



Antenna Datasheet

Product OC: Y0REB0CC2DA

Version: 1.0

Date: 2025-08-18

Product Name: Embedded 4G Antenna

Key Features:

Frequency Band: 699–960 MHz, 1710–2690 MHz

Dimensions: 49.50 mm × 17.32 mm × 0.13 mm

Efficiency: Up to 45 %

RoHS Compliant

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1 Specification

Test Condition: Assembled in test device

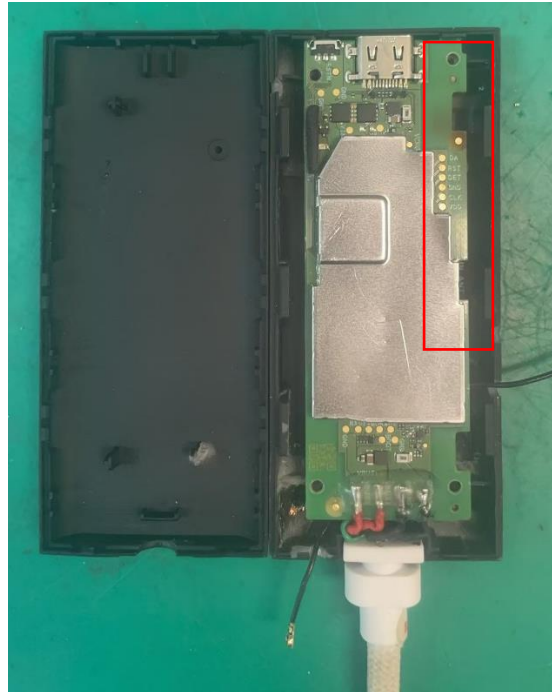
1.1. Electrical

Electrical	
Frequency Range	699–960 MHz, 1710–2690 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 7.5
Peak Gain	1.9 dBi

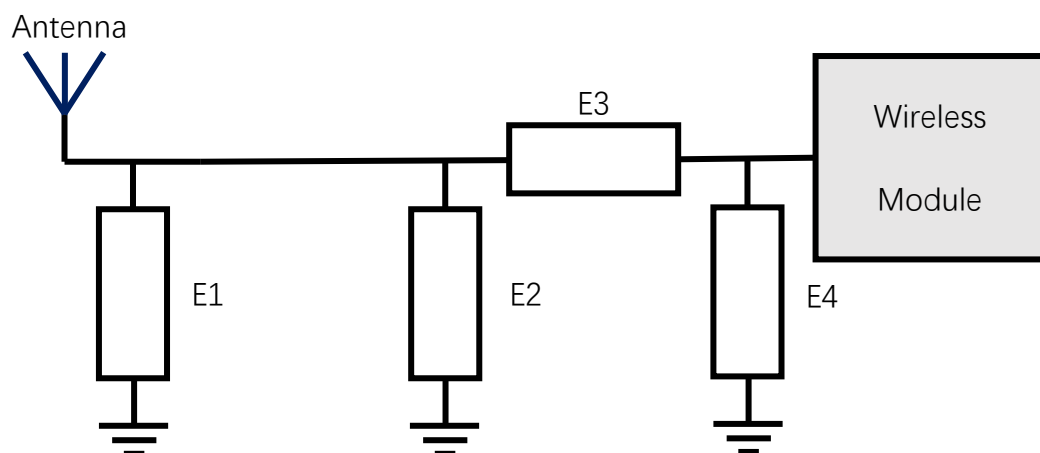
1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	49.50 mm × 17.32 mm x 0.13 mm
Material & Color	FPC & Black
Weight	Typ. 0.15 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS Compliant	Yes

1.3. Antenna Assembly

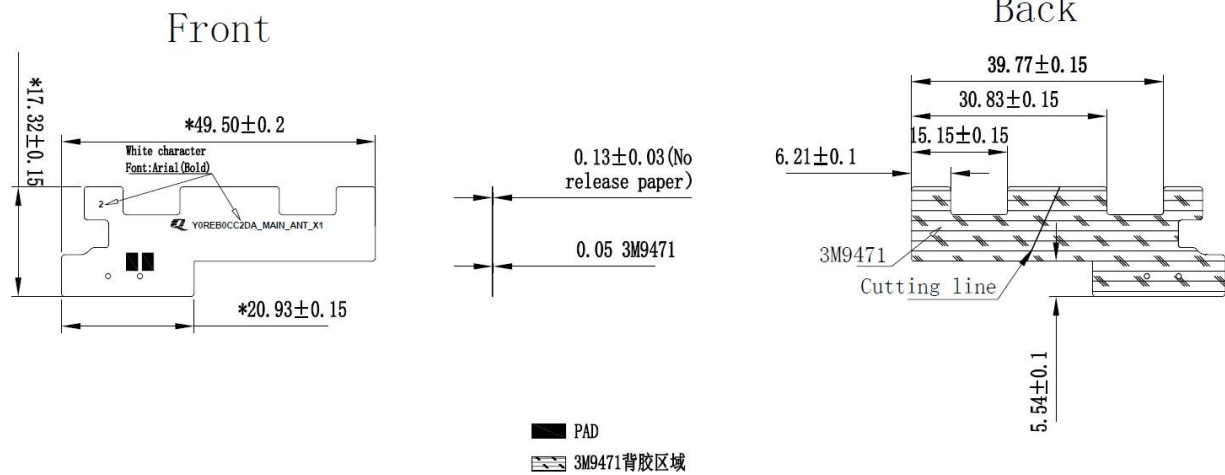


1.4. Matching Circuit



	E1	E1	E3	E4
Default Matching	12nH	DNI	0om	DNI
Tolerance	±5 %	N/A	±5 %	N/A

2 Drawing



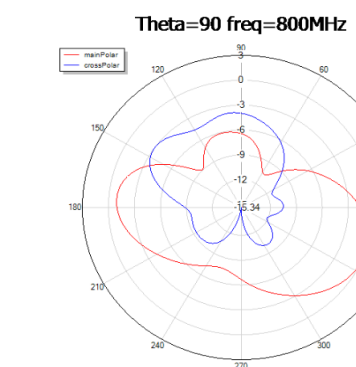
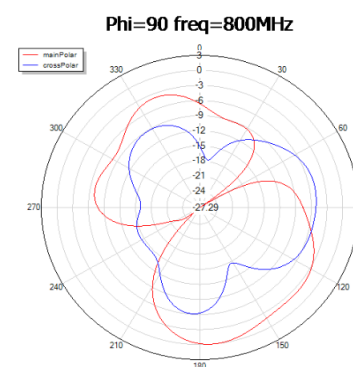
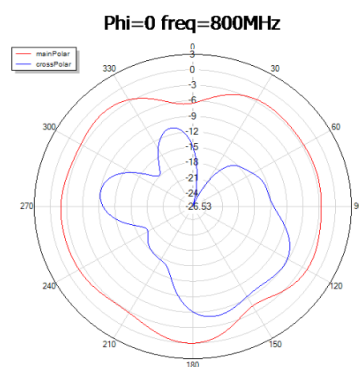
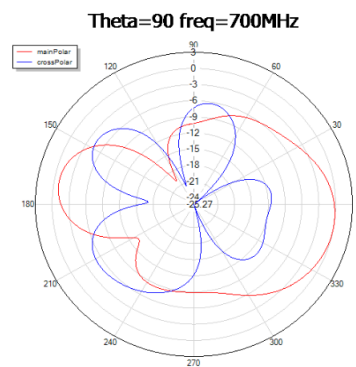
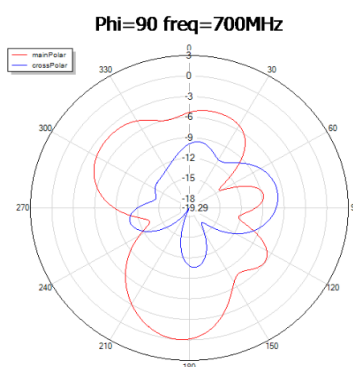
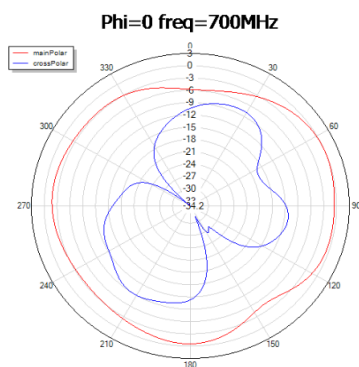
3 Detailed Performance

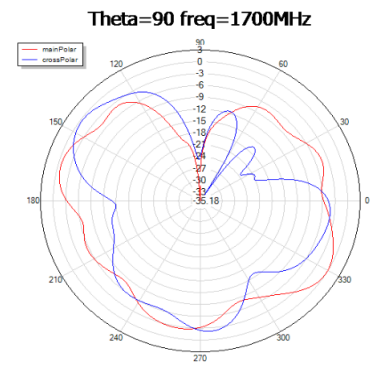
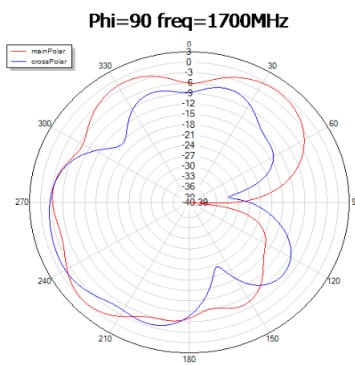
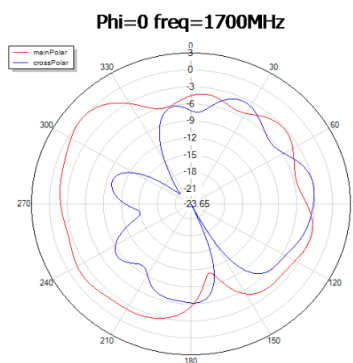
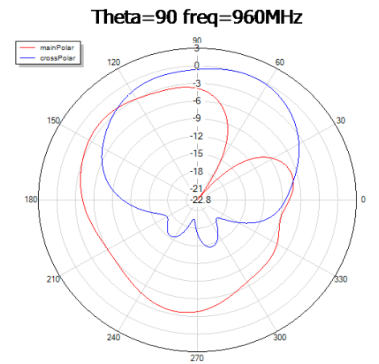
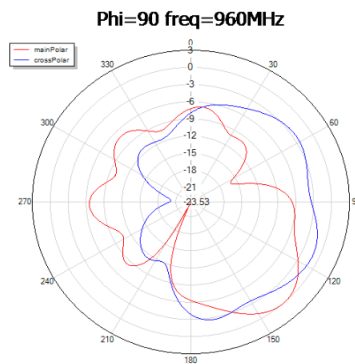
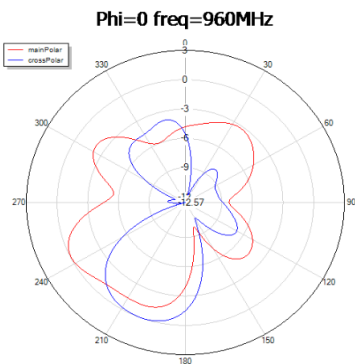
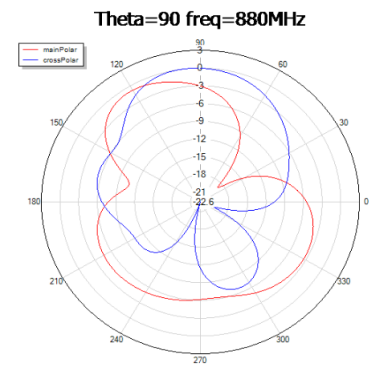
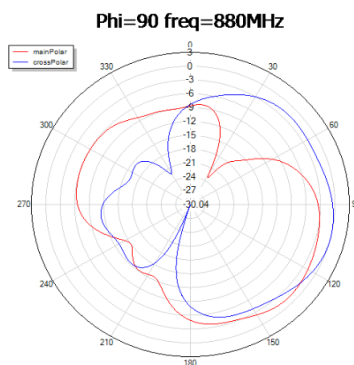
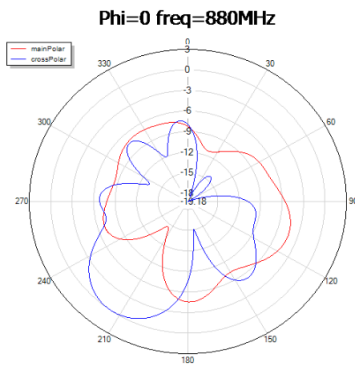
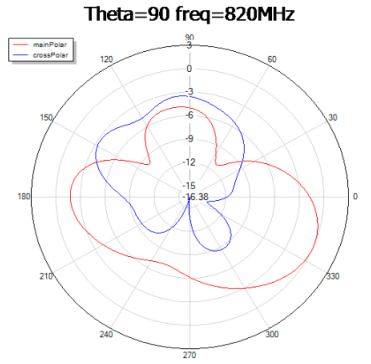
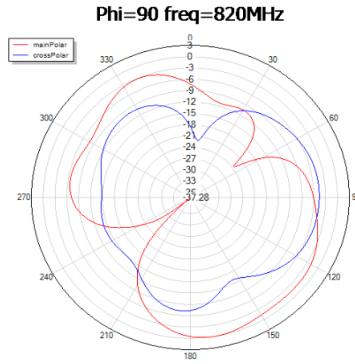
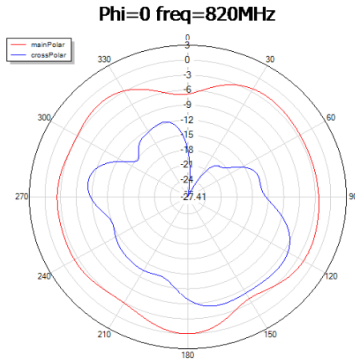
3.1. Gain and Efficiency

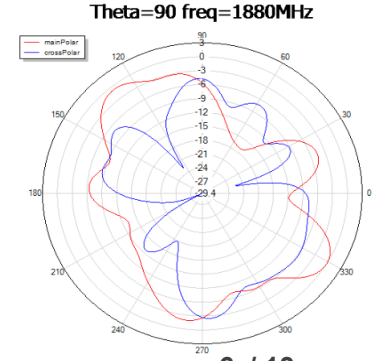
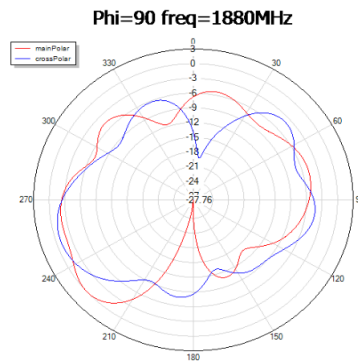
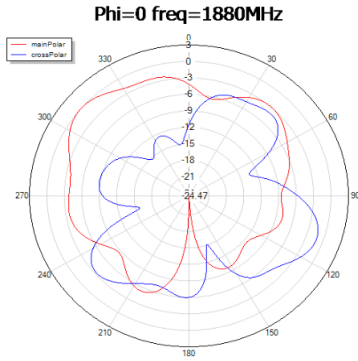
Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
700	-21.9	-18.0	0.6
720	-20.1	-16.1	1.0
740	-16.8	-13.5	2.1
760	-14.3	-11.2	3.7
780	-11.6	-8.8	6.9
800	-10.2	-7.3	9.6
820	-9.3	-6.3	11.7
840	-7.9	-5.4	16.3
860	-6.9	-4.7	20.3
880	-6.9	-4.3	20.7
900	-7.2	-4.0	19.2
920	-7.5	-4.5	17.9
940	-7.5	-4.5	17.9
960	-8.2	-4.9	15.0
1700	-5.1	-1.0	31.2
1720	-4.3	0.2	37.2
1740	-4.0	0.1	40.2
1760	-3.8	0.2	41.4
1780	-3.9	0.4	40.6
1800	-4.1	0.4	38.7
1820	-4.3	0.3	37.6
1840	-4.6	-0.1	34.9
1860	-5.2	-0.8	30.1
1880	-5.7	-0.4	27.2
1900	-5.0	1.2	32.0
1920	-5.1	1.4	30.9
1940	-5.5	1.2	28.0
1960	-5.8	1.0	26.2
1980	-5.2	1.5	30.4
2000	-5.6	1.1	27.7
2020	-5.8	0.8	26.1
2040	-6.4	0.1	23.0
2060	-6.2	0.2	23.9
2080	-6.6	-0.4	21.7
2100	-7.0	-0.9	19.8
2120	-7.0	-1.1	19.9
2140	-7.1	-1.3	19.4
2160	-7.2	-1.5	19.2
2180	-7.5	-2.1	17.6

Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2300	-7.7	-2.8	17.2
2320	-6.7	-1.5	21.5
2340	-5.8	-0.6	26.2
2360	-5.2	0.2	30.1
2380	-4.5	0.9	35.5
2400	-4.2	1.3	38.5
2420	-3.8	1.6	41.5
2440	-3.5	1.9	45.0
2460	-3.5	1.7	44.8
2480	-3.6	1.7	43.9
2500	-3.8	1.5	41.9
2520	-3.8	1.7	41.5
2540	-3.8	1.5	41.5
2560	-4.2	0.8	37.7
2580	-4.5	0.3	35.9
2600	-4.8	-0.3	33.4
2620	-4.9	-0.8	32.8
2640	-5.5	-1.5	28.1
2660	-5.5	-1.5	28.0
2680	-5.9	-1.7	25.9
2700	-6.0	-1.6	25.3

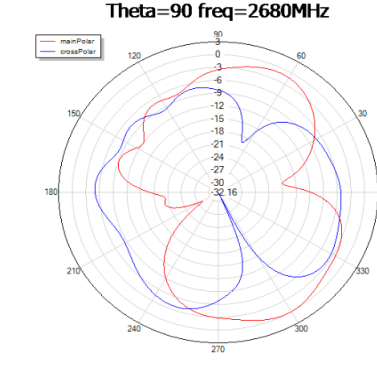
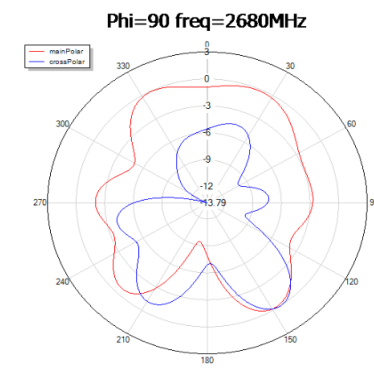
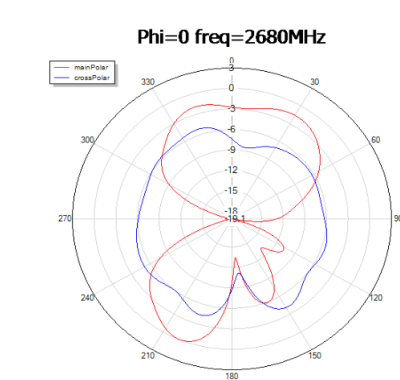
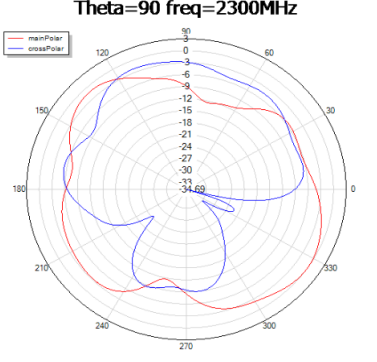
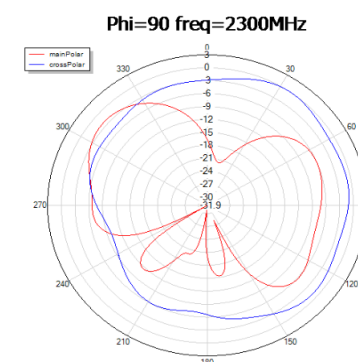
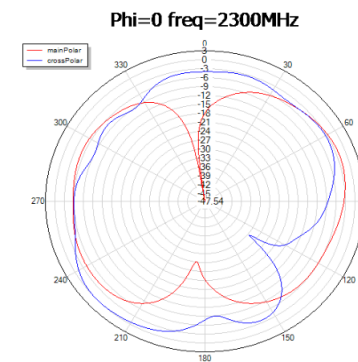
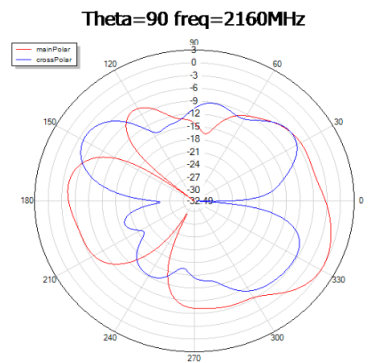
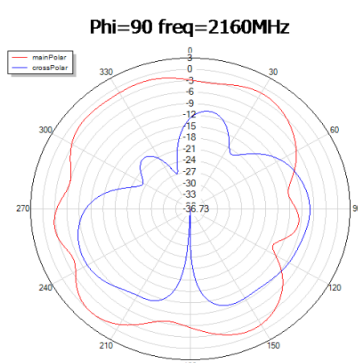
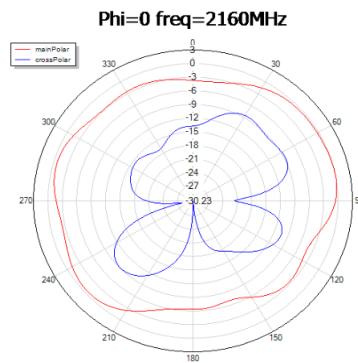
3.2. Pattern



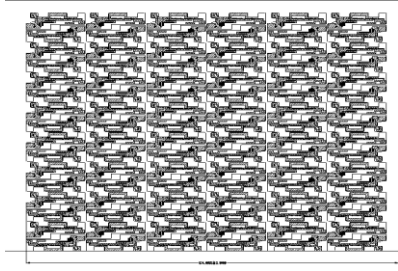
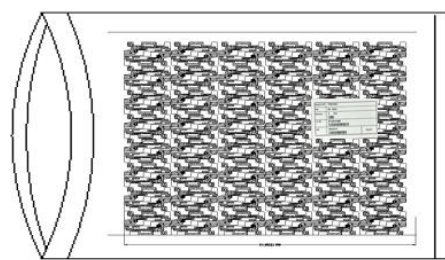
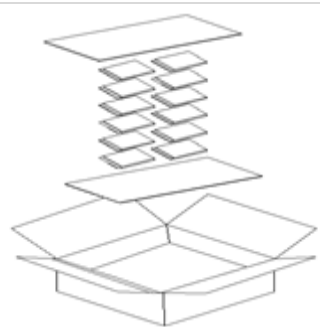
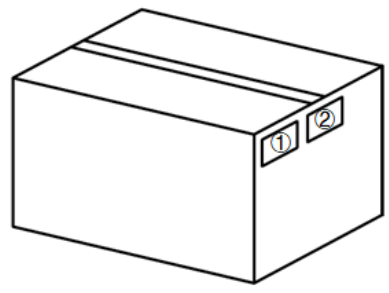


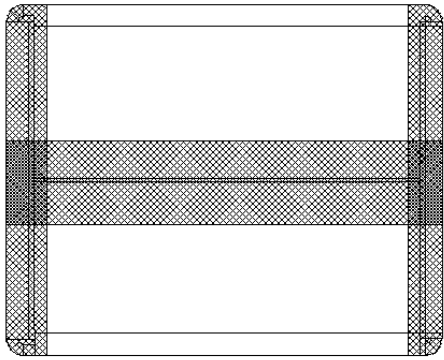


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4 Packaging

Step	Packaging Picture / 2D Picture	Description
1	 <p>260*314=96</p>	Micro-film packaging 96 antennas in a film.
2		20 films in a PE bag. (1920 Antennas / PE Bag)
3		(15 PE Bags / Carton Box) (28800 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 = 370 × 270 × 140 mm</u>
4		Position for Attaching Labels ① Carton Label ② Quality Label

5		<p>Sealing Cartons H-shaped sealing cartons</p>
Note	<p>The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.</p>	

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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Revision History

Version	Date	Author	Note
-	2025-08-18	Dewei Ni/ Mike Guo/ Riva Ren/ Rainey Liao	Creation of the document
1.0	2025-08-18	Dewei Ni/ Mike Guo/ Riva Ren/ Rainey Liao	First official release



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