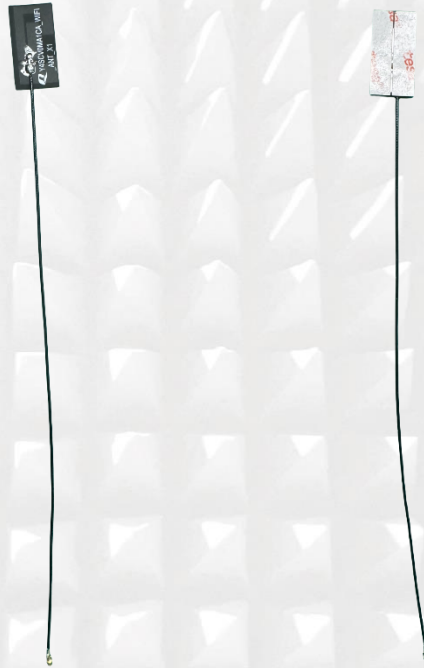




Antenna Datasheet

Product OC: Y4SCV0MA1CA

Version: 1.0

Date: 2025-12-11

Product Name: Wi-Fi Adhesive Mount FPC Monopole Antenna

Key Features:

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

Dimensions: 25 mm × 13 mm × 0.2 mm

Efficiency: Up to 60.4 %

RoHS and REACH Compliant

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1 Specification

Test Condition: Assembled in test device

1.1. Electrical

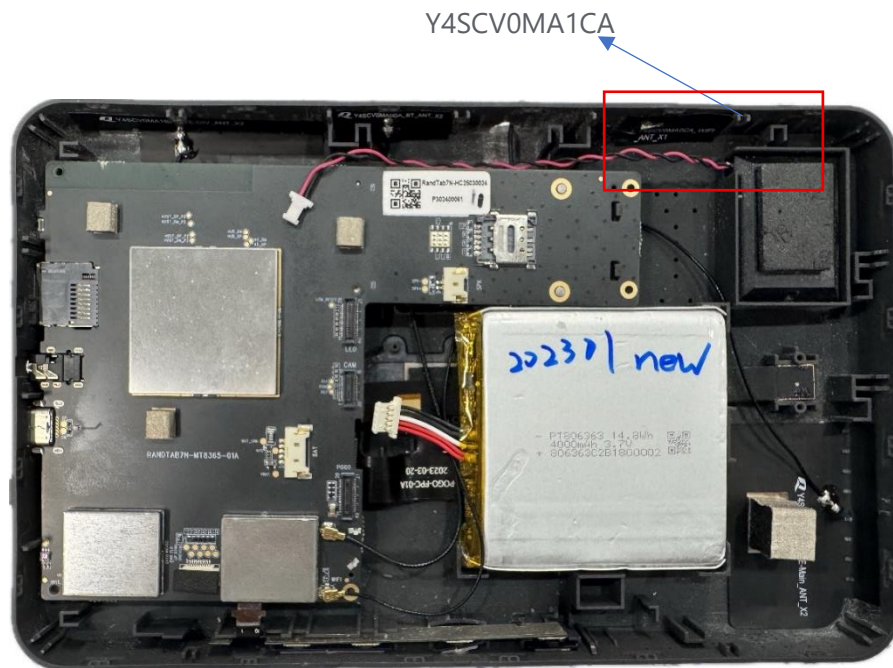
Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional

Electrical - Detail												
SPEC	Band	B71	B12 /B13 /B28	B5 /B8 /B26	n74 /n75 /n76	B1 /B2 /B3	B40	Wi-Fi 2G	B38 /B41	B42 /B48 /n77	n79	Wi-Fi 5G
	Freq. (MHz)	600– 700	700– 810	820– 960	1420– 1520	1700– 2170	2300– 2400	2400– 2500	2500– 2690	3300– 4200	4400– 5000	5150– 5850
Max. VSWR		-	-	-	-	-	-	1.6	-	-	-	1.6
Max. Return Loss (dB)		-	-	-	-	-	-	-12.9	-	-	-	-12.9
AVG Eff. (%)		-	-	-	-	-	-	54.6	-	-	-	54.3
AVG AVG Gain (dB)		-	-	-	-	-	-	-2.6	-	-	-	-2.7
Max. Peak Gain (dBi)		-	-	-	-	-	-	2.0	-	-	-	4.2
VSWR						≤ 1.6						
Return Loss						≤ -9.4 dB						
Peak Gain						≤ 4.2 dBi						

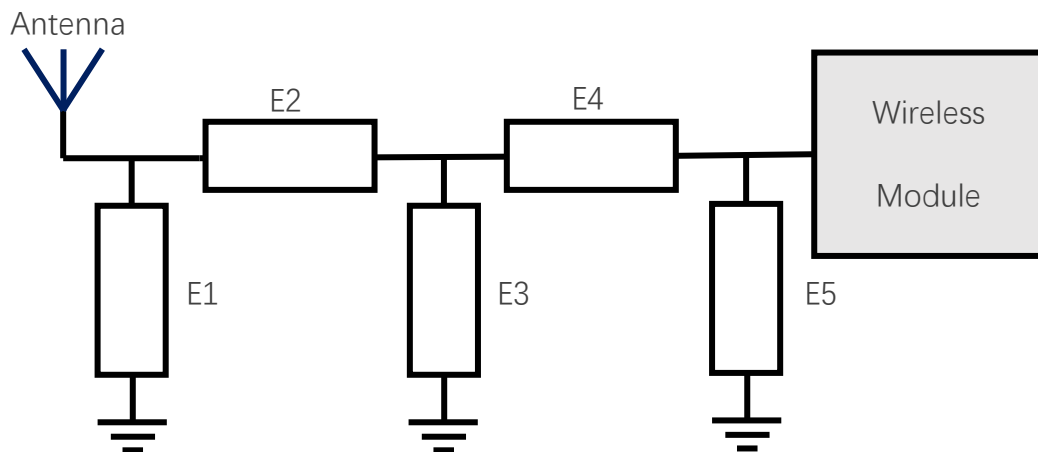
1.2. Mechanical & Storage

Mechanical	
Antenna Dimensions	25 mm × 13 mm × 0.2 mm
Material & Color	FPC & Black
Cable Type & Color & Length	Φ 0.81 & Black & 170 mm
Connector Type	ECT RF2
Mounting Type	Adhesive
Weight	Typ. 0.7 g
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

1.3. Antenna Assembly

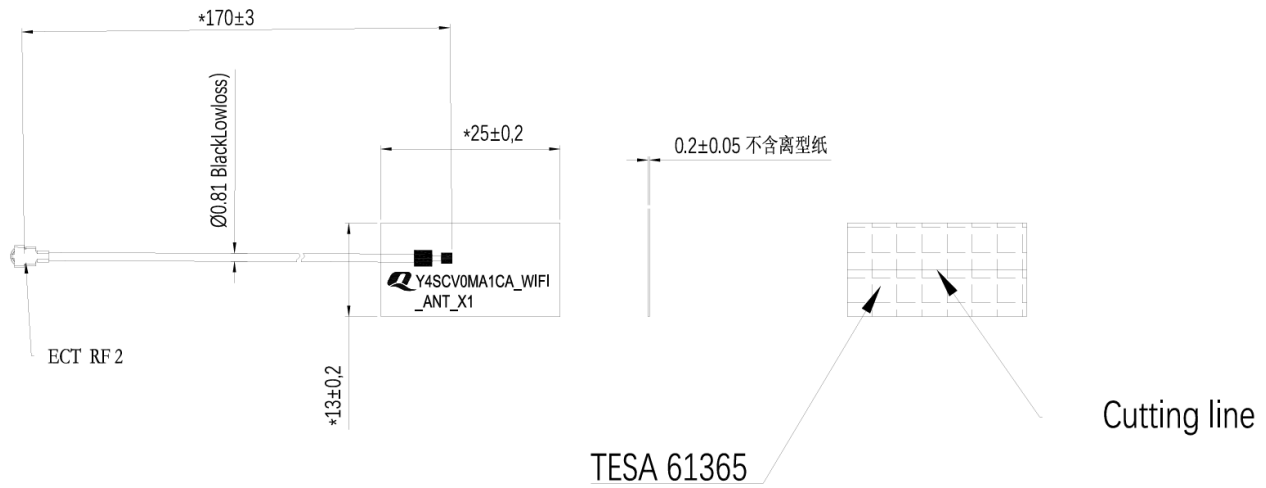


1.4. Matching Circuit



	E1	E1	E3	E4	E5
Default Matching	DNI	0 Ohm	DNI	0 Ohm	DNI
Tolerance	N/A		N/A		N/A

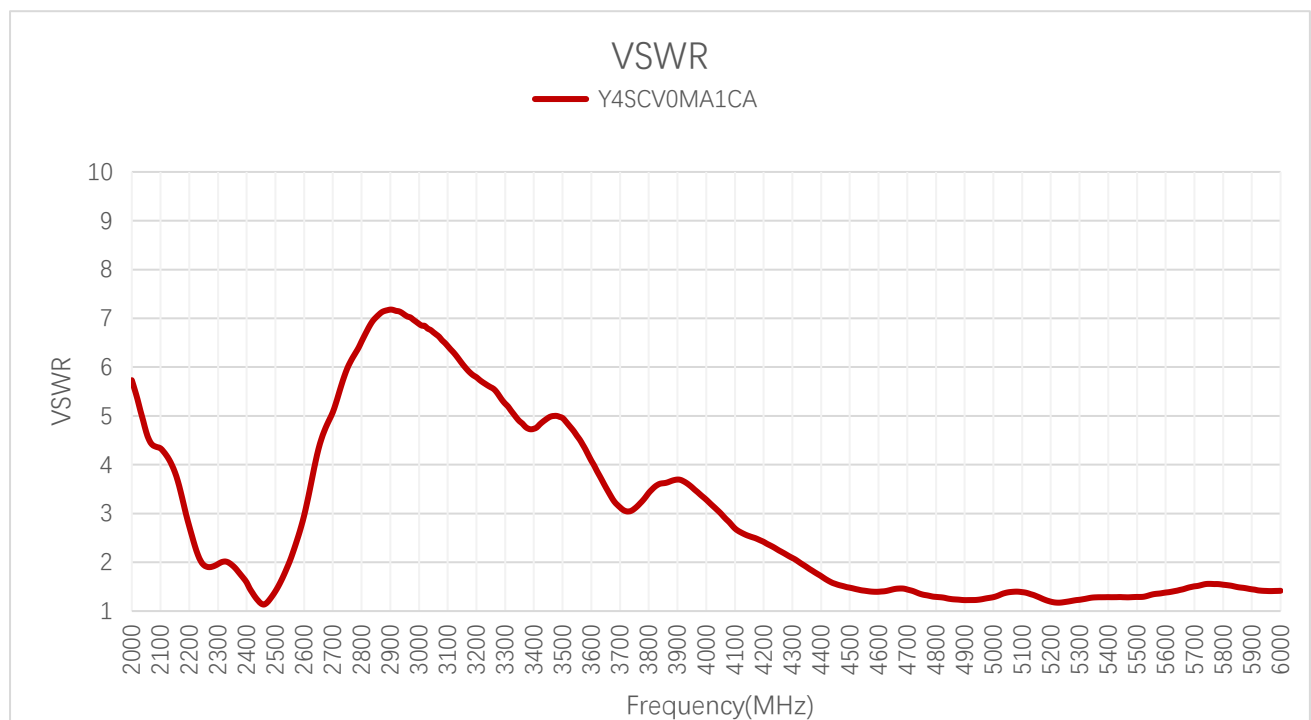
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

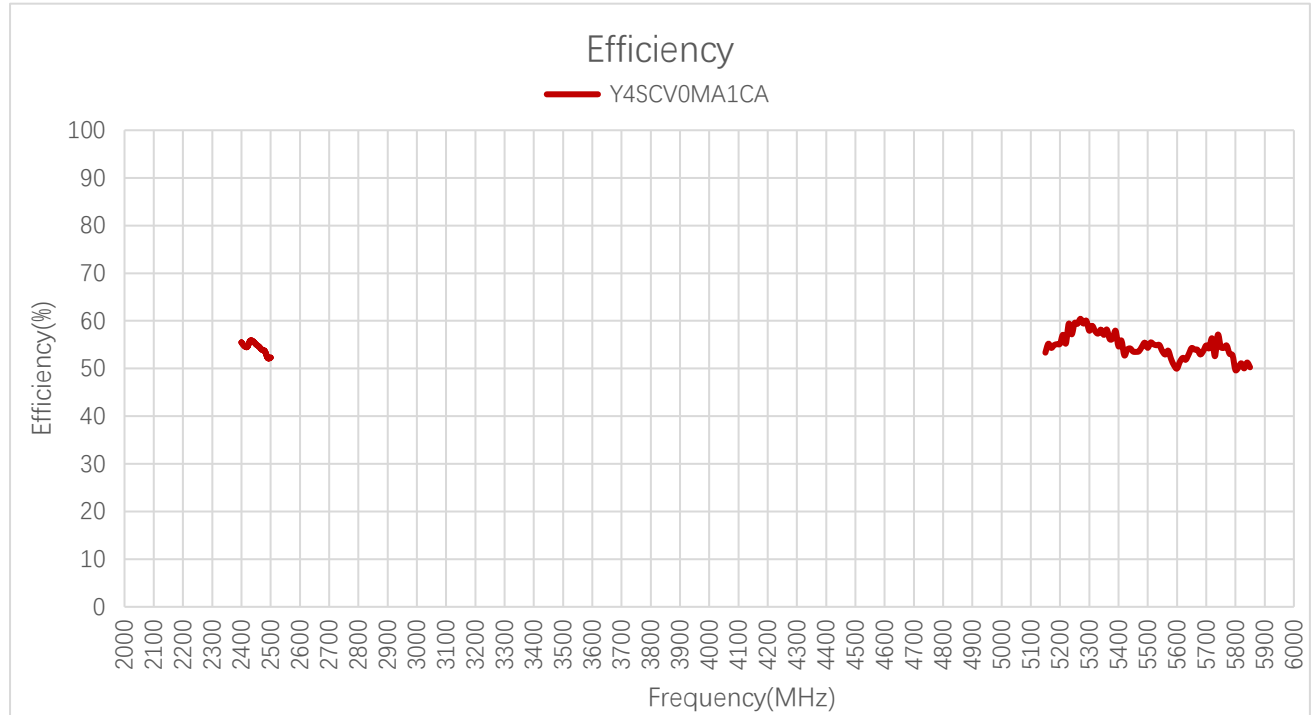


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	1.6	1.2	1.4	1.3	1.3	1.5	-	-	-

3.2. Radiation Performance Test

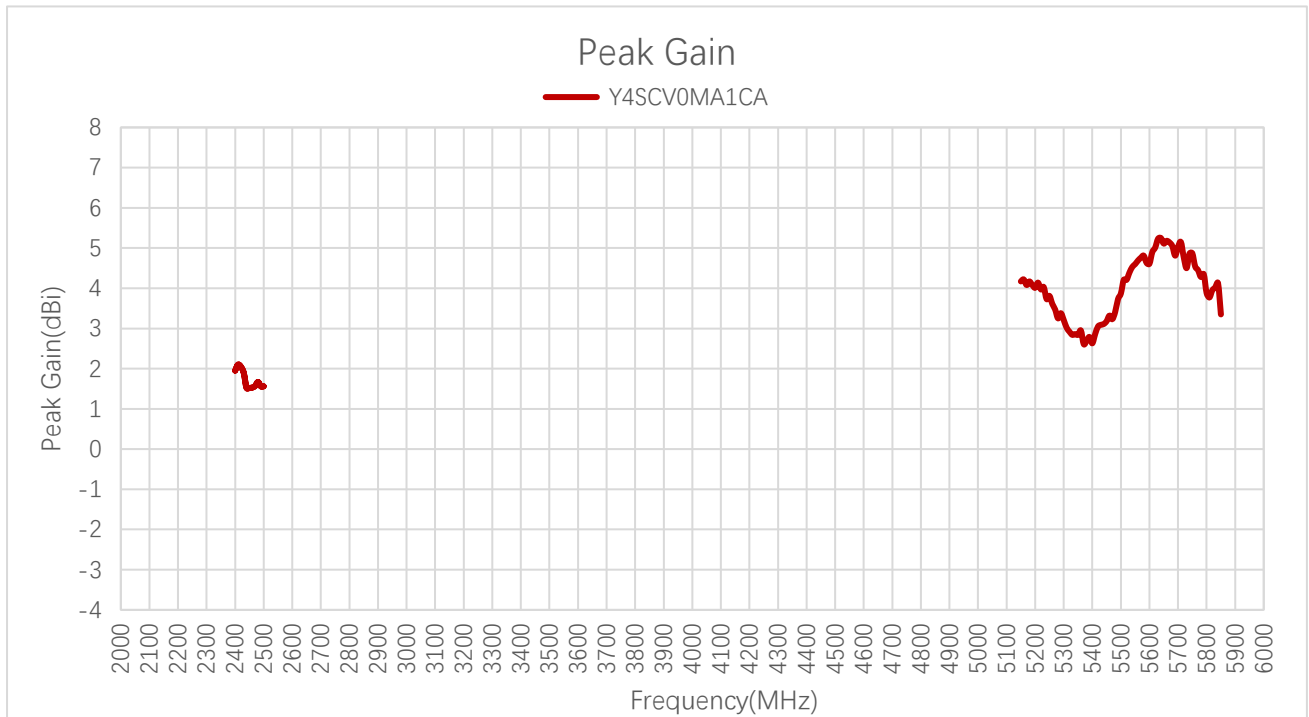
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	55.5	55	52.3	53.3	54.3	50.3	-	-	-

3.2.2. Peak Gain

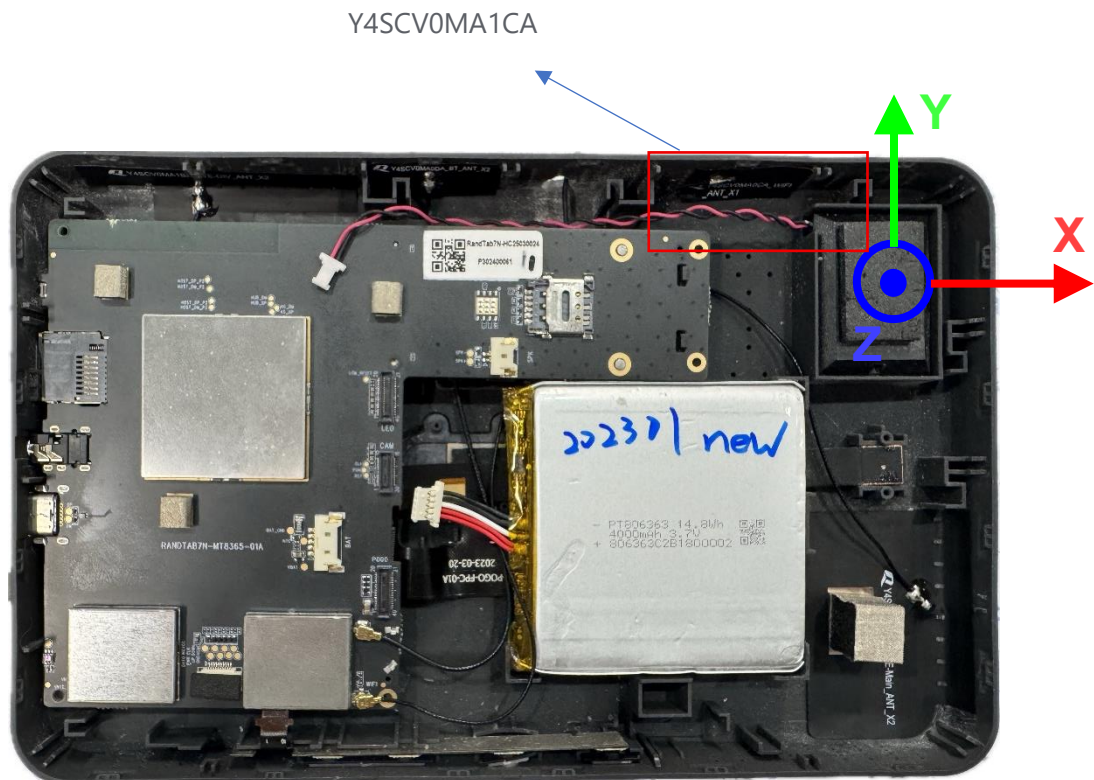


Peak Gain (dBi)

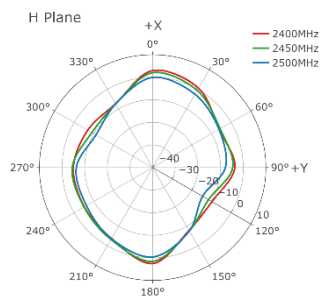
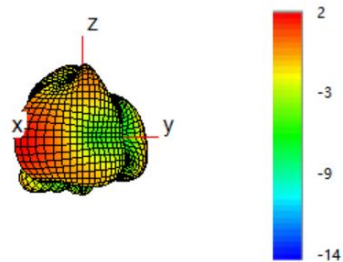
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	2	1.5	1.6	4.2	3.9	3.4	-	-	-

3.2.3. 3D & 2D Radiation Pattern

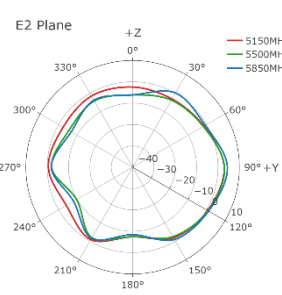
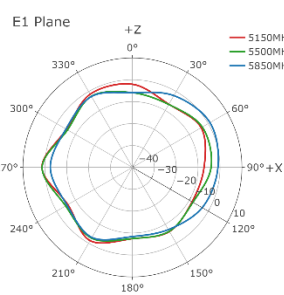
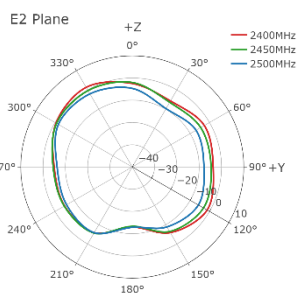
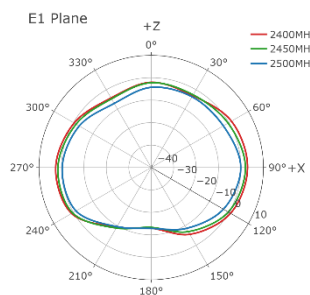
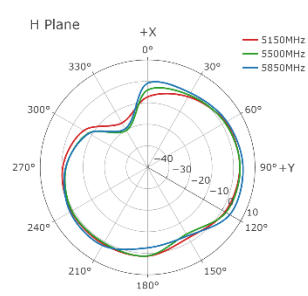
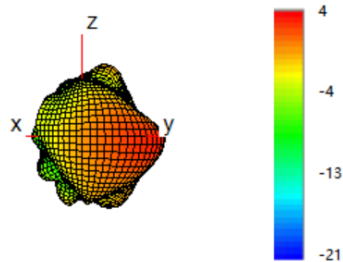
- Test Condition: Assembled in test device
- Test Chamber: GL-G-1



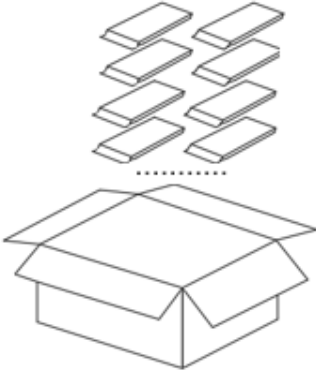
2450 MHz

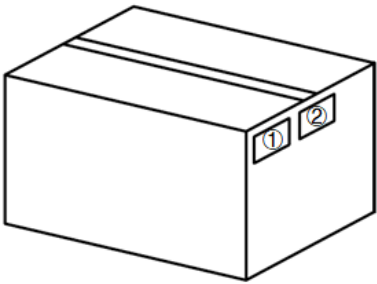
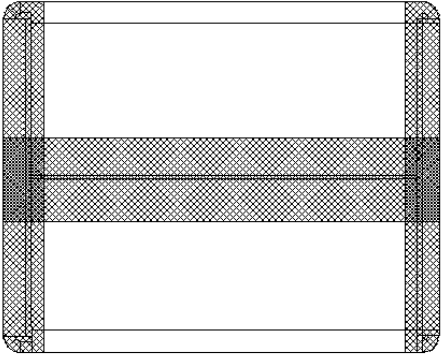


5500 MHz



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		50 antenna products are wrapped with EPE foam (50 Antennas / Tie)
2		100 antenna products in a PE bag. (100 Antennas / PE Bag)
3		(40 PE Bags / Carton Box) (4000 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 = 300 × 250 × 200mm</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

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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Email: info@quectel.com

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

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Revision History

Version	Date	Author	Note
-	2025-12-11	Edwin Xiao/ Steven Mo/ Strong Qiang/ Rainey Liao	Creation of the document
1.0	2025-12-11	Edwin Xiao/ Steven Mo/ Strong Qiang/ Rainey Liao	First official release



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