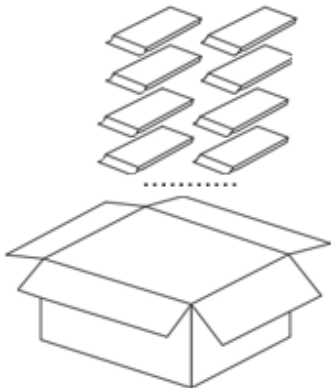
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain	2.1	1.9	1.4	5.3	3.6	3.6	-	-	-

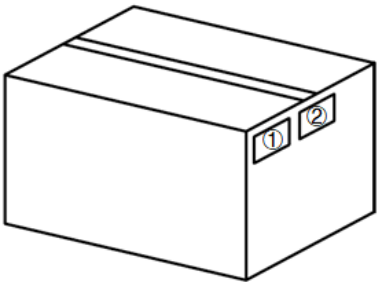
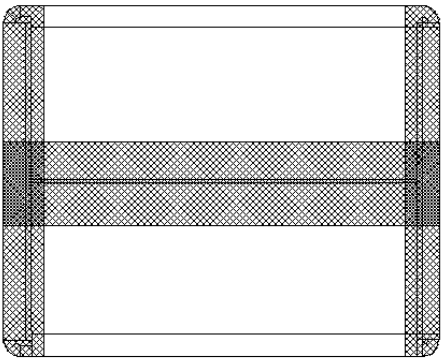
3.2.4. 2D Radiation Pattern

- Test Condition: Assembled in test device
- Test Chamber: SZ-S-1



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		50 Antennas / Tie
2	 100PCS/bag	100 antenna products in a PE bag. (100 Antennas / PE Bag)
3		(20 PE Bags / Carton Box) (2000 Antennas / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L × W × H = 325 × 325 × 200 mm</u>

4		Position for Attaching Labels ① Carton Label ② Quality Label
5		Sealing Cartons H-shaped sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

Contact Us

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

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Revision History

Version	Date	Author	Note
-	2025-12-17	Qinming Peng/ Shea Li/ Riva Ren/ Aria Chu	Creation of the document
1.0	2025-12-17	Qinming Peng/ Shea Li/ Riva Ren/ Aria Chu	First official release



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