

# Shenzhen Heyixun Technology Co., LTD

## SPECIFICATION FOR APPROVAL

customer Name	Guangzhou Youwo Technology Co., Ltd		
Customer project Name	BO807Z3K	Heyixun project Name	BO807Z3K
customer P/N		Heyixun P/N	HYX008-BO807Z3K-R-V0.2
Band	2400-2500MHz		
vers ion	A2		
Designer Information			
RF Engineer	Zhu Zengyuan	EE Engineer	Shi Zhenhao
ME Engineer	Feng xiaoheng		

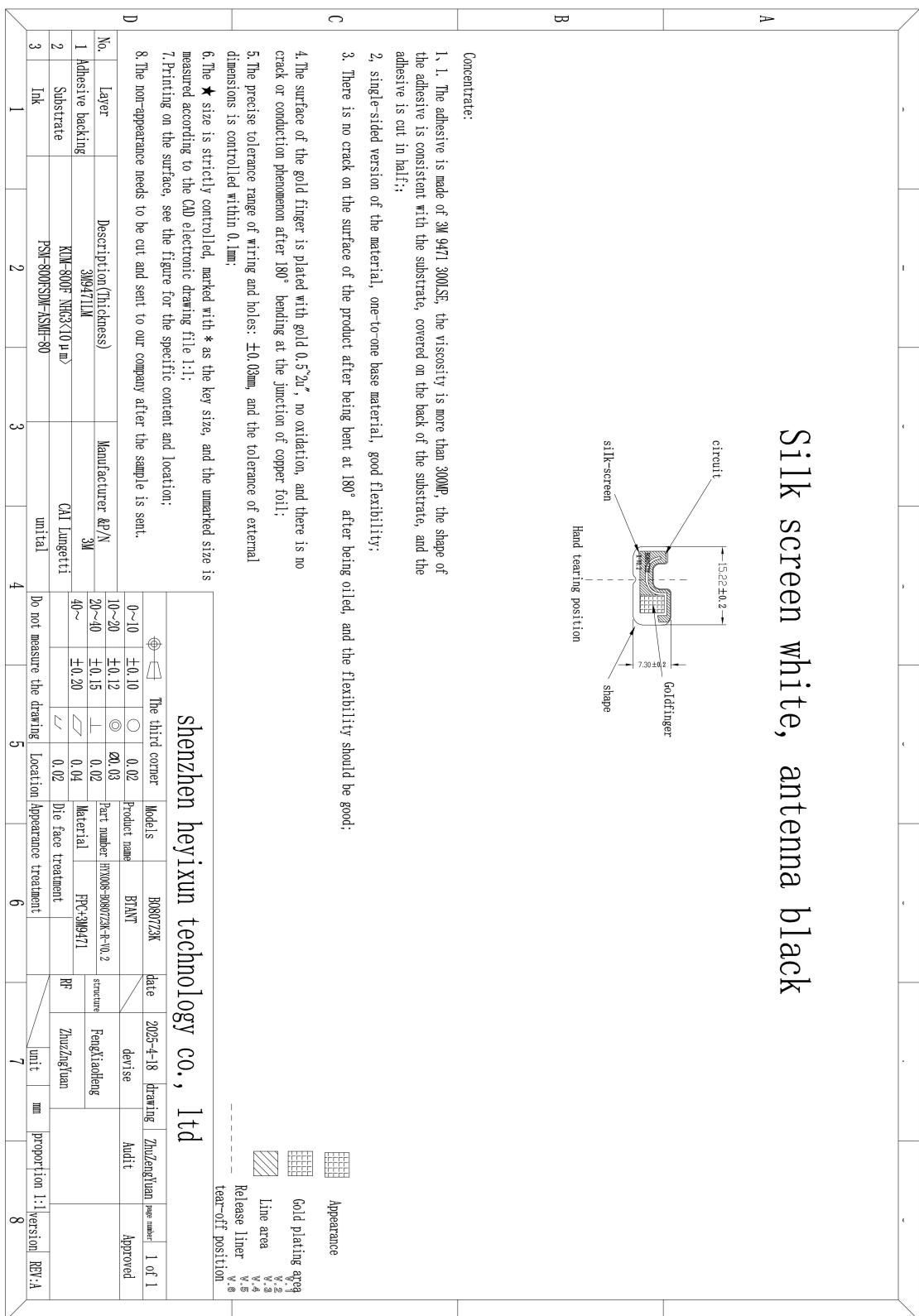
Heyixun Approval				customer Approval	
	prepared	checked BY	Approval BY	checked BY	Approval BY
signature	Zhu Zengyuan				
Date	2025-04-28				

change Log					
vers ion	change Description		person in charge	Approval BY	Date

# catalogue

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Drawing or Product Image



address: 1903-1905, Building 2, Jiufang Square, Tiezai Road, Gongle Community, Xixiang Street, Bao'an District, Shenzhen

sample Dimensions Test Report

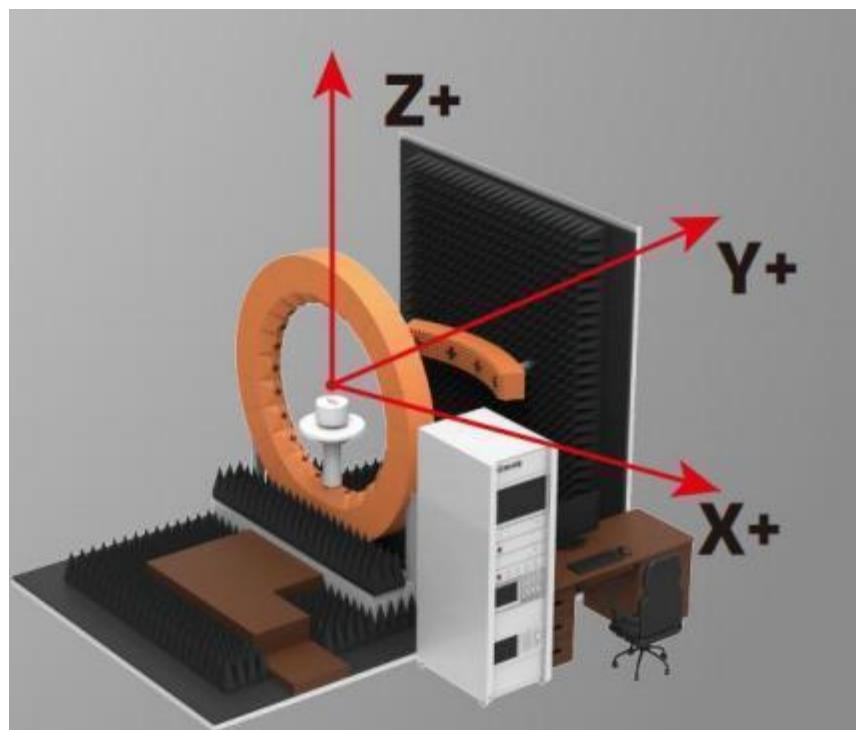
customer Name	Guangzhou Youwo Technology Co., Ltd	customer P/N		Heyixun P/N	HYX008-BO807Z3K-R-V0.2
Test Date	2025-04-28	sample Qty.	3	Inspector	Zhu Zengyuan
Dimension NO.	standard	sample 1	sample 2	sample 3	pass/NG
① length	15.22±0.2mm	15.20mm	15.25mm	15.30mm	<b>Pass</b>
② width	7.30±0.2mm	7.31mm	7.32mm	7.29mm	<b>Pass</b>
③ thickness	0.2±0.05mm	0.20mm	0.21mm	0.21mm	<b>Pass</b>
Conclusion					PASS
Inspector & Date	Zhu Zengyuan 2025-04-28	Approval & Date			

## RF Performance Test Report

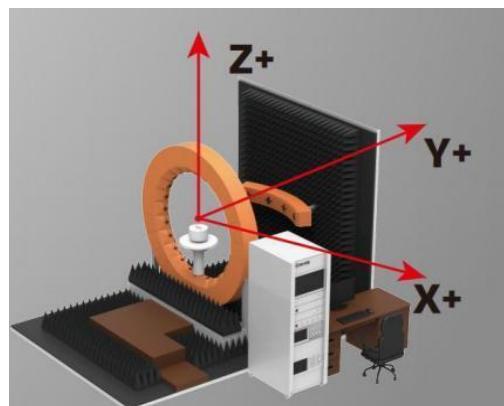
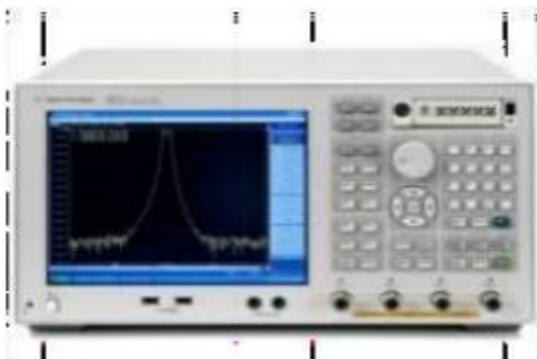
customer Name	Guangzhou Youwo Technology Co., Ltd	project Name	BO807Z3K	Heyixun P/N	HYX008-BO807Z3K-R-V0.2
Band	2400-2500MHZ	Test Date	2025-04-28	Inspector	Zhu Zengyuan

### Antenna Test Equipment Introduction

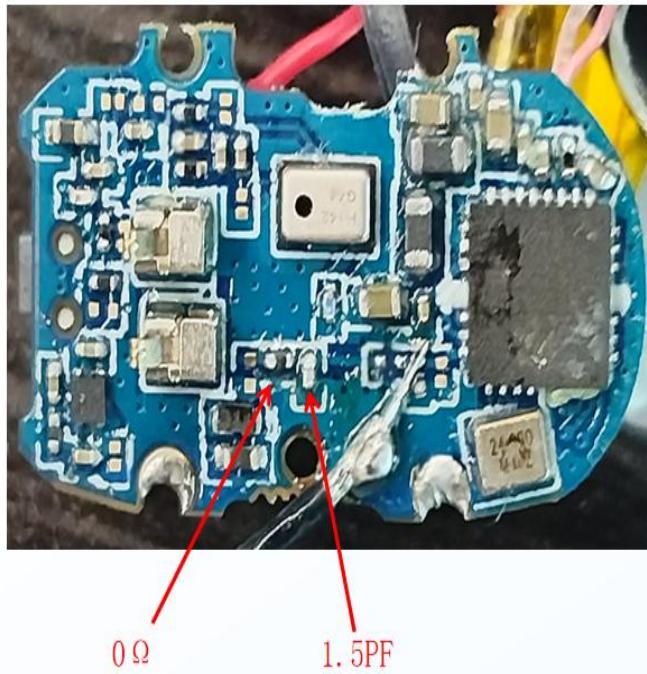
Test of antenna input characteristics using Agilent E5071c and Agilent 5071c vector network analyzer; The radiation pattern of the antenna are tested using the ETS starlab 3D near field Anechoic Chamber, and the instrument is used to agilent 8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:



Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



R



### 3 Test Result VSWR&Log Mag&Smith( $\Omega$ )



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-10.20	-20.85	-13.66	-9.82
Smith( $\Omega$ )	27.32	41.75	37.55	29.86
VSWR	1.89	1.19	1.52	1.95

...  
通过 Windows

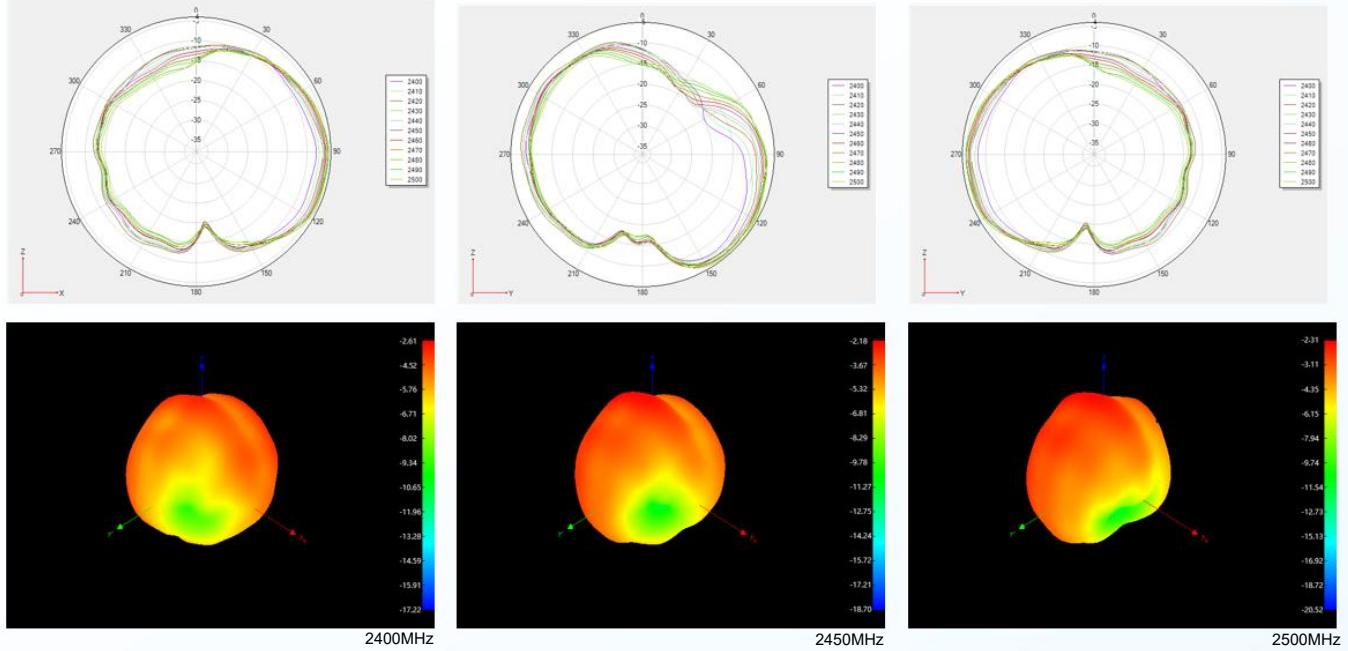
## 4. Test Result

### 4.1 Gain & Efficiency——ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	22.59	-2.61
2410	23.59	-2.49
2420	24.93	-1.92
2430	25.49	-2.47
2440	26.42	-2.32
2450	27.41	-1.96
2460	26.11	-2.18
2470	25.46	-2.43
2480	24.86	-2.03
2490	23.51	-2.34
2500	21.79	-2.31

## 4. Test Result

### 4.2 2D Pattern——BTANT



3. OTA Data

OTA		L			R		
1#	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-1.28	-3.44	-5.27	0.37	2.03	-0.37
	TIS (dBm)	-84.85	-84.28	-83.05	-81.83	-84.93	-85.87
	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
2#	TRP (dBm)	-5.91	-6.79	-7.13	-4.66	-4.67	-3.95
	TIS (dBm)	-80.3	-80.42	-79.5	-77.86	-80.4	-81.57
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-1.25	-2.94	-4.53	-0.07	1.66	0.17
	TIS (dBm)	-85.09	-83.76	-81.63	-81.63	-85.22	-86.16
3#	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-4.82	-6.34	-7.23	-4.76	-3.87	-4.55
	TIS (dBm)	-81.33	-78.46	-77.68	-77.36	-81.23	-81.74
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480

3. OTA Data

OTA		L			R		
3#	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-0.43	-3.1	-4.56	-0.95	1.43	1.33
	TIS (dBm)	-85.01	-85.1	-84.39	-79.84	-84.38	-86.61
	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
4#	TRP (dBm)	-4.79	-6.21	-7.43	-4.92	-3.88	-3.67
	TIS (dBm)	-81.42	-80.77	-80.7	-77.05	-80.17	-81.49
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	0.69	-0.98	-2.72	0.22	1.86	0.43
	TIS (dBm)	-84.83	-86.17	-85.45	-81.05	-84.4	-85.16
5#	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-3.9	-3.78	-5.82	-4.64	-3.41	-3.67
	TIS (dBm)	-79.87	-82.1	-81.28	-77.69	-80.7	-80.22
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480

3. OTA Data

OTA		L			R		
5#	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-0.91	-2.39	-3.92	0.15	2.01	1.2
	TIS (dBm)	-85.85	-85.67	-85.03	-80.41	-84.49	-86.7
	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
6#	TRP (dBm)	-4.58	-5.74	-6.76	-3.4	-2.71	-3.69
	TIS (dBm)	-81.67	-81.5	-81.29	-77.32	-80.52	-82.71
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-0.38	-2.81	-5.34	-0.58	1.24	-0.33
	TIS (dBm)	-83.6	-84.25	-84	-80.88	-84.73	-86.67
6#	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-4.1	-5.92	-8.66	-3.87	-3.04	-4.72
	TIS (dBm)	-79.54	-80.33	-80.15	-77.69	-80.1	-82.5
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480

3. OTA Data

OTA		L			R		
7#	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-0.83	-3.07	-4.88	-1.08	1.14	-0.13
	TIS (dBm)	-86.07	-85.77	-84.02	-79.98	-83.76	-86.13
	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
8#	TRP (dBm)	-4.52	-6.78	-8.3	-4.8	-3.47	-3.92
	TIS (dBm)	-82.14	-81.43	-80.44	-77.71	-79.65	-81.48
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	1.37	-0.97	-3.21	-1.73	-0.11	-0.55
	TIS (dBm)	-85.59	-86.21	-85.33	-79.08	-82.33	-84.11
8#	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-3.64	-4.52	-7.44	-4.63	-3.7	-3.89
	TIS (dBm)	-81.6	-81.78	-80.09	-77.61	-78.8	-80.23
	OTA	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480

3. OTA Data

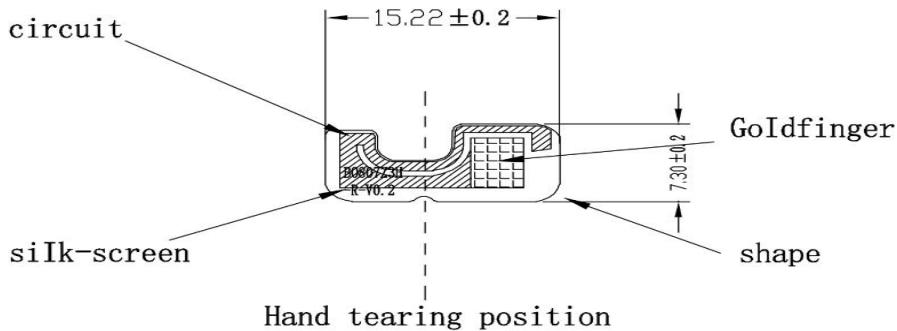
OTA		L			R		
9#	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	0.22	-2.62	-4.98	-0.51	1.76	1.55
	TIS (dBm)	-85.4	-85.24	-84.32	-80.24	-83.95	-85.93
	头模	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-3.14	-5.68	-7.14	-4.92	-3.66	-3.78
10#	TIS (dBm)	-81.42	-81.6	-80.1	-77.1	-79.63	-80.5
	OTA		L				
	自由	0	39	78	0	39	78
	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-0.69	-2.32	-3.95	-0.39	1.54	-0.63
	TIS (dBm)	-83.42	-83.88	-83.28	-80.78	-84.53	-86.09
	头模	0	39	78	0	39	78
10#	Frequency (MHz)	2402	2441	2480	2402	2441	2480
	TRP (dBm)	-4.1	-5.62	-7.22	-4.2	-3.71	-4.86
10#	TIS (dBm)	-79.88	-79.34	-79.08	-76.99	-80.15	-81.47

## Reliability Test Report

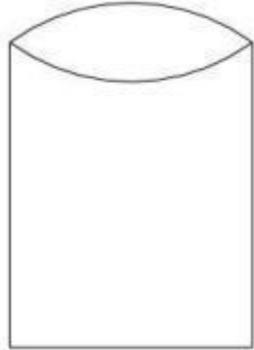
customer Name	Guangzhou Youwo Technology Co., Ltd	customer P/N		Heyixun P/N	HYX008-BO807Z3K-R-V0.2	
Test Date	2025-04-28	sample Qty.	3	Inspector	Zhu Zengyuan	
Test Item	Requirement	testing equipment	sample 1	sample 2	sample 3	PASS/NG
High temperature storage	The test was performed after 24 hours of exposure at +85° C and 2 hours of recovery	Constant temperature and humidity chamber	OK	OK	OK	Pass
Cryogenic storage	The test was performed after 24 hours of exposure at -40° C and 2 hours of recovery	Constant temperature and humidity chamber	OK	OK	OK	Pass
High temperature operation	Operates at +60° C for 24 hours	Constant temperature and humidity chamber	OK	OK	OK	Pass
Operates at low temperatures	It works on power for 24H at -20° C	Constant temperature and humidity chamber	OK	OK	OK	Pass
Salt spray test	(5 Shi 0.5)*Sodium chloride, pH value is 6.5~7.2, and the temperature of the experimental chamber is (35 ±2)° C <input checked="" type="checkbox"/> 24H <input type="checkbox"/> 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting pull-out force	1.13 Wire size ≥10N 0.81 Wire size ≥8N RG174 ≥60N RG178 ≥50N	Push-pull force gauge	/	/	/	/
Conclusion						Pass
Inspector & Date	Zhu Zengyuan 2025-04-28	Approval & Date				

PACKING CRITERION

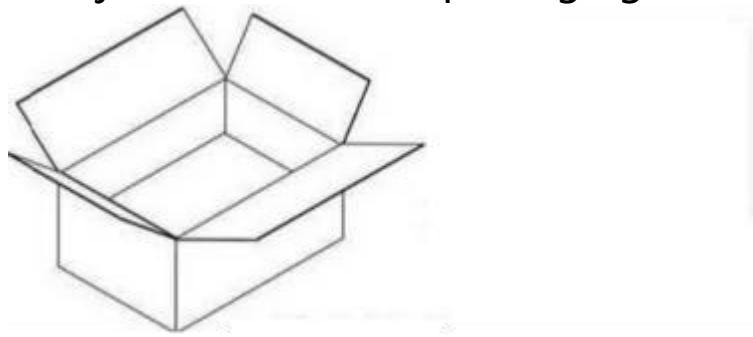
1. Individual products (Subject to the actual packaging)



2. Big PE bag packing (full sheet/single 90pcs) (Subject to the actual packaging)



3. Sealed, the outer box is affixed with our production label and ROHS label. (Subject to the actual packaging)



## Environmental requirements

MSDS (Material Safety Data Sheet)	<input checked="" type="checkbox"/> Offer	<input type="checkbox"/> Not available	<input type="checkbox"/> N/A
COC (Environmental Protection Agreement)	<input checked="" type="checkbox"/> Offer	<input type="checkbox"/> Not available	<input type="checkbox"/> N/A
Technical standards for environmentally friendly hazardous substances	<input checked="" type="checkbox"/> Offer	<input type="checkbox"/> Not available	<input type="checkbox"/> N/A
Specific environmental requirements	<input checked="" type="checkbox"/> ROHS2.0 COMPLIANT <input checked="" type="checkbox"/> Halogen-free <input checked="" type="checkbox"/> Meets California 65	<input checked="" type="checkbox"/> ROHS2.0 COMPLIANT	

## Install Wizard or Other

### Installation Process:

Take the 1POS product, tear off the release paper on the back of the FPC by hand, and then align the position of the FPC positioning hole with the positioning hole position of the shell (positioning rib or positioning line), and attach it to the shell flatly, the specific position is shown in the following figure:

### Precautions during the installation process:

- After attaching the antenna, ensure that the FPC is fully attached to the housing;
- The positioning hole is aligned with the positioning post position of the housing;
- The edge of the FPC is against the edge of the case;
- Antenna with Terminals When snapping the terminals to the PCBA end of the motherboard, first snap the terminals and then vertically;
- When disassembling the antenna terminals, it is necessary to use a tool (such as a special crowbar) to the terminals vertically, and do not directly pull the wire to disassemble them.