

Shenzhen Heyixun Technology Co., LTD

SPECIFICATION FOR APPROVAL

customer Name	Shenzhen Baseus Technology Co., Ltd.		
Customer project Name	EnerGeek Gx11 Mifi	Heyixun project Name	EnerGeek Gx11 Mifi
customer P/N		Heyixun P/N	HYX0119-Ener Geek GX11 Mifi-v2
Band	2400-2500MHZ 5100-5850MHZ		
vers ion	A1		
Designer Information			
RF Engineer	Feng Xiaoheng	EE Engineer	Shi Zhenhao
ME Engineer	Zhu Zengyuan		

Heyixun Approval				customer Approval	
	prepared	checked BY	Approval BY	checked BY	Approval BY
signature	Guo Mengya				
Date	2025-6-10				

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

catalogue

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Drawing or Product Image

Hand-torn position

38.65±0.2

7.57±0.2

Silk screen white, antenna black

Concentrate:

1. The adhesive is made of 3M 9471 3000SE, the viscosity is more than 3000MP, the shape of the adhesive is consistent with the substrate, covered on the back of the substrate, and the adhesive is cut in half;;
- 2, the material is single-sided, half to one third of the.
3. There is no crack on the surface of the product after being bent at 180° after being oiled, and the flexibility should be good;

4. The surface of the gold finger is plated with gold 0.5~2μ, no oxidation, and there is no crack or conduction phenomenon after 180° bending at the junction of copper foil;
5. The precise tolerance range of wiring and holes: ±0.03mm, and the tolerance of external dimensions is controlled within 0.1mm;
6. The ★ size is strictly controlled, marked with * as the key size, and the unmarked size is measured according to the CAD electronic drawing file 1:1;
7. Printing on the surface, see the figure for the specific content and location;
8. The non-appearance needs to be cut and sent to our company after the sample is sent.

No.	Layer	Description (Thickness)	Manufacturer & P/N
1	Adhesive backing	3M9471LM	3M
2	Substrate	KIM-800F Ni63(10 μm)	CAL Lingeretti
3	Ink	PSH-800FSM-ASM-80	unital

Do not measure the drawing	Location	Appearance	treatment
0~10	±0.10	○	0.02
10~20	±0.12	◎	0.03
20~40	±0.15	⊥	0.02
40~	±0.20	∇	0.04
	∠	0.02	Die face treatment

shenzhen hexixun technology co., ltd	date	2025-5-17	drawing	ZhuZengYuan	part number	1 of 1
	models	EM666K GXT1 M6				
	Product name	Wifi				
	Part number	HY0019-EM666K GXT1 M6-2				
	Material	FFC-3M9471				
	RF					
	structure					
	device	Fengxiacheng				
	unit	ZhuZengYuan				
	mm					
	proportion 1:1					
	version	REV.A				

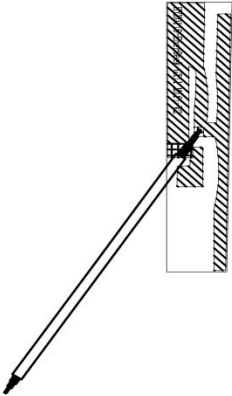
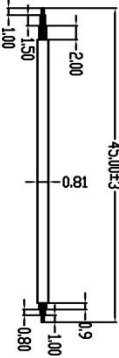
Appearance

Gold plating area
V.1
V.2
V.3
V.4
V.5
V.6

Line area
V.1
V.2
V.3
V.4
V.5
V.6

Release liner
V.1
V.2
V.3
V.4
V.5
V.6

tear-off position

A				B				C				D																																														
				<p>一、technical specification</p> <p>1. nominal voltage: 60VAC (R.M.S)</p> <p>2. Frequency test range: 0~6GHz</p> <p>3. characteristic: 50±2 ohms</p> <p>4. operating temperature range: -40℃~+85℃</p> <p>5. operating humidity: 95%R.H. Max.</p> <p>二、Electrical performance</p> <p>1. insulation resistance: 500M ohms</p> <p>2. Contact resistance: centerPINneedle 25m ohms Max.</p> <p>External iron shell 15m ohms Max.</p> <p>3. withstand voltage: 200V AC 2 Min</p> <p>4. line loss: 900M Hz 0.5dB Max</p> <p>1800M Hz 0.7dB Max</p> <p>5. VSWR: 0.1~36Hz 1.3 Max.</p> <p>3~6GHz 1.5 Max.</p> <p>三、mechanical property</p> <p>1. withdrawal force: initial stage 4N Min. 30Aafter returning 2N Min.</p> <p>2. pull: 7N Min</p>				<p>unit: MM</p> <p>loa: 45±3mm</p> 				<p>shenzhen heyixun technology co., ltd</p> <table><tr><td>Models</td><td>date</td><td>2025-5-17</td><td>drawng</td><td>ZhuZengYuan</td><td>page number</td><td>1 of 1</td></tr><tr><td>Product name</td><td>devise</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Part number</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Material</td><td>structure</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Die face treatment</td><td>RF</td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>Do not measure the drawing Location Appearance treatment</p> <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr></table>				Models	date	2025-5-17	drawng	ZhuZengYuan	page number	1 of 1	Product name	devise						Part number							Material	structure						Die face treatment	RF						1	2	3	4	5	6	7	8
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No. Layer Description(thickness) Manufacturer &P/N				The third corner				date				2025-5-17				drawng				ZhuZengYuan				page number				1 of 1																														
1 wire rod 0.81				10~20 ±0.10 ±0.12				0.02 0.03				Product name																																														
2 terminal 4 generations				20~40 ±0.15 ±0.20				0.02 0.04				Part number																																														
3				40~ ±0.20				0.02				Material																																														
1				2				3				4				5				6				7				8																														

Shenzhen Heyixun Technology Co., LTD

sample Dimensions Test Report

customer Name	Shenzhen Baseus Technology Co., Ltd.	customer P/N		Heyixun P/N	HYX0119-Ener Geek GX11 Mifi-v2
Test Date	2025-6-10	sample Qty.	3	Inspector	Guo Mengya
Dimension NO.	standard	sample 1	sample 2	sample 3	pass/NG
①length	38.65±0.2mm	29.65mm	38.60mm	38.63mm	Pass
②width	7.57±0.2mm	7.53mm	7.50mm	7.57mm	Pass
③thickness	0.20±0.05mm	0.22mm	0.20mm	0.21mm	Pass
④Line length	45±3mm	44mm	45mm	45mm	Pass
Conclusion					PASS
Inspector & Date	Guo Mengya 2025-6-10		Approval &Date		

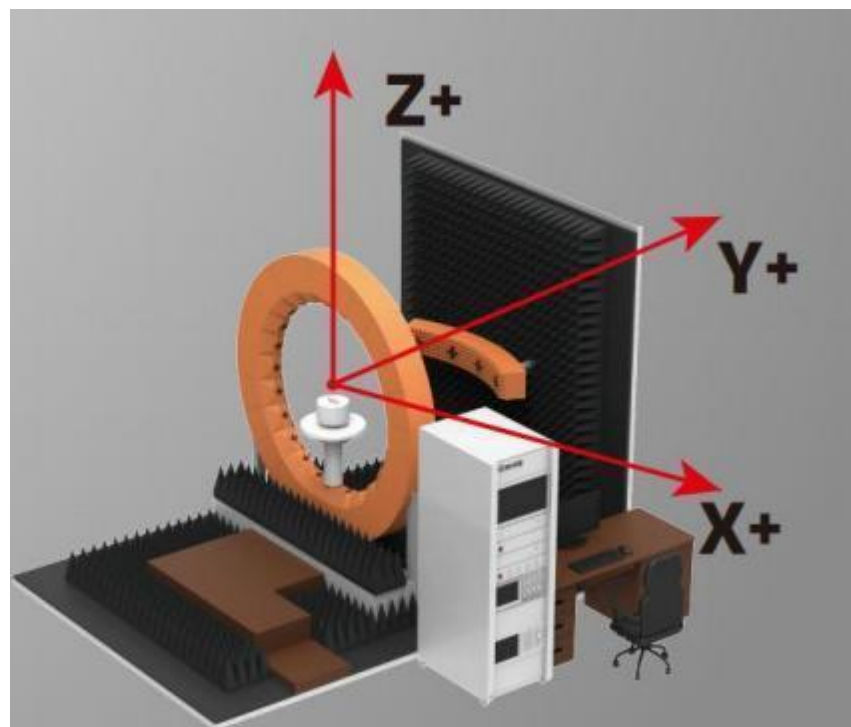
Shenzhen Heyixun Technology Co., LTD

RF Performance Test Report

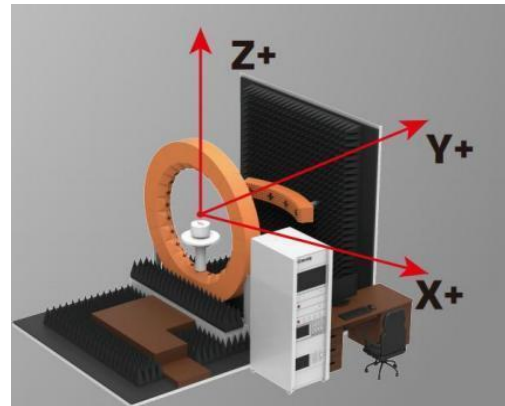
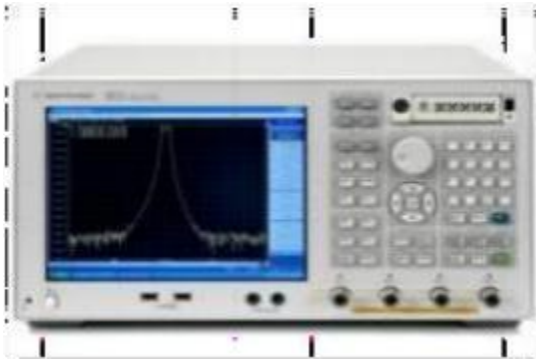
customer Name	Shenzhen Baseus Technology Co., Ltd.	project Name	EnerGeek Gx11 Mifi	Heyixun P/N	HYX0119-EnerGeek GX11 Mifi-v2
Band	2400-2500MHZ 5100-5850MHZ	Test Date	2025-6-10	Inspector	Guo Mengya

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 agilent8960 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



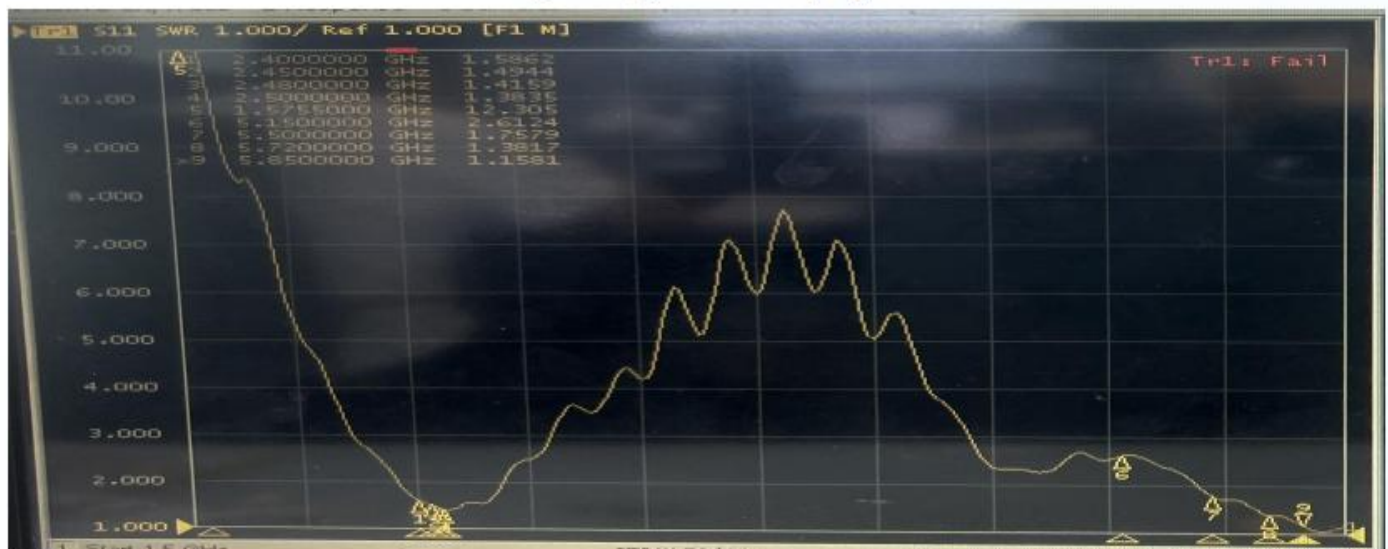
2.Product Overview & Dimension



WIFI天线



3 Test Result VSWR&Log Mag&Smith(Ω)



3. Test Result VSWR&Log Mag&Smith(Ω)

3.2 Gain & Efficiency—ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	55.93	2.32
2450	56.70	2.40
2480	53.97	2.21
2490	52.13	2.01

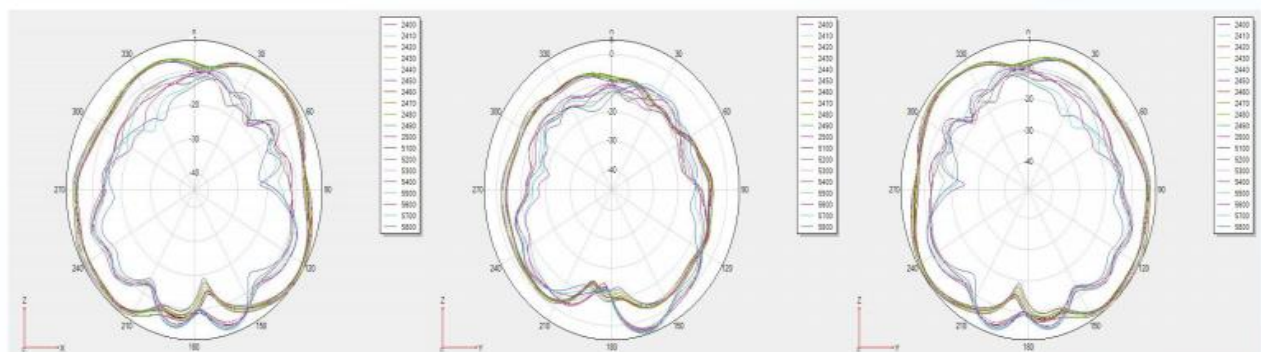
3. Test Result VSWR&Log Mag&Smith(Ω)

3.2 Gain & Efficiency—ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
5100	49.41	2.16
5200	49.78	2.71
5300	50.08	2.31
5400	53.95	3.31
5500	52.84	3.39
5600	53.93	3.92
5700	52.47	3.56
5850	50.32	3.43

3. Test Result

3.3 2D Pattern—BT ANT



4.OTA Data

1#

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
WIFI	802.11 b/11Mbps	1	18.78	-84.66
		6	17.76	-84.78
		11	18.93	-84.3
	802.11 g/54Mbps	1	16.97	-71.51
		6	15.81	-70.10
		11	17.46	-71.18
	802.11 n/65Mbps	1	16.98	-67.73
		6	15.89	-65.88
		11	17.45	-67.59
	802.11 A/54Mbps	36	16.19	-71.71
		149	15.28	-71.37
		165	15.75	-71.14

4.OTA Data

1#

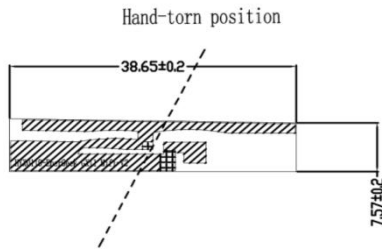
Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
WIFI	802.11 b/1Mbps	1	18.76	-92.78
		6	17.05	-92.74
		11	18.89	-92.38
	802.11 g/6Mbps	1	16.57	-87.78
		6	16.40	-86.44
		11	16.79	-87.58
	802.11 n/6.5Mbps	1	16.51	-86.70
		6	16.27	-85.77
		11	16.79	-86.68

Reliability Test Report

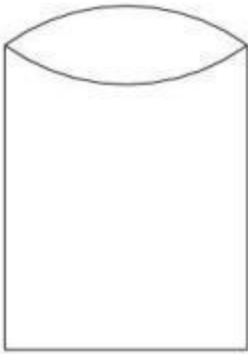
customer Name	Shenzhen Baseus Technology Co., Ltd.	customer P/N		Heyixun P/N	HYX0119-Ener Geek GX11 Mifi-v2	
Test Date	2025-6-10	samp le Qty.	3	Inspector	Guo Mengya	
Test Item	Requireme	testing equipment	samp le 1	samp le 2	samp le 3	PASS/NG
High temperature storage	The test was performed after 24 hours 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	8N	8N	8N	Pass
Conclusion						Pass
Inspector & Date	Guo Mengya 2025-6-10		Approval & Date			

PACKING CRITERION

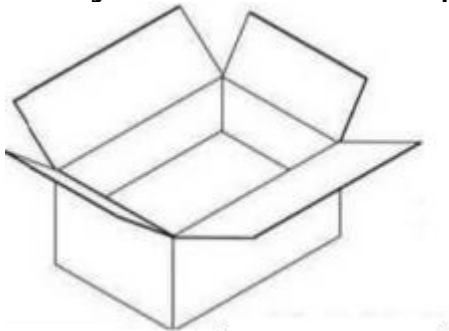
1、Individual products (Subject to the actual packaging)



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		

Install Wizard or Other

Installation Process:

Take the 1PCS 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 TerminalsWhen 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.