



深圳市昱晟通讯设备有限公司  
Yusheng Communications-equipment Co.,LTD

**Xingmai GTX2Antenna Specifications**

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Project phase		TEL	13797995807

time	Report Version	Main content
2024/05/13	V0.1	Initial Commissioning Report
2024/06/01	V0.2	Antenna Optimization Report
	V0.3	Trial production prototype optimization report
	V0.4	Replace screen antenna optimization report

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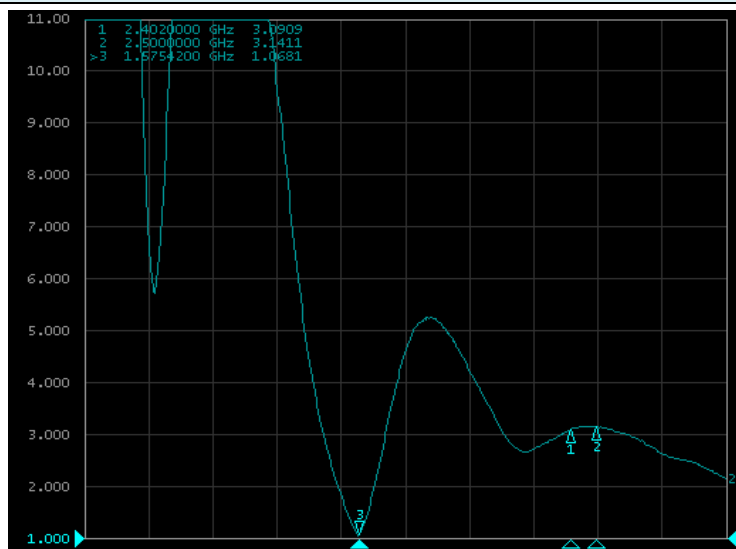
## GTX2 Antenna Specifications

### Main contents of the report

#### Antenna debugging results:

1. Arm GPS antenna efficiency debugging is about 7%,
2. Arm BT antenna efficiency debugging is about 6%

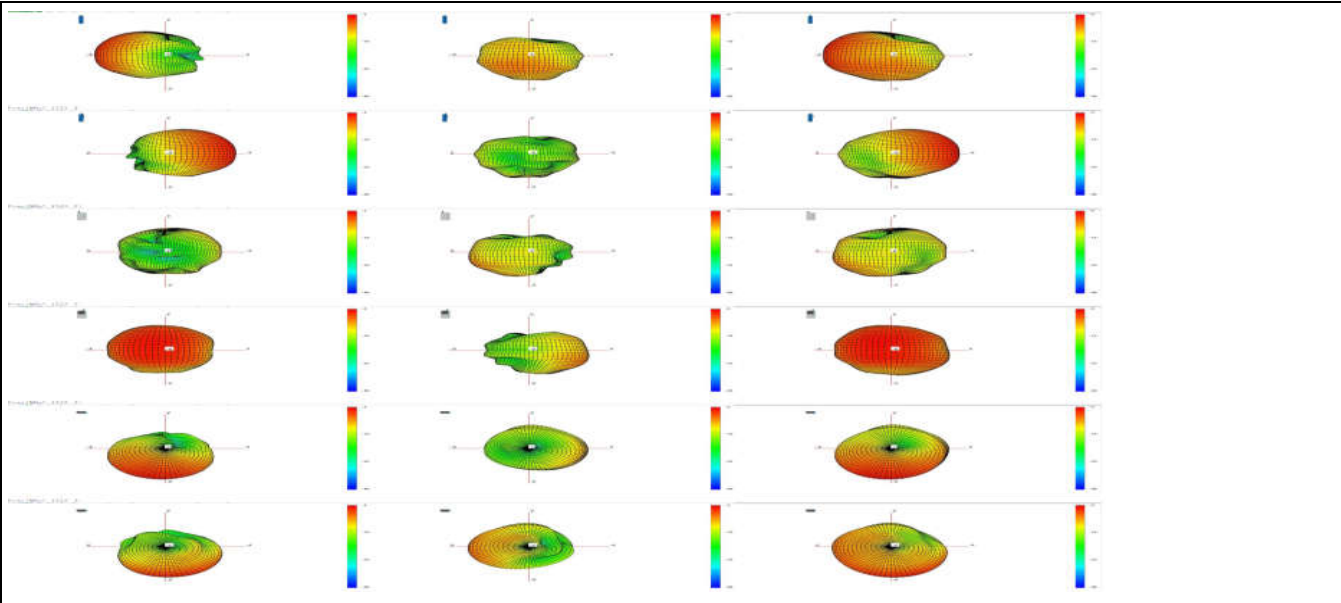
### GPS/BT Passive Diagram



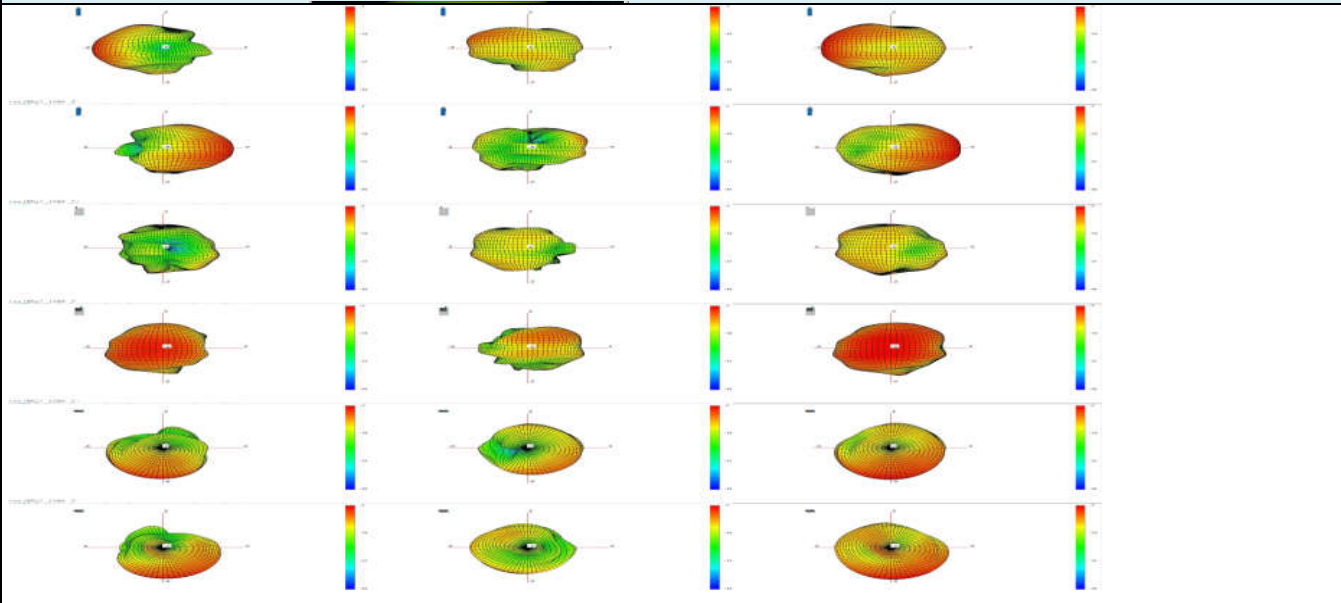
### Antenna efficiency parameter test results

BT Arm	Frequency	efficiency%	efficiencydb	Gain	GPS Arm	Frequency	efficiency%	efficiencydb	Gain
	2400	5%	-13.2	-8.1		1550	6%	-12.4	-7.6
	2410	5%	-13.0	-7.7		1555	6%	-12.1	-7.3
	2420	5%	-12.8	-7.5		1560	7%	-11.8	-6.8
	2430	6%	-12.4	-7.2		1565	7%	-11.5	-6.5
	2440	6%	-12.2	-7.0		1570	7%	-11.3	-6.2
	2450	6%	-12.0	-6.6		1575	7%	-11.6	-6.3
	2460	6%	-12.4	-6.9		1580	7%	-11.9	-6.6
	2470	6%	-12.5	-7.3		1585	6%	-12.0	-7.2
	2480	5%	-12.8	-7.6		1590	6%	-12.5	-7.5
	2490	5%	-13.1	-7.9					
	2500	5%	-13.3	-8.2					

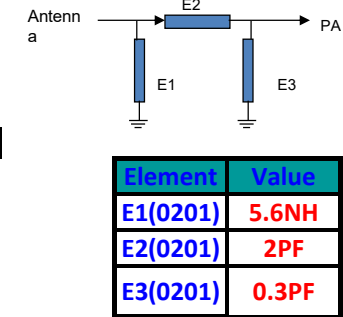
### 1575MHZ passive radiation pattern/field diagram



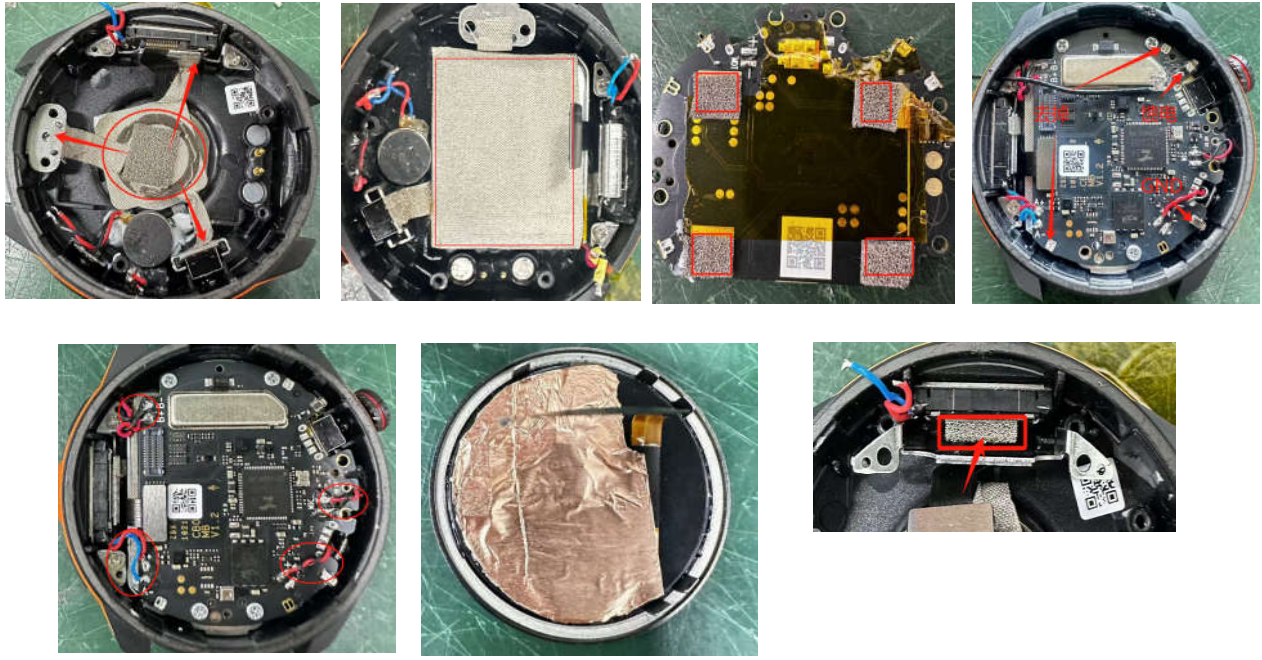
2450MHZ passive radiation pattern/field diagram



GPS Matching



Environmental treatment

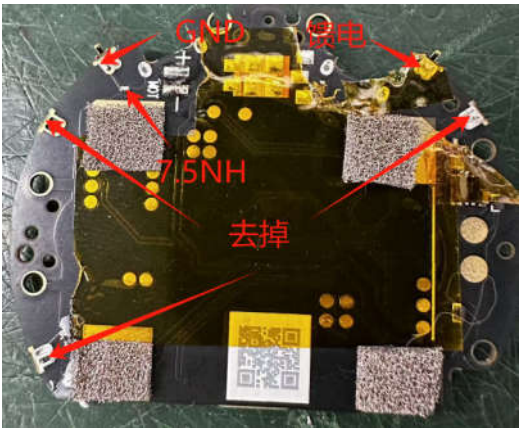


The whole machine environment is processed as shown in the figure.  
 The battery, speaker, motor, and microphone wires are wound as shown and placed on the inner side of the motherboard.  
 Screen cable copper foil shielding cover processing

N value test of the whole machine



Special attention



Summarize
<p>1. Environmental treatment should be grounded according to the diagram above:</p> <ul style="list-style-type: none"><li>(1) Conductive cloth shielding battery</li><li>(2) Heart rate small board iron sponge grounding</li><li>(3) Horn magnet and horn iron plate grounding</li></ul>