Shenzhen XINHENGYANG Technology Co., Ltd

SPECIFICATION

Customer Name: Shenzhen Heshijia Technology Co., LTD

Product Model: PTM-PFV01

Customer P/N :

XINHENGYANG P/N: NZ.01.0000104

SPECIFFCATIONS: frequency band: 2400MHZ-2500MHZ/5150MHZ-5850MHZ

Production date: 2024.8.2

Sample Version: V1

XINHENGYANG		
FICTION	DQE	R&D
Customer		
PUR	QC	R&D

Manufacturer: Shenzhen Xinhengyang Technology Co., LTD

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Tel: 0755-83600916 Email: xinhengyang1116@163.com

Network address: https://www.xhy-2008.com

Number	Effective date	Change record
V1	2024.8.2	Initial release

一、The basic parameters

A. Electrical Characteristics	
Frequency	**2400MHZ-2500MHZ** **5150MHZ-5850MHZ**
VSWR	**< 3.0**
Avg Efficiency	**>50%**
Impedance	**50 ± 25 Ohm**
Polarization	**Linear**
Peak Gain	**2.4GHZ:2.96dBi** **5.85GHZ:3.57dBi**
B. Material & Mechanical Characteristics	
Material of Radiator	**FPC white.**
Cable Type	**Generation/1.13**
Connector Type	**L=90MM**
Dimension	**/**
C. Environmental	
Operation Temperature	**- 20 ˚C ~ + 60 ˚C**
Storage Temperature	**- 30 ˚C ~ + 70 ˚C**

二、Electrical Specification

Those specifications were specially defined for__PTM-PFVO1__ model.

三、VSWR

1 Measuring Method

1.A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR

2.Keeping this jig away from metal at least 20cm

2 Measurement frequency points and VSWR value

四、 Anechoic chamber

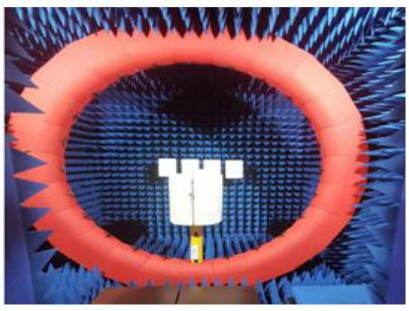
Introduction:

Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave absorbing material as the lining of the shield room, it can absorb the most of the electromagnetic energy into the six wall is a better simulation of the free space conditions.

The main working principle of microwave anechoic chamber is according to the electromagnetic wave in the medium from the low magnetic guide magnetic direction of propagation rules, absorbing materials to guide the electromagnetic wave using high permeability, through resonance, a substantial absorption of electromagnetic wave radiation energy, by coupling the electromagnetic energy into heat energy.

main performance ：

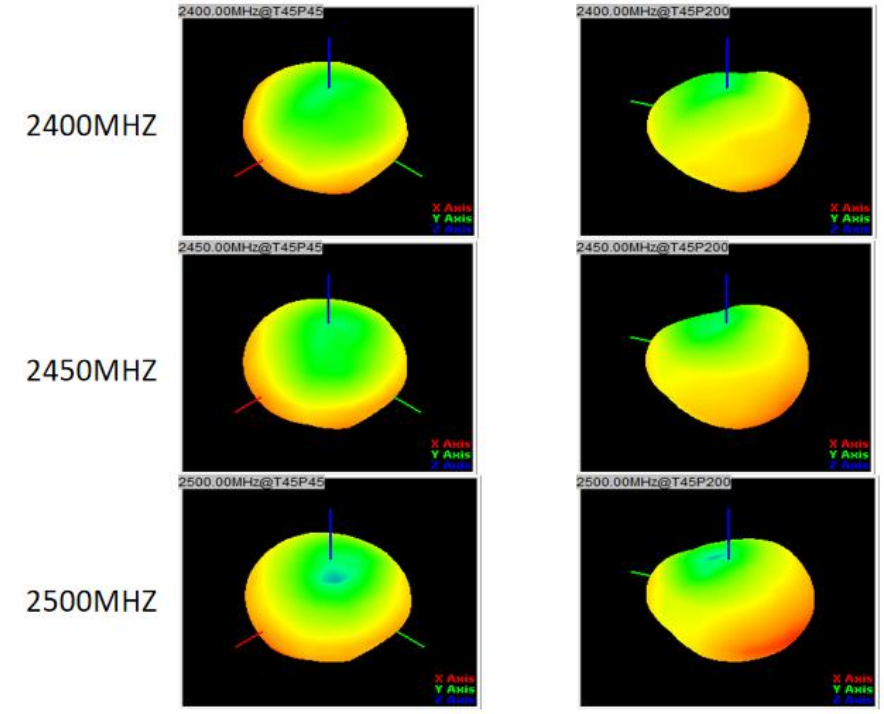
Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)

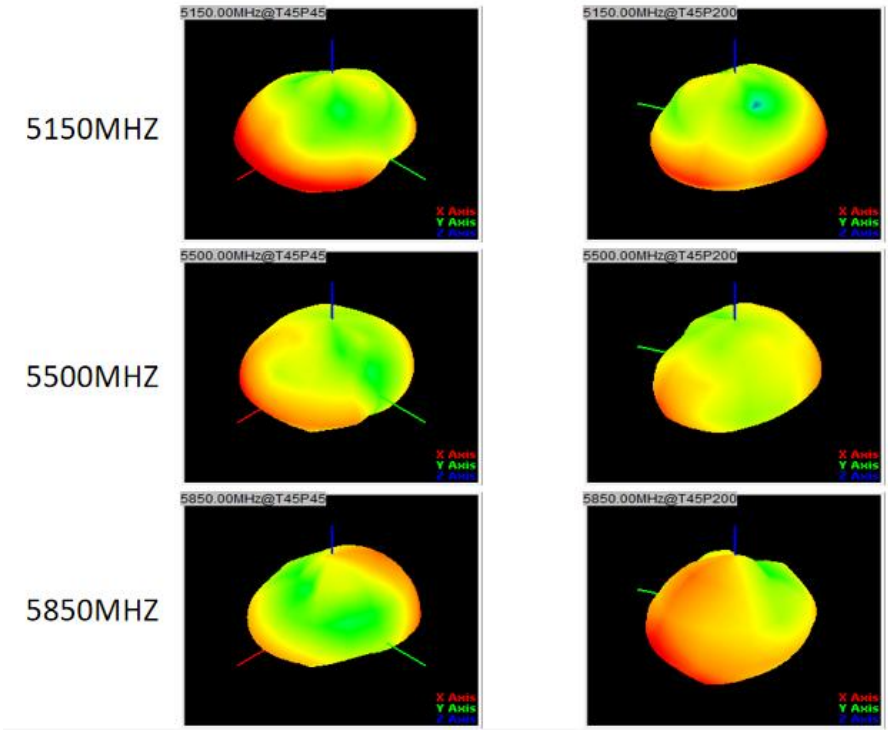
五、Gain table of Antenna

Passive field pattern:

2400MHZ-2500MHZ



5150MHZ-5850MHZ



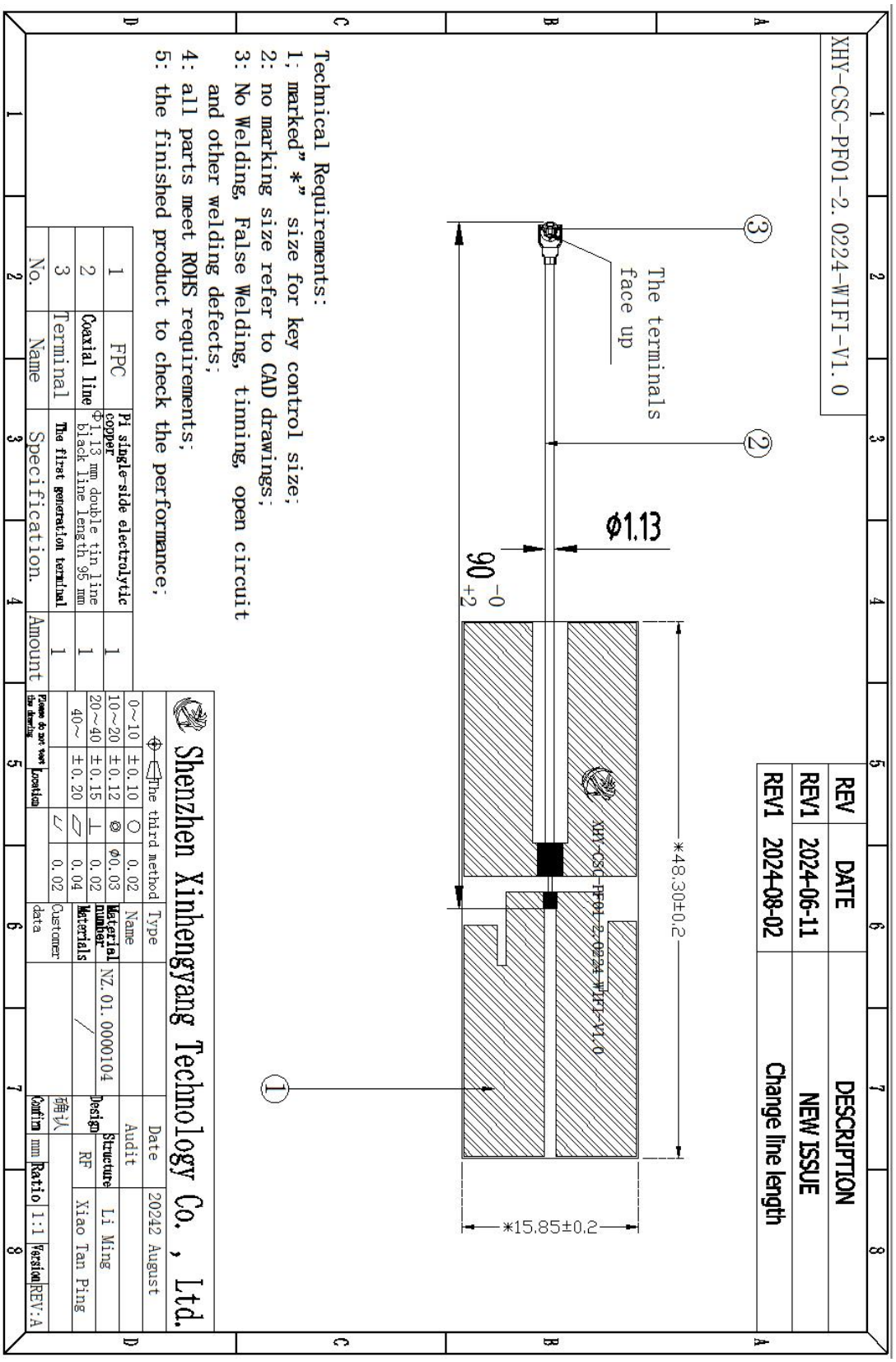
Passive efficiency gain:

2400MHZ-2500MHZ+5150MHZ-5850MHZ					
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	50.61	2.82	5250	52.614	2.38
2410	51.51	2.96	5300	52.24	2.57
2420	50.43	2.86	5350	51.16	2.63
2430	49.65	2.72	5400	50.56	2.57
2440	49.93	2.38	5450	49.62	2.60
2450	48.84	2.76	5500	45.81	2.77
2460	47.65	2.68	5550	47.45	3.06
2470	45.66	2.45	5600	50.65	3.34
2780	48.87	2.58	5650	52.34	3.51
2490	47.15	2.40	5700	56.05	3.17
2500	47.13	2.29	5750	51.43	3.57
5150	54.73	2.15	5800	55.61	3.02
5200	55.12	2.42	5850	53.50	2.75

OTA active:

BAND	802.11B 11Mbps		BAND	802.11G 54Mbps		BAND	802.11N NCS7		BAND	802.11A 54Mbps	
	TRP (dBm)	TIS (dBm)		TRP (dBm)	TIS (dBm)		TRP (dBm)	TIS (dBm)		TRP (dBm)	TIS (dBm)
1	12.35	-79.49	1	10.05	-66.91	1	11.08	-63.49	149	8.30	-68.33
6	13.14	-84.02	6	10.74	-69.10	6	10.82	-67.39	157	8.14	-69.30
11	13.38	-83.38	11	11.15	-69.32	11	11.78	-65.99	165	7.68	-70.58

六、Antenna Dimensions



七、ROHS

Antenna NZ. 01. 0000104 meets RoHS requirements.

八、 Product packaging instructions

A. packing should meet the moistureproof, vibration, pressure and mildew proof, etc.

B. the smallest packing unit logo must have the manufacturer trademarks, product model, name, code and quantity.

C. in the attached packing list, certificate of approval, and the factory inspection report.

**********END**********