

Project No.: SG201909180302/1

Date: 2024.10.23

Rev: A2-1023

Acknowledgement

Customer name: BAT

Customer project: 004.032.0052704

Customer part number : 外置天线,2.4~2.5GHz,2dBi,5.151 ~ 5.85GHz,2dBi,109mm,Black,SMA-J,PC+ABS,AG-011520-1007,带PE袋,viewsonic客指,BAT

B&T P/N: AG-011520-1007

Spec: 2.4G-5.8G external black folding antenna -SMA-J

Sealed by corporation:

compilation	verify	approval
Qiucui ping	Liulihua	Zhouquan

Sealed by customer:

check	verify	approval

Contact information of B&T

Contact person for sales: Longmingguo	MB:18576042661	E-mail: longmg@tech-now.com
Contact person for technical: He Xing	MB:15915343738	E-mail: hex@tech-now.com
Contact person for Quality: Zeng Kang	MB:18188400229	E-mail: zengk@tech-now.com

Form no. : B&T- qr-en-002 version: B3

Contents

1、 cover·····	1
2、 Catalog·····	3
3、 Product surface·····	4
4、 Performance parameter table·····	5
5、 Electrical performance test report·····	6-7
6、 Table of Materials and Hazardous Substances·····	8
7、 Packaging specification·····	9

3、Product surface

Document No.	B&T-WI-C-PE-4610-1		REV.	Revise	Date
			A0	New Product	19-10-22

Unit: mm

Technical drawing of an antenna. The main drawing shows a cylindrical antenna with a hemispherical tip. A dimension line indicates a length of 109±4. A detail view of the hemispherical tip is shown with a 1:1 scale. The detail view shows a cross-section of the tip with a central pin and a surrounding shell.

Technical requirements:

- 1: the frequency band of the antenna is 2400~2500/5151-5850MHz and the color is black.
- 2: antenna voltage standing wave ratio VSWR≤2.0
- 3: the antenna can be folded at 90 degrees.
- 4: the appearance shall be free of stains.
5. Smooth welding spot, no short circuit, no virtual welding.
6. Shell laser lettering "915MHz"
7. Products must meet the requirements of RoHS.

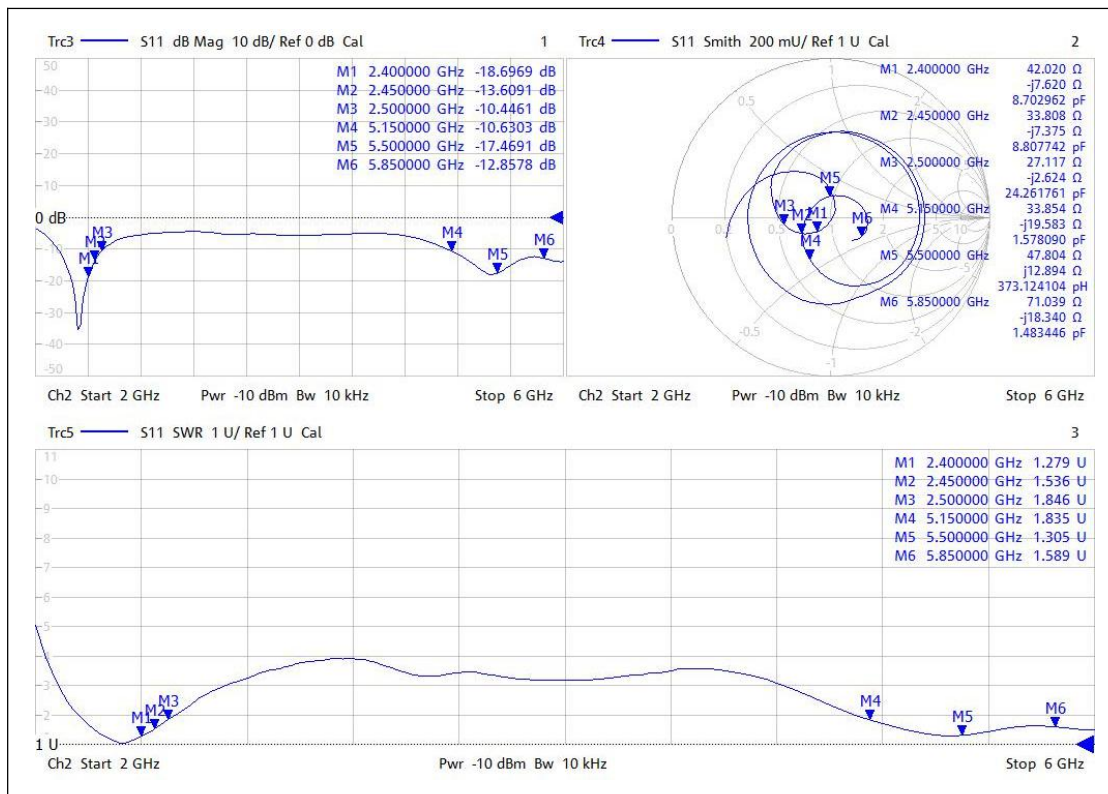
SIP				Name	5.8g external black 8.5cm folding antenna -SMA-J	
Appearance			visual	Customer		
Retention	3KG	C=0	Force Device	P/N		
Length of the antenna	109	±4	Caliper	Part No.	AG-011520-1007	
VSWR	≤2.0	MAX	Network Analyzer	Project No.	SG201909180302/1	
Antenna drive	smooth	GO/NG	versatile	Page 1 of 1		
SMA-J	1/4-36	GO/NG	linked with SMA-K	中山市博安通通信技术有限公司		
Test Item	Standard	Tolerance	Test tools	ZHONGSHAN B&T TECHNOLOGY HOLDINGS Co., Ltd		
		AQL=0.25	Note	0°		

4、Performance parameter table

Electrical parameters	
frequency range	2400~2500/5151-5850MHz
Input impedance	50 Ω
VSWR	<2
Max Gain	$\geq 2\text{dBi}$, $\leq 4\text{dBi}$
Power capacity	10w
Pass test	access
Polarization mode	vertical
Radiation direction	omnidirectional
Connector type	SMA-J
Mechanical parameters	
Total antenna length	$109 \pm 4\text{mm}$
Sustaining power	3Kg
Coaxial cable	RG178 line
Salt mist test	24H
Environment parameter	
Operating Temp	-30℃~65℃

5、Electrical performance test report (Single antenna testing)

S11 Parameter



➤ 驻波比数据

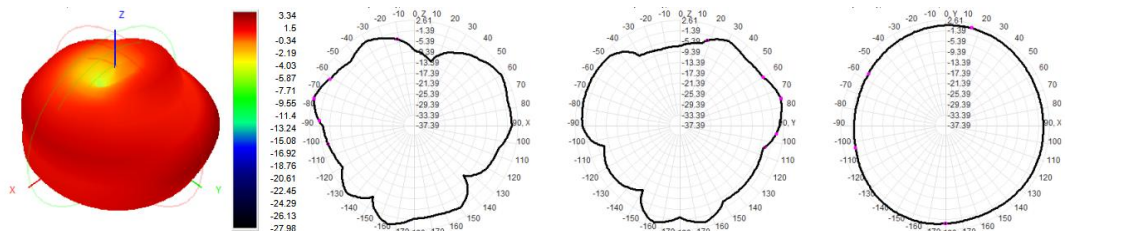
Freq/MHz	2400	2450	2500	5150	5500	5850
VSWR	1.279	1.536	1.846	1.835	1.305	1.589

➤ 天线暗室测试数

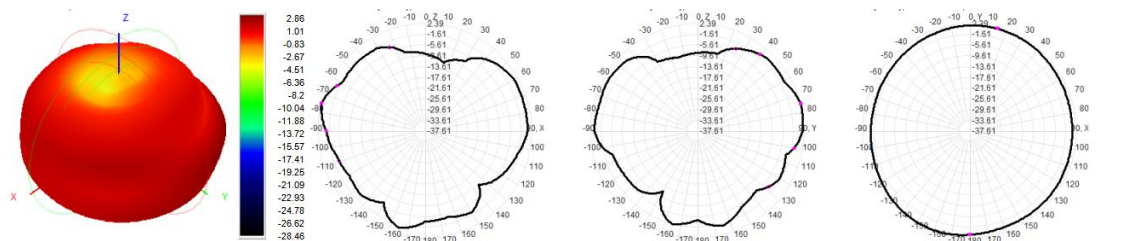
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	3.34	70.61
2410	3.46	71.12
2420	3.39	70.69
2430	3.29	70.33
2440	3.12	69.33
2450	2.86	69.94
2460	2.65	68.77
2470	2.63	68.38
2480	2.56	67.58
2490	2.56	66.36
2500	2.57	65.52
5000	2.87	55.97
5100	3.14	59.13
5200	3.17	61.01
5300	3.42	63.30
5400	2.81	59.37
5500	3.81	59.62
5600	3.52	61.87
5700	2.66	63.67
5800	3.03	65.58
5900	3.73	68.72
6000	3.54	66.04

➤ 天线方向图

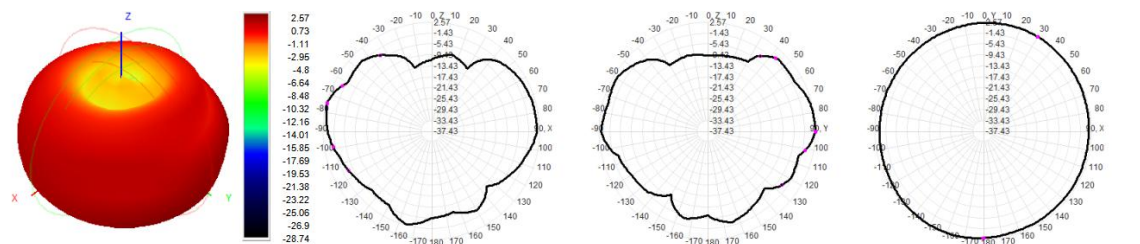
2400MHz



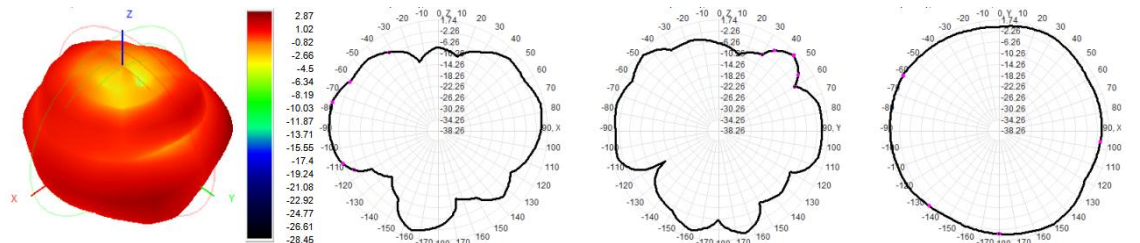
2450MHz



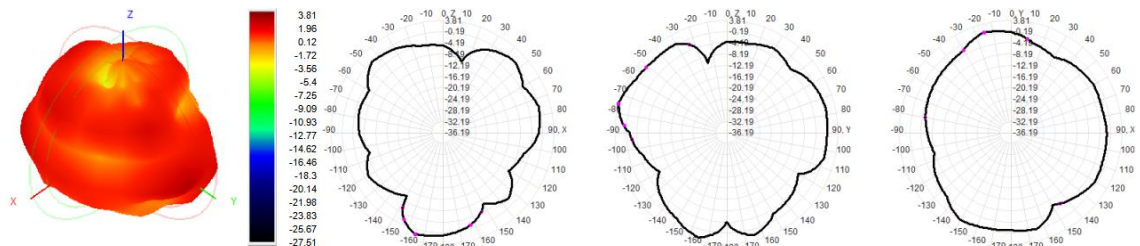
2500MHz



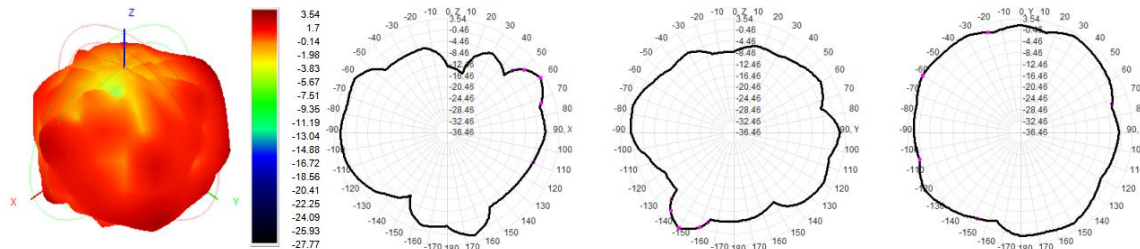
5000MHz



5500MHz



6000MHz



Form no. : B&T-qr-en-002 version: B3

6、Table of Materials and Hazardous Substances

Items are	specifications	The material	RoHS The inspection results (PPM)						ICP Test number	Detection time
			Cd	Pb	Hg	Cr+6	PBB	PBDE		
1	RG178 line	FEP/silver plated copper wire	ND	9	ND	ND	ND	ND	XMNEC1900240103	19.03.20
2	Zinc alloy	Zinc alloy	ND	15	ND	ND	/	/	CANEC1902469902	19.02.26
3	Folding plastic	PC+PBT	ND	ND	ND	ND	ND	ND	SZSEC1901177701	19.06.06
4	rod sleeve	TPEE	ND	ND	ND	ND	ND	ND	SZEC1901516201	19.07.19
5	connector	brass	ND	25599	ND	ND	ND	ND	CANEC1908127402	19.05.20
		PTFE	ND	5	ND	ND	ND	ND	CANEC1825975101	18.12.19
		Gold plating	ND	33468	ND	ND	ND	ND	SZSEC1900245903	2019.3.1
		Zinc alloy	ND	18	ND	ND	/	/	CANML1902928201	19.03.05
6	Heat shrinkable casing	Heat shrinkable casing	ND	ND	ND	ND	ND	ND	CANEC1826815803	19.01.07

PACKING CRITERION

P/N: AG-011520-1007

Spec: 2.4G-5.8G external black folding antenna -SMA-J

一、Labeling requirements (according to the customer's name, refer to the corresponding finished product label production requirements. If there is no requirement, it will follow the ordinary label requirements.)

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	ZHONGSHAN B&T TECHNOLOGY Co., Ltd Sichuan B&T Technology Co., Ltd.		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Running water number	*****

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	ZHONGSHAN B&T TECHNOLOGY Co., Ltd Sichuan B&T Technology Co., Ltd.		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	****.*.*
Trace code	*****	Running water number	*****

2、Job description:

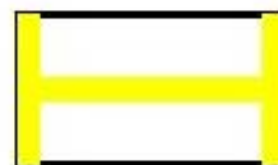
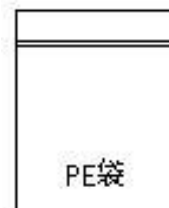
1.1 packaging:

Product 1 PCS smal bag,

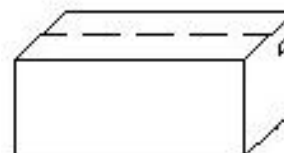
Product 50 PCS big bag

2. Outer packing:

1000 PCS a box



纸箱



Matters needing attention:

1 whether to add partitions, Pearl cotton;

2 label attached, such as ROHS, etc.;