
PRODUCT SPECIFICATION

Customer:

Customer's part number:

Product description: 2.4G Terminal Antenna

Uni Link's part number: AH-2.4G-3DB-BT

Issue Date: 2023-11-9

Note: 2400-2500MHZ

1、 (PRODUCT TECHNICAL SPECIFICATION)

Electrical Specifications	
Frequency Range (MHz)	2400-2500
Bandwidth (MHz)	100
Input Impedence (Ω)	50
V.S.W.R	≤ 1.5
Gain (dBi)	3
Polarization Type	Vertical
Power Capacity (w)	50
Mechanical Specifications	
Antenna Length (mm)	105mm

Radiator	Cuprum
Connect Type	SMA-Male
Working Temp(°C)	-40~85
Radome Color	Black
Weight (g)	15g

Product introduction

The antenna is specially designed and produced for wireless network card. The antenna has the advantages of beautiful appearance, small structure and convenient installation.

2、 (PRODUCT PICTURE)

3、 (ELECTRIC APPLIANCE CHARACTERISTICS)

ITEM		TEST CONDITION	SPECIFICATION
1	Return Loss	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 Return Loss Characteristics.	0.01
2	VSWR	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 VSWR Characteristics.	≤ 1.5

3	Smith chart	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 Gain Response Characteristics.	50 (Ω)
4	Gain response	Using Agilent Network Analyzer 8753ET to Measure Antenna S21 Gain Response Characteristics.	3DB

4、 (MECHANICAL CHARACTERISTICS)

1	BENDING TEST	The load on the wire end of 30CM away from the connector is 120g. After fixing the connector, the remote pendulum test is carried out. The remote pendulum Angle is left and right 60 degrees, remote pendulum 1000 times after testing characteristics.	After 1000 times of remote pendulum test, there is no phenomenon showing the damage of electrical performance.
2	STRENG TEST	A 15 lb static load is applied to the bottom of the pay-off end for one minute.	There are no signs of mechanical or electrical failure.

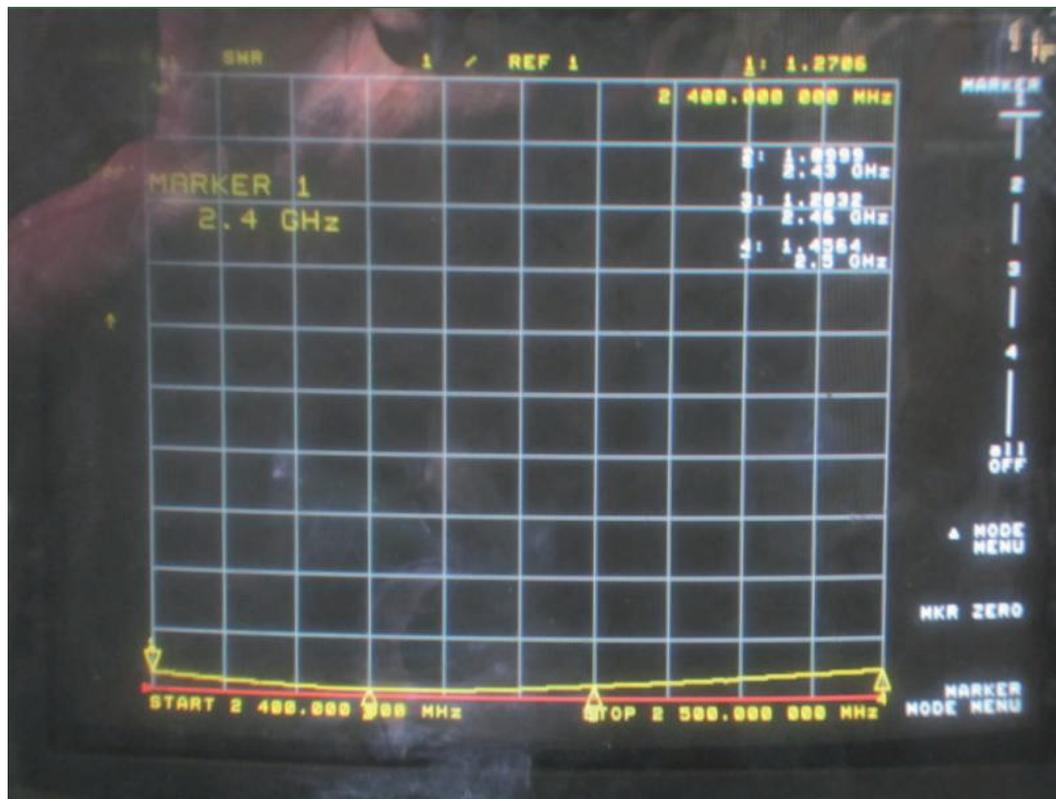
3	PULLING FORCE	Tension test between tension gauge joints and wires.	It can withstand the pulling force of 7Kg without any phenomenon showing the damage of electrical performance.
4	VIBRATION TEST	Vibration in the X axis direction for 120 minutes, Y axis direction for 120 minutes and Z axis direction for 240 minutes at 1.10mm and amplitude and 33.30Hz/sec vibration frequency.	There is no indication of damage to electrical performance.

5、 DURABILITY)

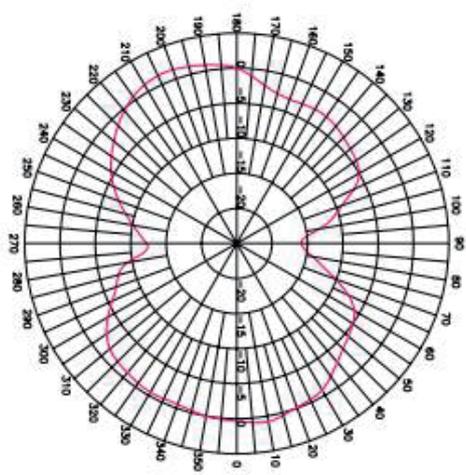
1	SAIT SPRAY TEST	Saline spray test: according to GB1266-86 standard Distilled water: a distillation PH6.5~7 Spray volume: 1.4me80cm ² /h Compressed air pressure: 1Kgf/ cm ² Test relative degree: 98° Temperature: 45°~47° Pressure temperature: 35° Test time: 96hr	All characteristic range is 30% of
2	HEAT TEST	85+2°C for 96 hours, after keep in normal condition for 30min the to test.	

3	HUMIDITY TEST	40+2°C 90-95%RH for 96hours, after keep in normal condition for 30min the to test.	the initial value
4	COLD TEST	-40+2°C for 96hours, after keep in normal condition for 30min the to test.	There is no indication of damage to electrical performance.

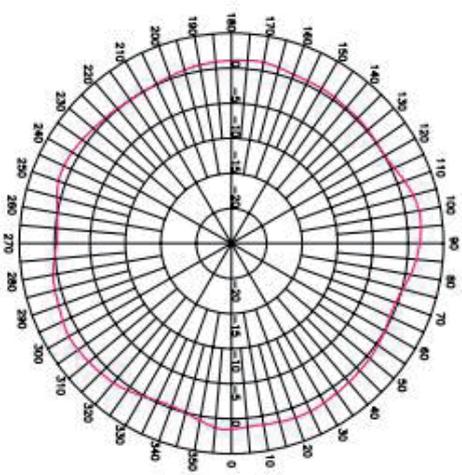
6、 (STATIONARY WAVE PATTERN)



E-Plane Pattern @ 2.45GHz

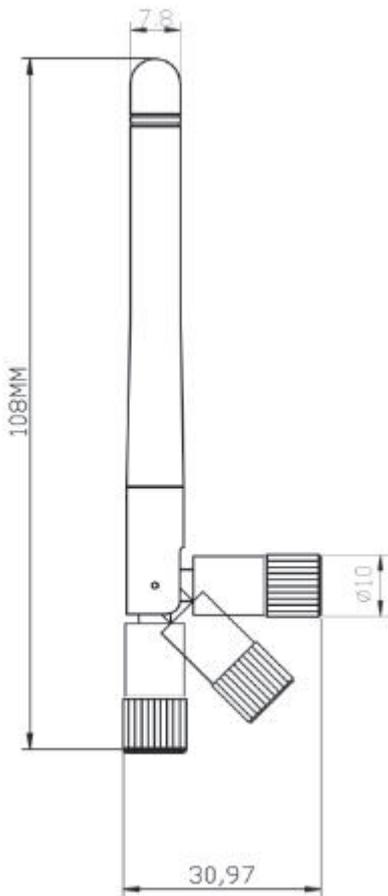


H-Plane Pattern @ 2.45GHz



TITLE	2.4GHz Swivel Antenna-181 Model	Rev. Date	01/22/06
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7. Product specification drawing



Passive Test For 2.4g												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	76.35	-1.17	3.44	1.29	40.809	35.541	3.44	-19.37	4.61	0	43	43
2410	80.08	-0.96	3.67	1.52	43.357	36.721	3.67	-18	4.64	0	43.06	43.09
2420	76.68	-1.15	3.57	1.42	41.44	35.243	3.57	-18.71	4.72	0	43.19	43.25
2430	75.9	-1.2	3.62	1.47	40.593	35.305	3.62	-20.04	4.82	0	43.18	43.2
2440	81.55	-0.89	4.06	1.91	42.856	38.693	4.06	-18.96	4.95	0	43.26	43.26
2450	85.16	-0.7	4.32	2.17	44.323	40.834	4.32	-16.61	5.02	0	43.34	43.32
2460	67.11	-1.73	3.27	1.12	34.963	32.148	3.27	-15.77	5	0	43.06	43.12
2470	70.76	-1.5	3.43	1.28	37.123	33.633	3.43	-14.08	4.93	0	43.03	43.1
2480	80.85	-0.92	3.97	1.82	42.679	38.168	3.97	-12.7	4.89	0	43.28	43.33
2490	83.44	-0.79	4.11	1.96	44.031	39.409	4.11	-12.15	4.9	0	43.34	43.38
2500	77.78	-1.09	3.79	1.64	41.08	36.699	3.79	-12.64	4.88	0	43.41	43.47

