

Material acknowledgement

product description	Manufacturer: Shenzhen Yusheng Communication Equipment Co., Ltd Project model: CWR01G				
	Name of material: Metal mid-frame antenna				
	Specifications / Colors:				
	Material code:		Sample delivery date:		
	Version No. :		Note: (this cover needs with supplier seal)		
appendix	☐ sample ☐ Manufacturing flow chart / 2D diagram ☒ Electrical and Mechanical Property Description (Specification) ☐ Full-size measurement report ☐ CPK report ☐ QC schedule drawing		☐ Reliability test report ☐ packaging information ☐ List of raw materials / RoHS & REACH & HF Report ☐ Bill of Materials, MSDS ☐ Environmental material questionnaire		
Supplier audit	Proposed: review and approval (All of the above require manual signature, and printing is not allowed)				
The above is filled by the supplier, the following is filled by Xiao Che Technology					
discriminate	Confirmation of the person	Confirm content	Confirm the results	Signature of confirmation	Confirmati on date
Technical confirmation	ID	☐ Appearance ☐ color ☐ process ☐ material			
	structure	☐ Material ☐ dimension (including the key control dimension annotation) ☐ Specification and technical requirements ☐ adaptation verification			
	hardware	☐ Specification and technical requirements (including electrical performance parameters) ☐ Adaptation to verify the ☐ effect			
	quality	☐ RoHS materials ☐ Non-RoHS materials ☐ meet the requirements of REACH ☐ Compliance with halogen free requirements ☐ other environmental requirements ☐ test standard confirmation ☐ appearance ☐ normative dimension ☐			



Shenzhen Yusheng Communication Equipment Co., LTD

		reliability confirmation			
Final confirmation	project	☐ Acknowledge the integrity of the document ☐ dimension dimensions ☐ Appearance ☐ Electrical performance parameter ☐ function ☐ effect			
condition of recognition:	☐ formal admission ☐ Limited recognition (Limited _____ PCS) ☐ disallow				
Distribution Department:	☐ Supplier ☐ Factory IQC ☐ Quality ☐ Project ☐ After-sales ☐ Customer ☐ Other _____				

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1. Overview

1.1 Scope of application

This requirement, provides CWR01G Antenna technical requirements and material requirements specifications.

This requirement applies to CWR01G Antenna type selection, test, and acceptance.

1.2 Project basic information

Antenna name:	<u>CWR01G</u>
Antenna frequency band:	BT+GPS
edition:	V0.1

2. Technical index requirements

2.1 Introduction of test items and equipment

inventory	test item	equipment
Active test	TRP,TIS	Integrated tester, microwave darkroom

2.2 Active Reporting

2.2.1 Test instructions

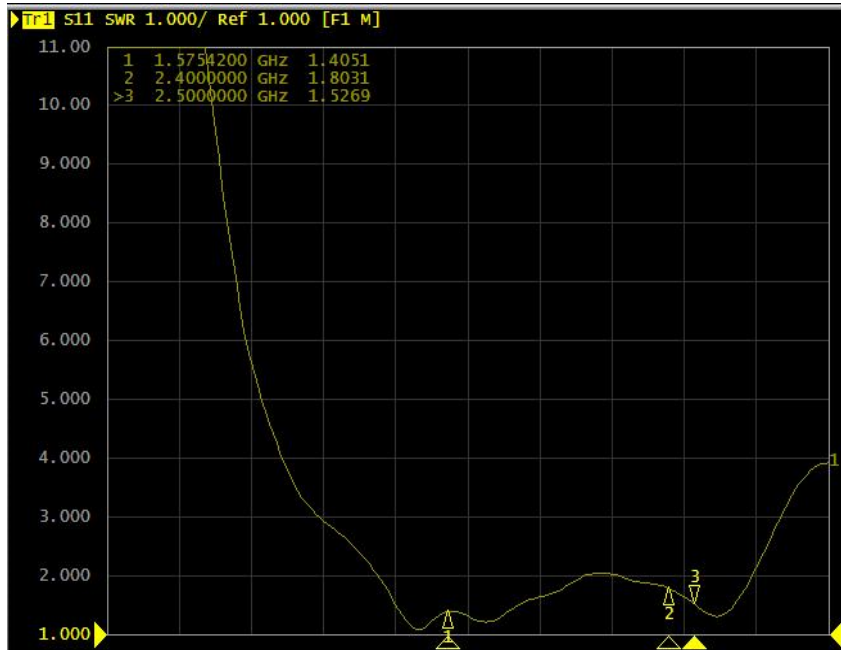
Test tools: Agilent8960 instrument, R & S CMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program

Test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$

Test method: DUT is fixed in the center of the turntable with H plane, on the same horizontal line as the center of the horn antenna.

The positioning system enables the DUT to rotate in the whole sphere to satisfy the high-precision 3 D positioning. Each RF instrument and turntable controller communicate with the PC with automatic test software through the GPIB interface.

2.2.2 GPS / BT passive map

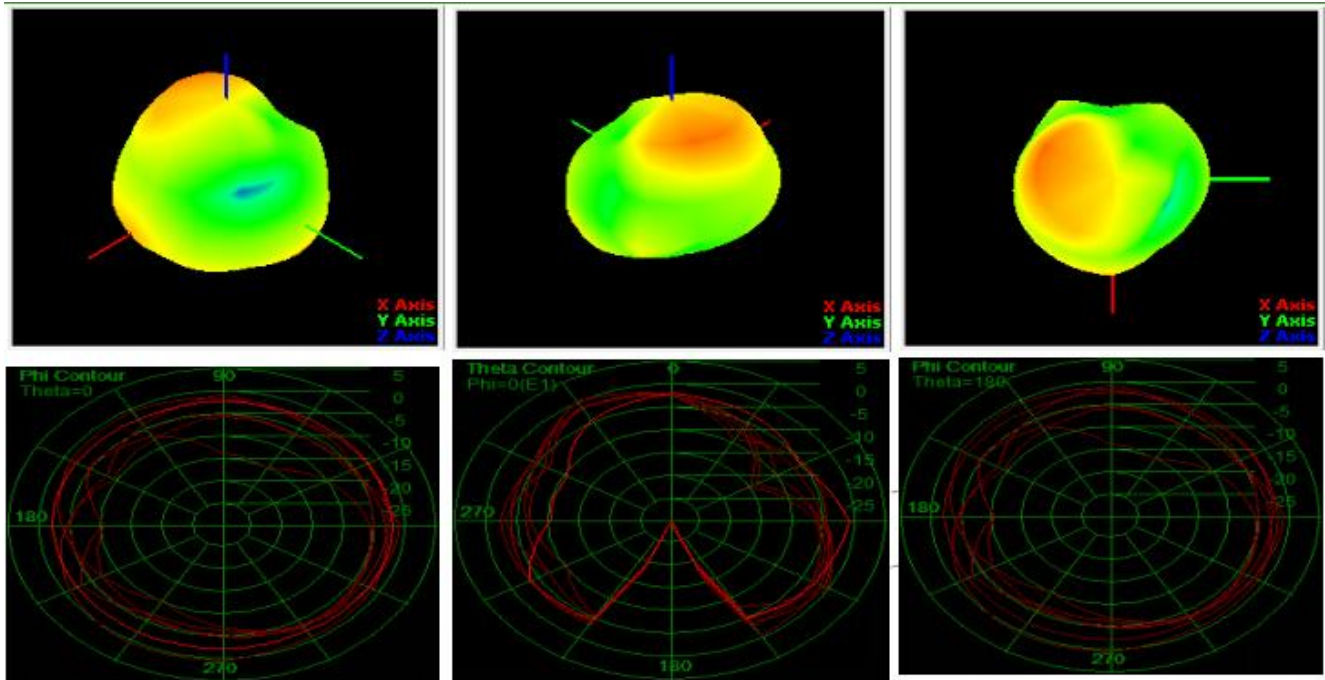


2.2.3 Antenna efficiency parameters test situation

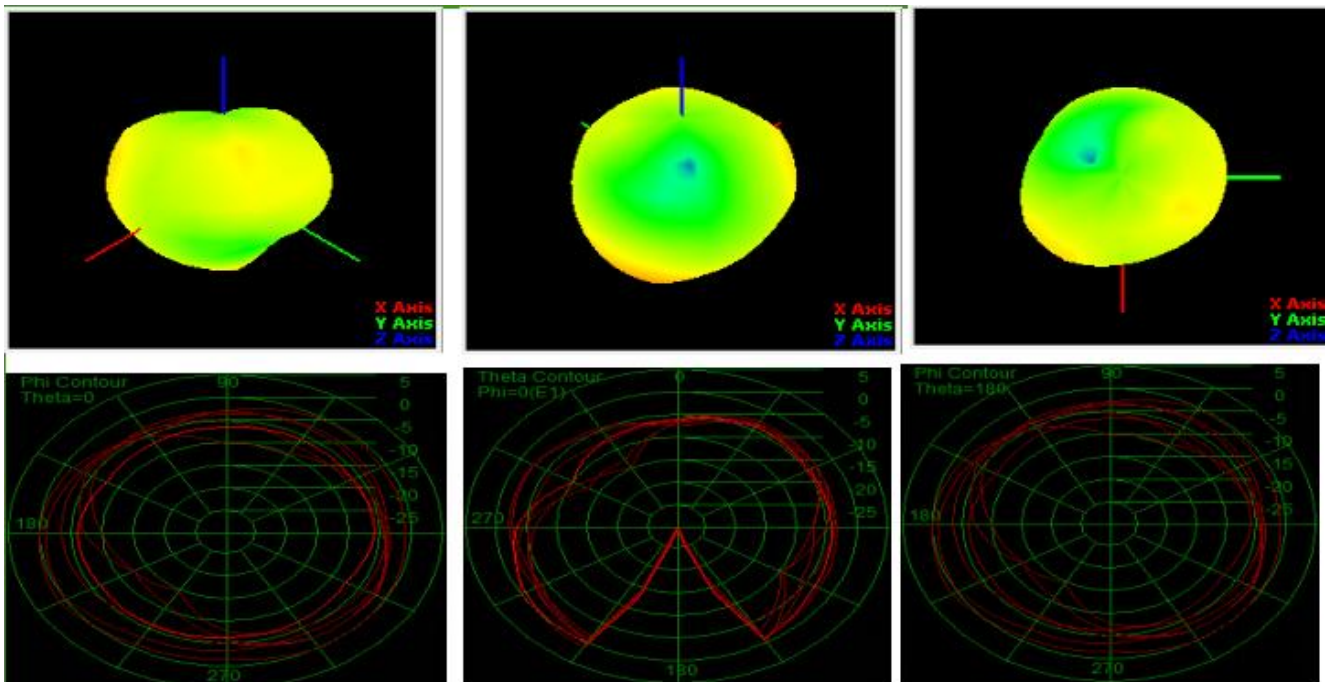
	frequency point	productiveness%	productiveness db	gain
BT Arm	2400	4%	-13.7	-6.3
	2410	5%	-13.3	-6.3
	2420	4%	-13.8	-6.1
	2430	5%	-12.8	-6.0
	2440	5%	-12.9	-5.9
	2450	6%	-11.9	-5.6
	2460	6%	-12.1	-5.6
	2470	6%	-12.4	-5.7
	2480	5%	-13.2	-6.1
	2490	4%	-13.6	-6.3
	2500	4%	-14.4	-6.4

	frequency point	productiveness%	productiveness db	gain
GPS Arm	1550	5%	-13.3	-6.2
	1555	6%	-12.5	-5.9
	1560	6%	-12.1	-5.6
	1565	7%	-11.7	-5.6
	1570	7%	-11.4	-5.6
	1575	7%	-11.3	-5.5
	1580	6%	-12.0	-5.6
	1585	6%	-11.9	-5.8
	1590	5%	-12.8	-5.9

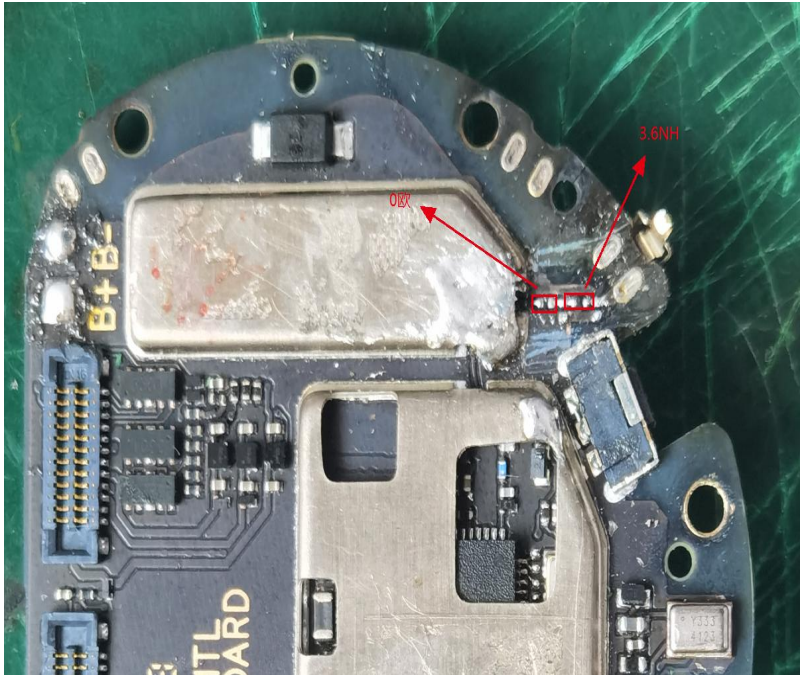
2.2.4 1575MHZ passive direction diagram/field pattern diagram



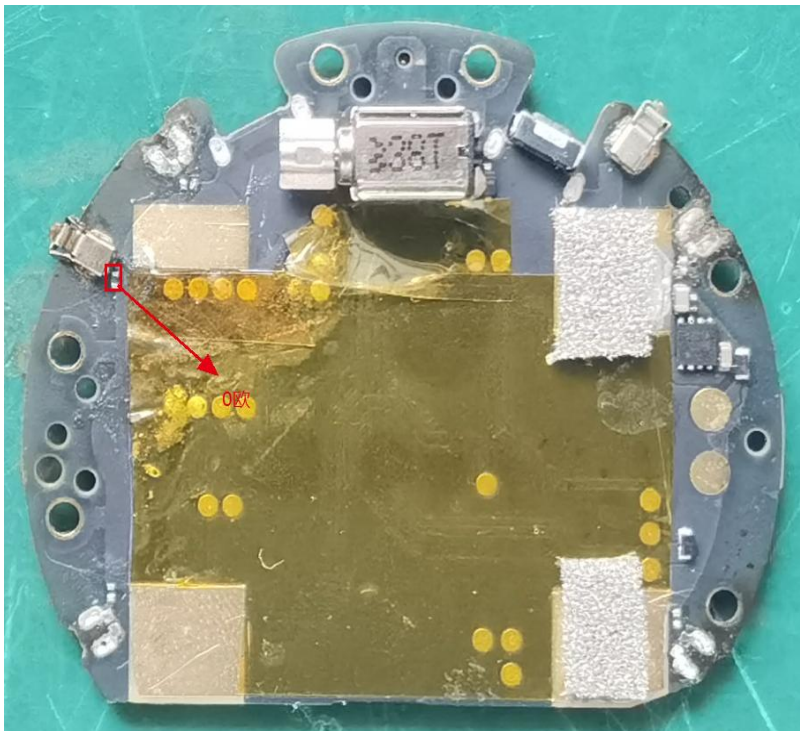
2.2.5 2450 MHZ passive direction diagram/field pattern diagram



2.2.6 Main board matching

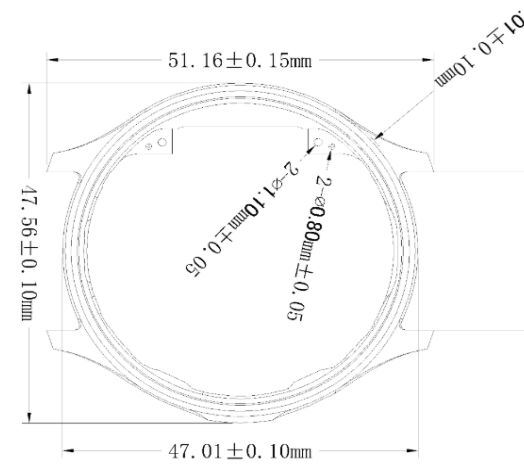
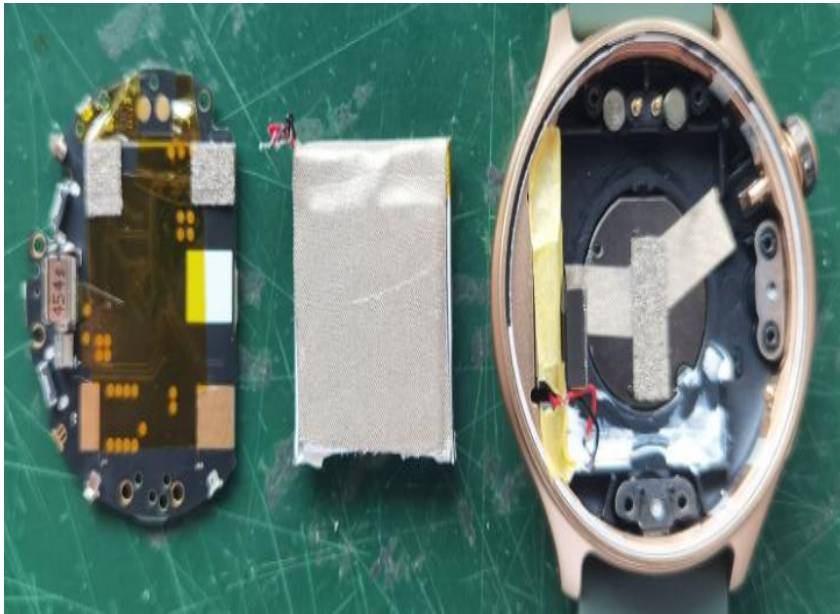


1, the main path position NC, string
3.6 NH, position NC, 0 ohm

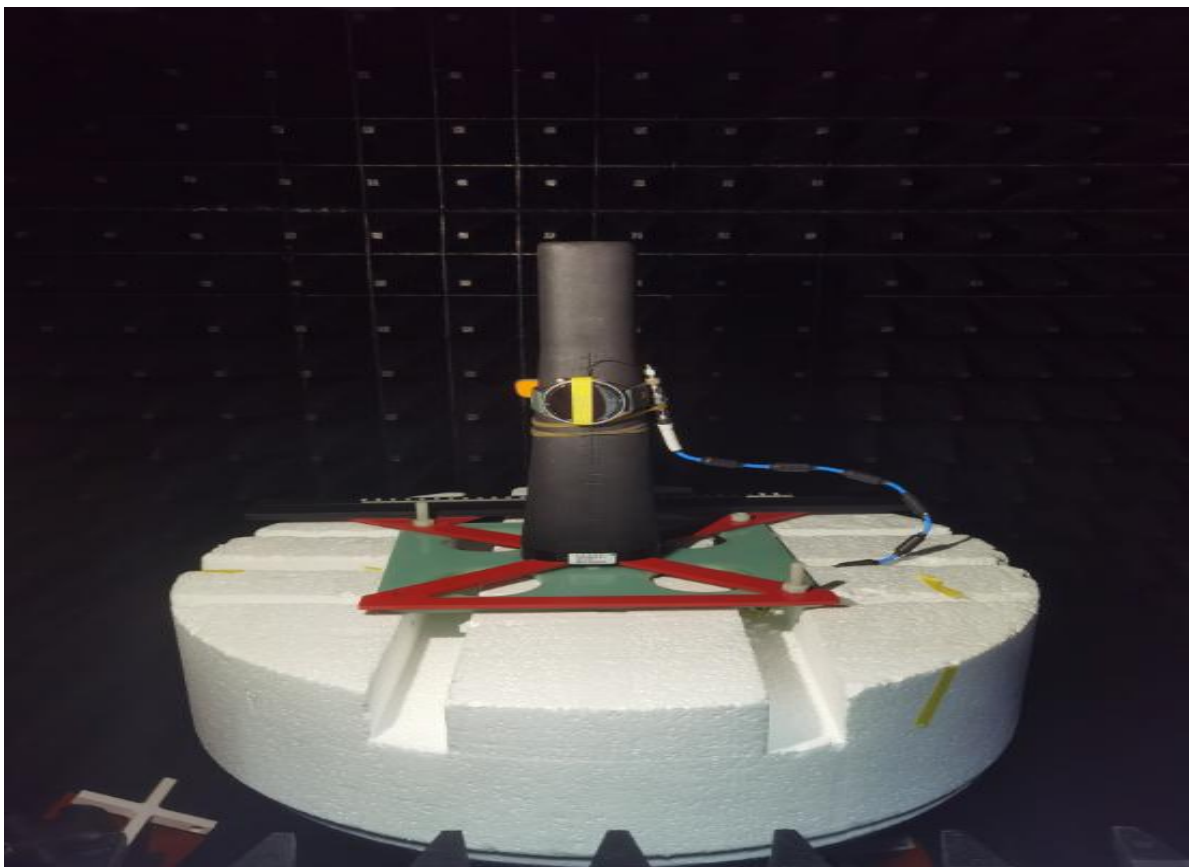


1. At five o'clock, back to 0 euro, all
other GND are removed

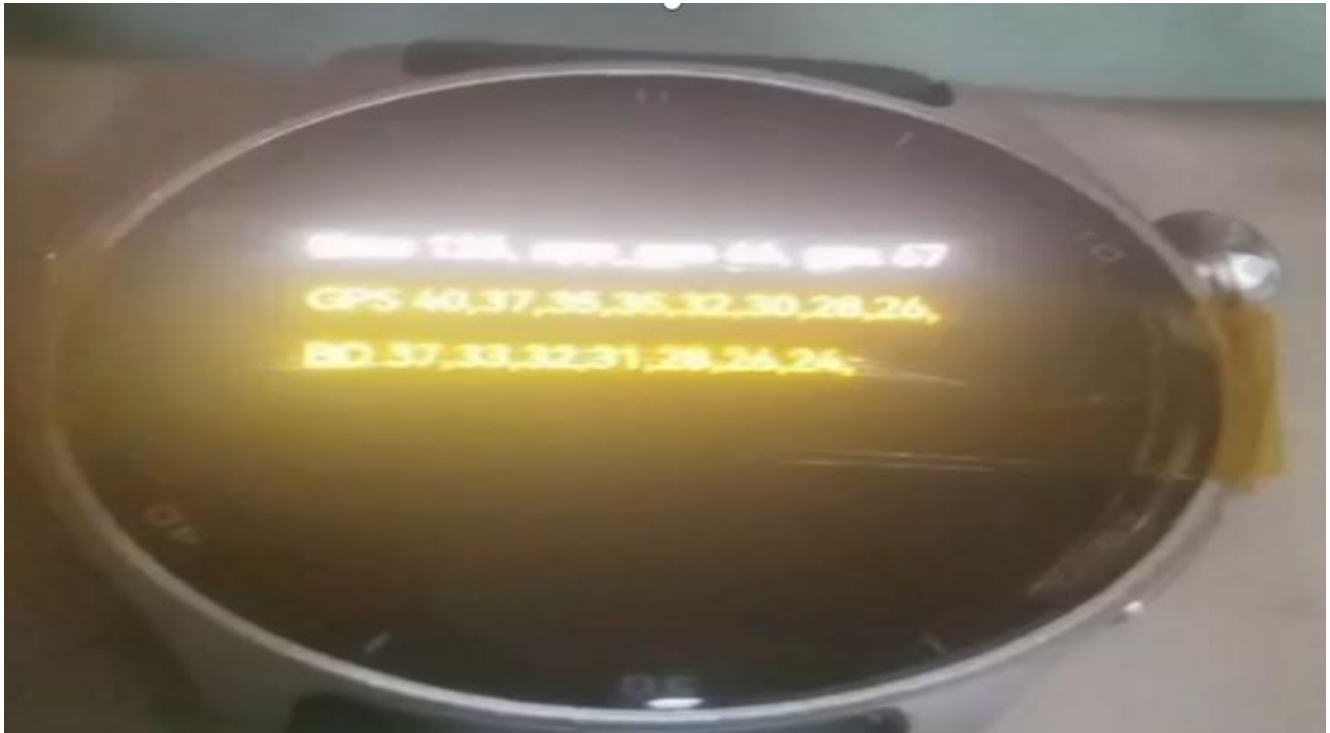
2.2.7 Environmental treatment



2.2.8 Antenna test environment



2.2.9 The CN value test of the whole machine



2.3 Summary

1. Environmental treatment is shared with CW 06 G
2. Heart rate board FPC is shielded with conductive cloth; heart rate plate is grounded with battery sponge; the battery is especially protected Plate here; horn insulation with insulating paper; battery wire and horn line welding line according to the requirements