

SPECIFICATION



ShenZhen TianDa Communication Co,LTD

C5813 Antenna

Product Specification

Customer	Xmitech Electronic	Frequency band	2400-2500MHz 5150-5850MHz
Project name	C5813	Edition	A
Item number	XM-HB-80-WI-A	Colour	White
RF design	Wangxinchuang	Structural design	Zhouluhong
Date	2025.10.15		

Customer confirmation:

Whether the assembly meets your requirements: ☐OK ☐NG

ShenZhen TianDa Communication CO., LTD.

No.902, Shifeng Building, No.6267, Ba'ao Avenue, Fuhai
Sub-district, Bao'an District, Shenzhen City.

Catalog

1. Product Technical Specifications
2. Product Images
3. VSWR
4. Antenna Gain, Efficiency
5. OTA Data
6. Antenna Pattern
7. Engineering Drawings

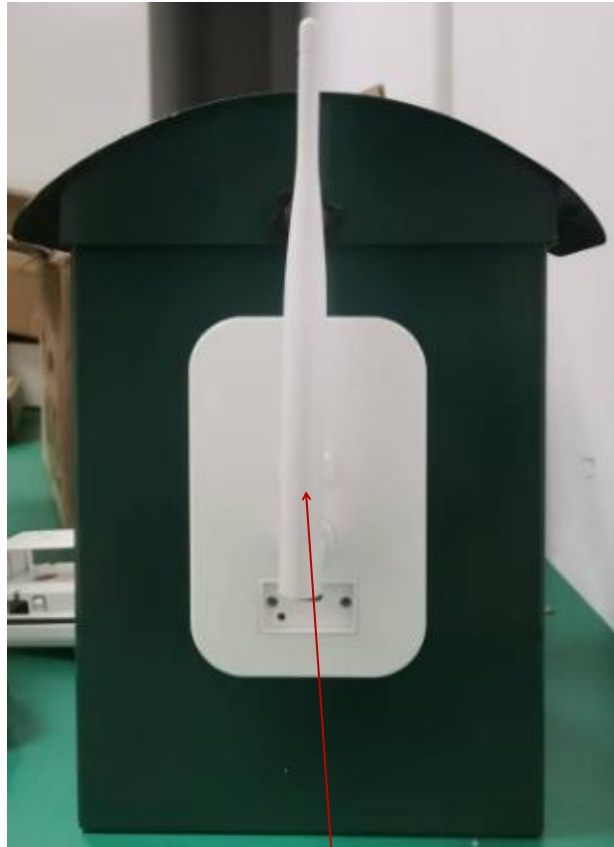
1、Product Technical Specifications

Electrical Specifications	
Frequency Range (MHz)	2400~2500;5150~5850
Bandwidth (MHz)	2.4G:100M; 5.8G:700M;
Input Impedence (Ω)	50
V.S.W.R	≤ 2.0
Gain (dBi)	≤ 6.0
Max Input Power (w)	10
Mechanical Specifications	
Antenna Length (mm)	195
Connect Type	SMA
Radome Color	White

2、Product Images



Antenna



Antenna position

3、VSWR



4、Antenna Gain, Efficiency

Passive Test For 2.4G-2.5G							
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	AttH (dB)	AttV (dB)
2400	67.04	4.58	2.43	55.821	11.216	44.75	44.6
2410	69.45	4.79	2.64	58.306	11.144	44.59	44.46
2420	72.39	4.97	2.82	61.26	11.129	44.71	44.6
2430	72.75	5.04	2.89	62.112	10.637	44.76	44.78
2440	73.59	5.04	2.89	63.237	10.351	44.99	44.94
2450	63.03	4.45	2.3	54.438	8.588	44.52	44.41
2460	72.15	5.12	2.97	62.432	9.717	45.22	45.11
2470	72.17	5.11	2.96	62.558	9.607	45.04	44.97
2480	63.35	4.55	2.4	54.98	8.365	44.37	44.26
2490	65.17	4.65	2.5	56.534	8.637	44.71	44.54
2500	68.99	4.84	2.69	59.784	9.202	44.82	44.69

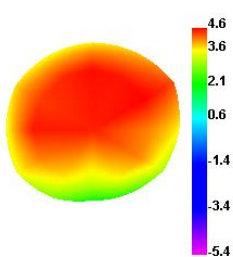
Passive Test For WIFI5G							
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	AttH (dB)	AttV (dB)
5150	65.29	6.42	4.27	49.301	15.99	52.64	52.17
5200	60.95	6.18	4.03	46.191	14.762	51.8	51.32
5250	62.85	5.98	3.83	47.54	15.305	52.04	51.42
5300	61.42	5.14	2.99	45.67	15.751	51.92	51.21
5350	62.34	4.34	2.19	45.047	17.29	52.07	51.42
5400	48.28	3.29	1.14	34.306	13.974	51.99	51.15
5450	47.86	3.13	0.98	33.912	13.944	52.14	51.26
5500	43.25	2.87	0.72	30.816	12.435	52.69	51.66
5550	50.29	3.82	1.67	36.504	13.791	53.94	52.96
5600	51.11	4.3	2.15	37.844	13.264	54.4	53.68
5650	55.15	4.61	2.46	40.257	14.891	54	53.69
5700	57.76	4.37	2.22	41.526	16.233	53.82	53.64
5750	62.58	4.41	2.26	44.589	17.993	54.22	53.98
5800	54.81	3.25	1.1	39.176	15.633	54.31	53.81
5850	48.75	2.74	0.59	34.552	14.202	54.26	53.49

5、OTA Data

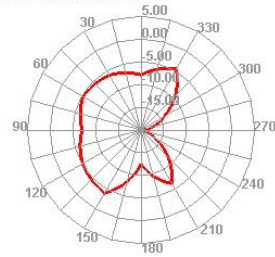
OTA Date			
Test	Wifi 2.4G b (11M)		
Result	1	7	13
Frequency (MHz)	2412	2442	2472
TRP(dBm)	20.5	21.0	21.6
TIS(dBm)	-86.9	-87.8	-85.4
OTA Date			
Test	Wifi 2.4G g (54M)		
Result	1	7	13
Frequency (MHz)	2412	2442	2472
TRP(dBm)	20.0	20.6	20.2
TIS(dBm)	-73.0	-73.7	-72.8
OTA Date			
Test	Wifi 2.4G n (MCS7)		
Result	1	7	13
Frequency (MHz)	2412	2442	2472
TRP(dBm)	20.0	20.9	20.3
TIS(dBm)	-71.0	-71.4	-70.4

6、Antenna Pattern

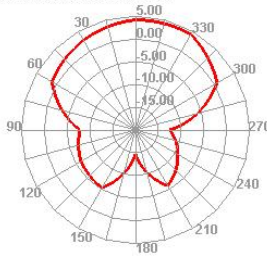
2400.000MHz



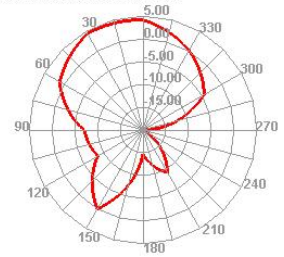
2400.000MHz H



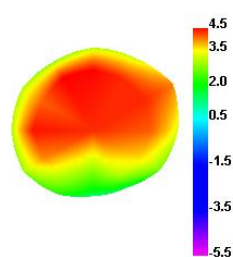
2400.000MHz E1



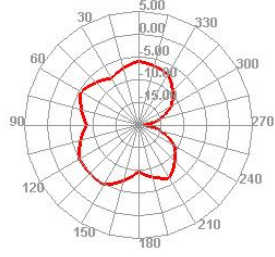
2400.000MHz E2



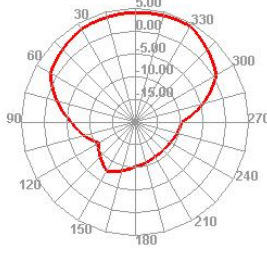
2450.000MHz



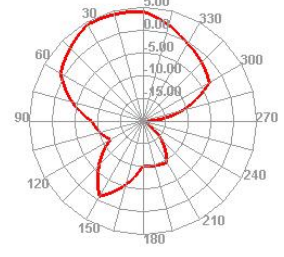
2450.000MHz H



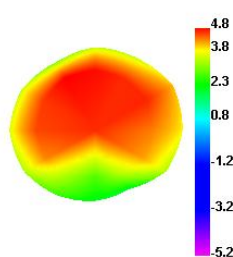
2450.000MHz E1



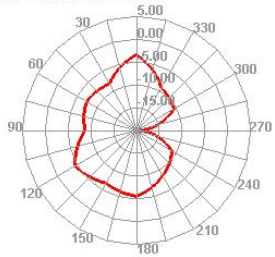
2450.000MHz E2



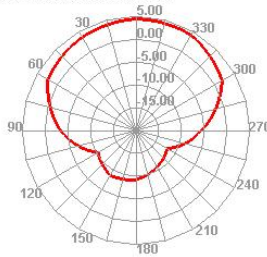
2500.000MHz



2500.000MHz H



2500.000MHz E1



2500.000MHz E2

