

R19 项目天线规格书

R19 Project antenna material requirements specification

客户名称： 深圳市爱保护科技有限公司

customer name : Shenzhen Aiprotection Technology Co., LTD

项目型号： R19

Project model: R19

产品名称： FPC 天线

product name : FPC antenna

产品规格： 详见 BOM 清单

Product specification: See the BOM list for more details

物料编码：

Material code:

变更内容履历 Change Content CV: :

序号 NO	版本 edition	状态 status	生效日期 availability date	责任人 person liable	页码 pagination	备注 remarks
1	初版 first edition	初版 first edition	2023-06-05	钟秋鸿 ZhongQiuhong	11	

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开发设计工程师/日期 Development & Design Engineer / Date	SQE 工程师/日期 SQE Engineer / Date	采购负责人/日期 Purchasing Leader / Date	开发部经理批准/日期 Development Manager approval / date

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1.概述 Overview

1.1 适用范围 scope of application

本要求规定了 R19 产品的天线技术要求和物料需求规范。

This requirement specifies the antenna technical requirements and material requirements specifications for R19 products.

本要求适用于 R19 产品的天线选型、测试和验收。

This requirement is applicable to the antenna selection, testing and acceptance of R19 products.

1.2 项目基础信息 Basic information of the project

天线名称： Antenna name:	<u>R19</u>
天线频段： Antenna band:	BT:2.4GHz-2.5HGz
天线材质： Antenna material:	Electrolytic copper + gold plating + coaxial welding

2.技术指标要求 Technical index requirements

2.1 测试项目及设备介绍 Introduction of the test items and the equipment

清单 inventory	测试项目 test item	设备 equipment
有源测试 Active test	TRP,TIS	综合测试仪、微波暗室 Integrated tester, microwave darkroom

2.2 有源报告 Active Reporting

2.2.1 测试说明 test specification

测试工具：Agilent8960综测仪、R&SCMW500、全电波远场ETS暗室，高精度定位系统及其控制器和带自动测试程序的电脑

测试环境：温度 $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$ ，湿度 $50\% \pm 15\%$

测试方法：DUT以H面放于转台中心位置固定，与喇叭天线中心位置在同一个水平线上。

定位系统使 DUT 在整个球面进行旋转，满足高精度的三维定位。各射频仪器、转台控制器与带自动测试软件的 PC 通过 GPIB 接口进行通信

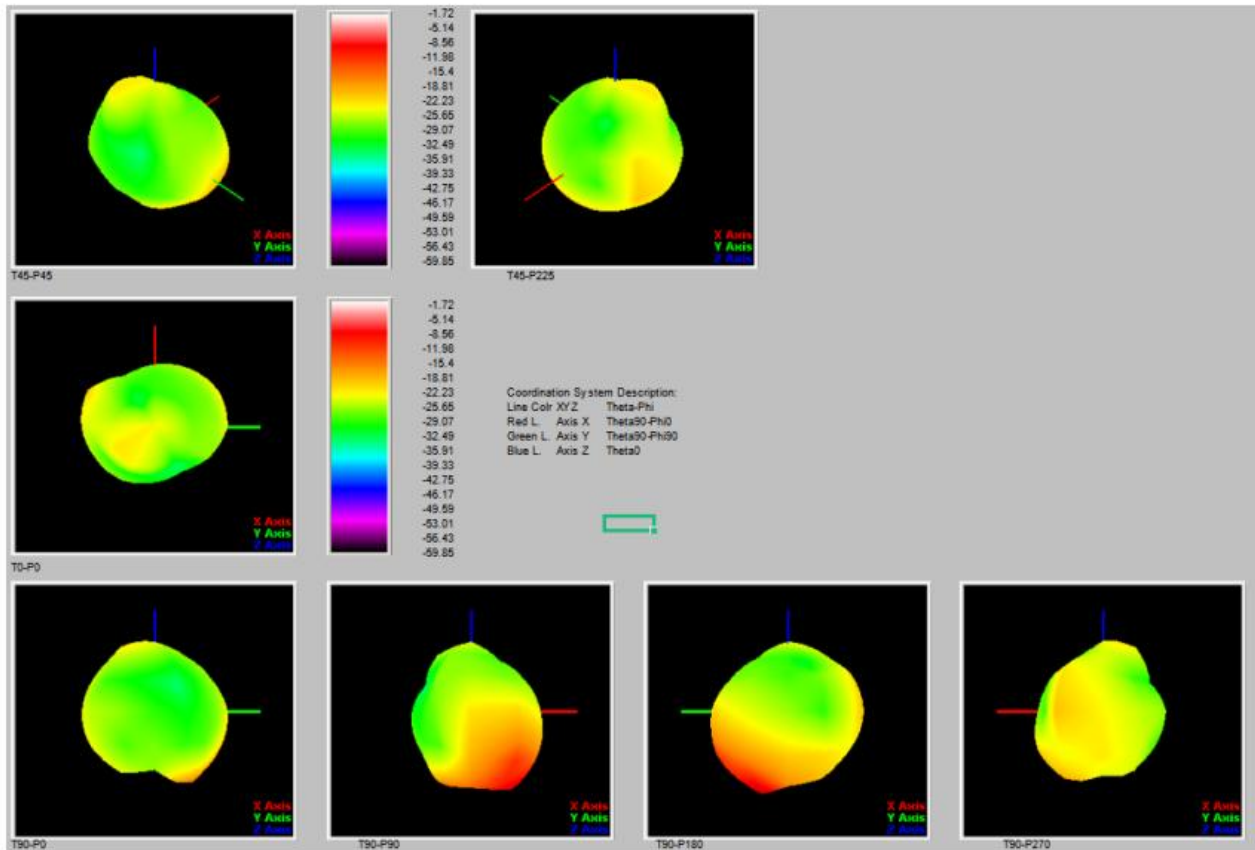
Test tools: Agilent8960 instrument, R & SCMW500, full wave far field ETS dark room, high precision positioning system and its controller and computer with automatic test program
Test environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity $50\% \pm 15\%$
Test method: The DUT is fixed in the center of the turntable with the 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

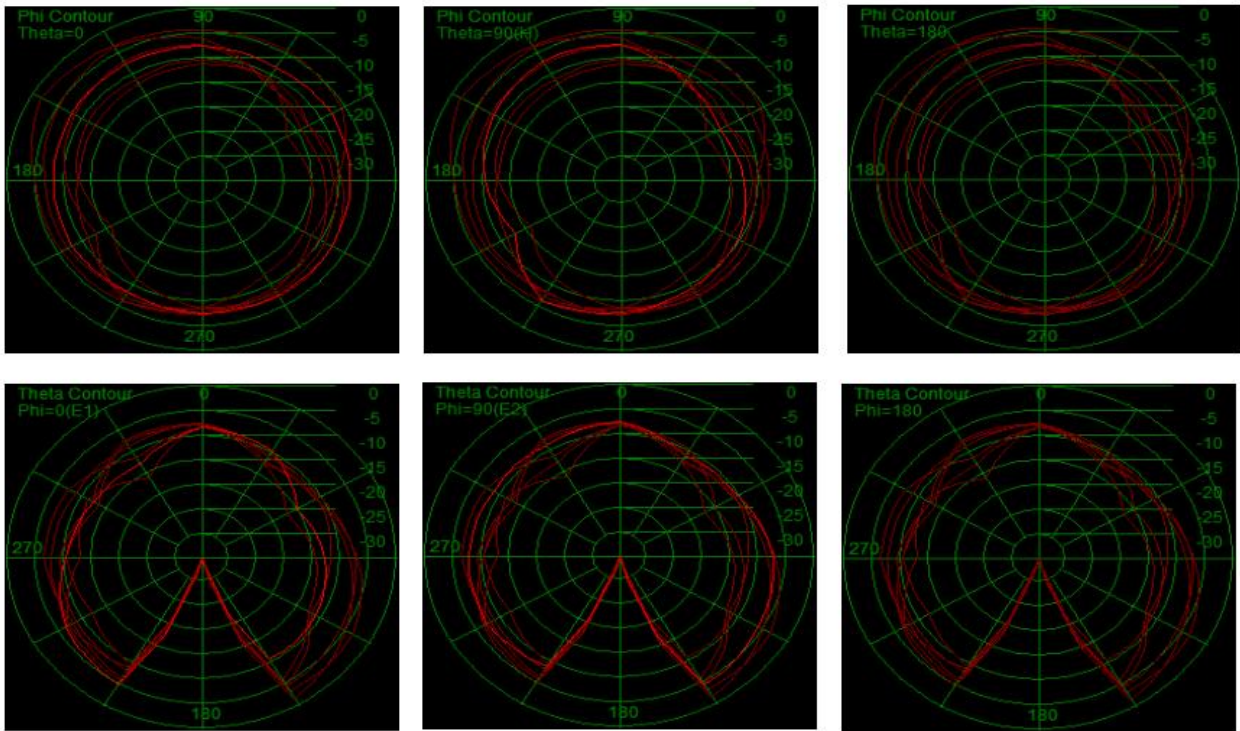
2.2.2 BT 无源参数 BT passive parameter

Passive Test		
BT		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400.0	10.2%	-2.08
2410.0	10.4%	-2.01
2420.0	10.8%	-1.95
2430.0	11.0%	-1.89
2440.0	11.3%	-1.84
2450.0	11.7%	-1.80
2460.0	12.0%	-1.76
2470.0	11.6%	-1.81
2480.0	11.4%	-1.83
2490.0	11.1%	-1.88
2500.0	10.9%	-1.92

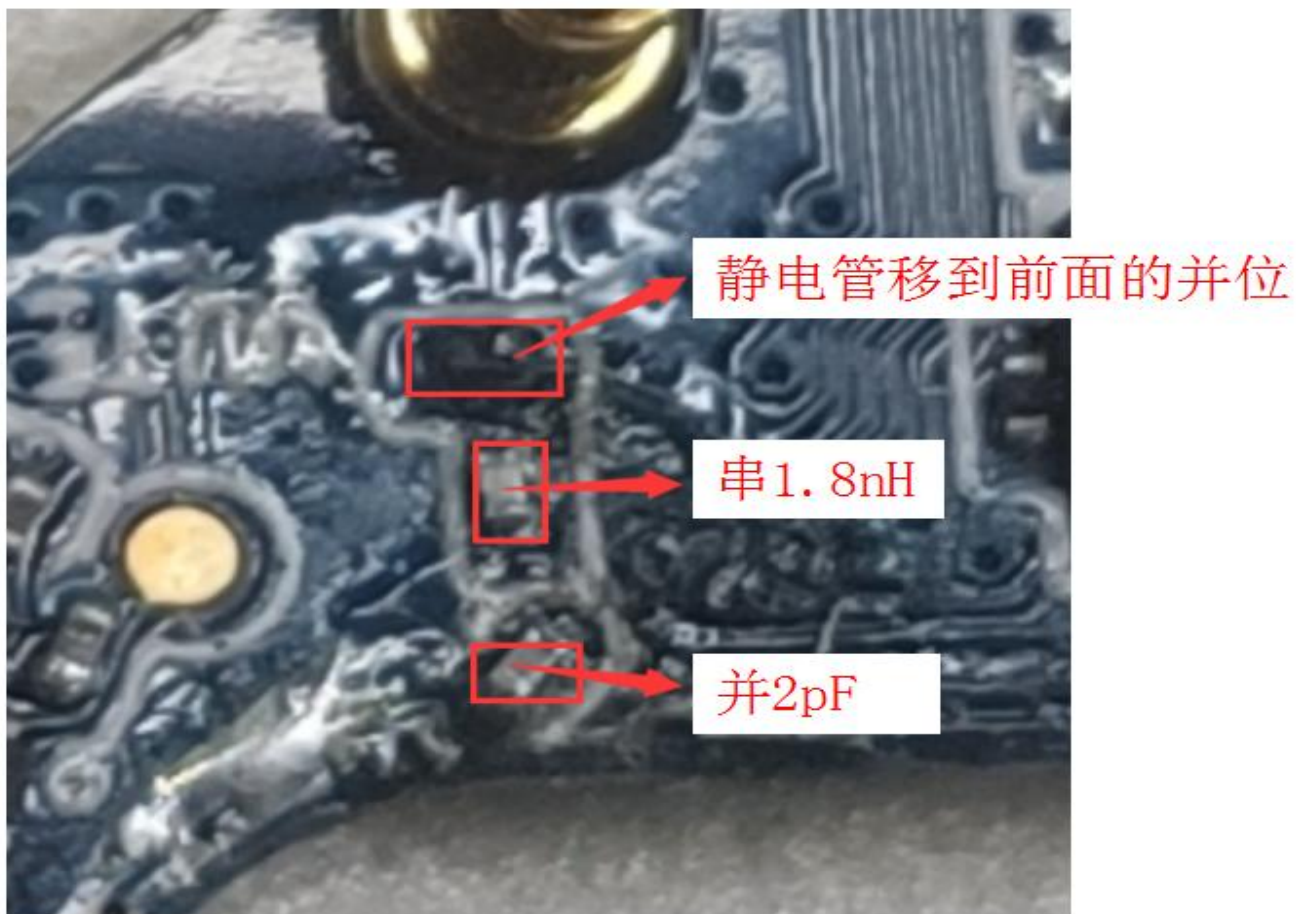


2.2.3 天线无源参数 Antenna passive parameter

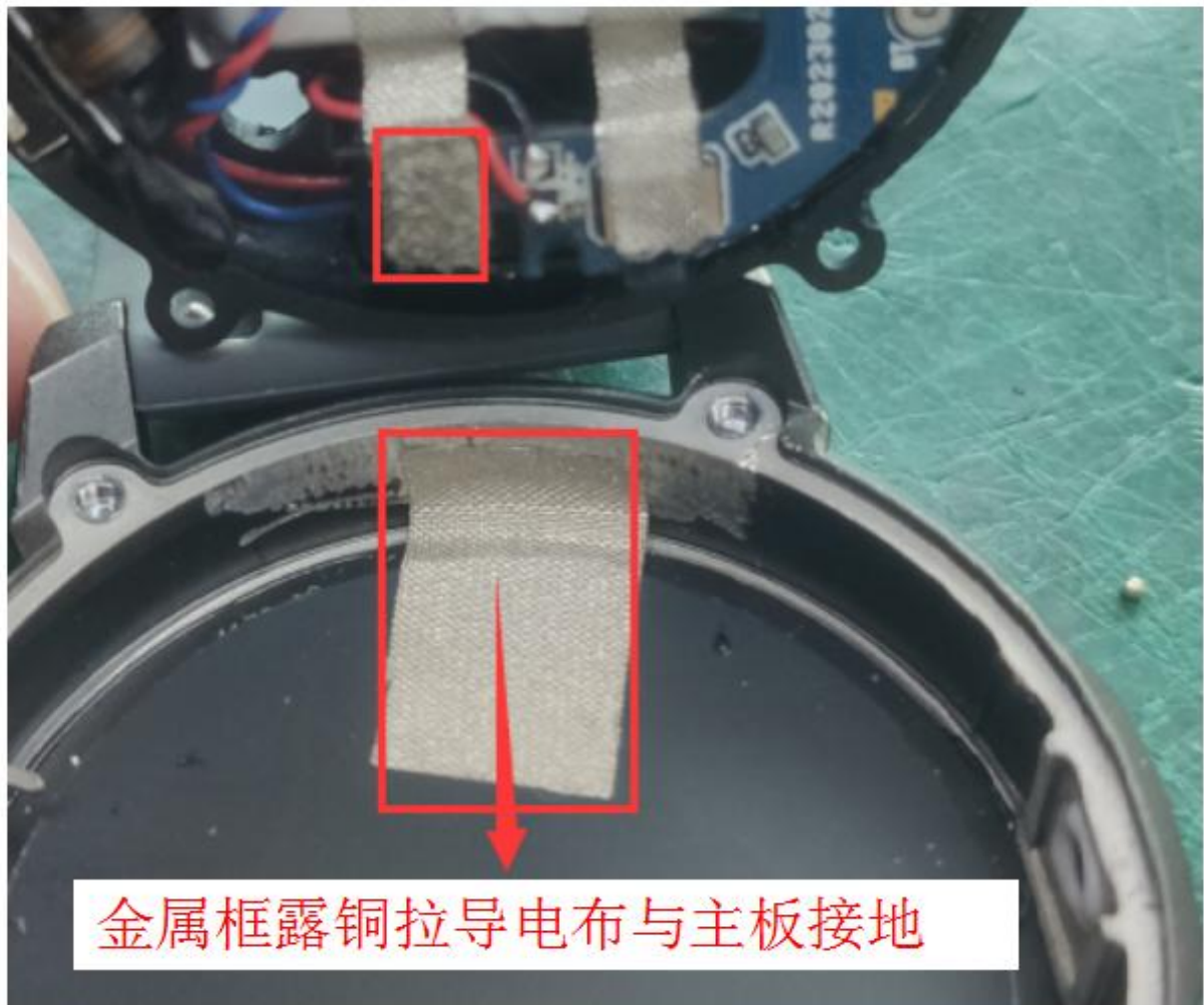
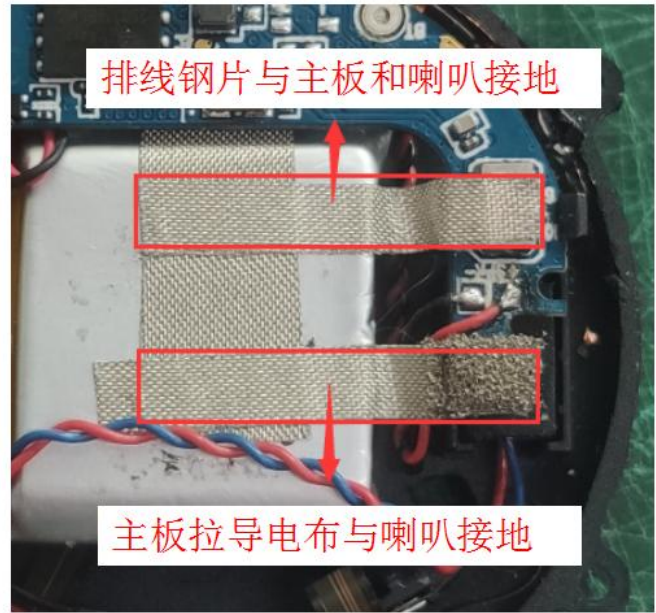
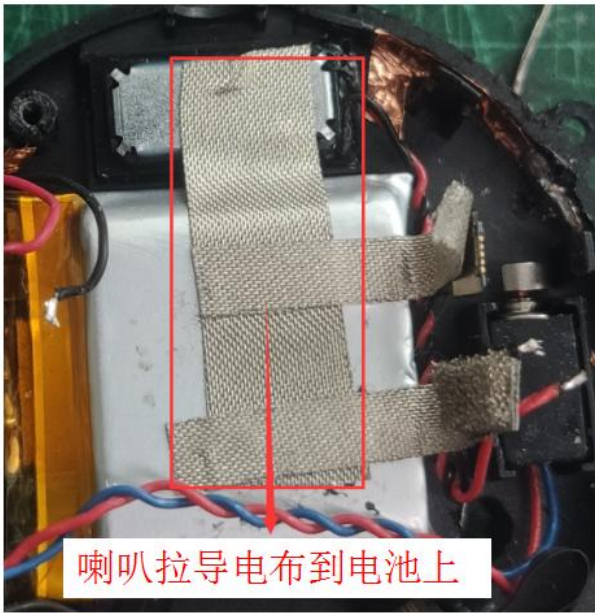




2.2.4 主板匹配 Motherboard matching



2.3.5 环境处理 Environmental treatment



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4.物料清单 BOM Bill Of Material BOM

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YUSHENG COMMUNICATION TECHNOLOGY CO.,LTD.

413012(R19)-BOM 表

Edition/版本: R:A client/机种:413 Model/项目: R19 date/日期: 20230605

Item	Part No 项次	Name 名称	Types of 类型	version n 版本	specification 规格	Material quality 材质	colour 颜色	Craft 表面 处理	unit 单位	Quantity 数量
1	413012-I A	BT 天线 BT antenna	Z	R:A	16.38*6.46*0.12mm	电解铜 1 对半 Electrolyzed copper 1 half	黑色 black (colour); blackness	镀金 gold-plating	PCS	1
1.1	413012-I A-01	BT 天线-FPC BT antenna-FPC	B	R:A	16.38*6.46*0.12mm	电解铜 1 对半 Electrolyzed copper 1 half	黑色 black (colour);	镀金 nickelage; nickeling	PCS	1

以上部件满足 ROHS2.0 HF 到达 GP 的环境要求

The above parts meet the environmental requirements of ROHS2.0 HF Reach GP

类型: W.外包 B. 半成品 Z.成品 C. 客户的供应

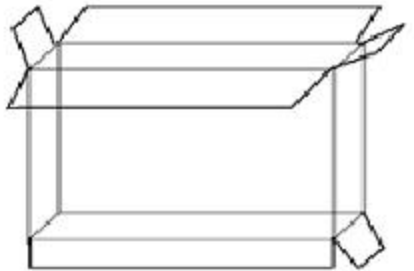
Type: W. Outsourcing B. Semi-finished products Z. Finished products C. Customer supply

确认 Confirmation:

审核 Review:

制作 Production: XMH

5.包装示意图 Schematic diagram of packaging

包装方式图 Packing pattern drawing																				
产品名称 Product name	FPC 天线 FPC antenna																			
料号 Material number	413012																			
装箱明细 Packing details	纸箱尺寸 1 Carton Size 1: 270*260*200MM 纸箱尺寸 2 Carton Size 2: 260*200*200MM 纸箱尺寸 3 Carton Size 3: 根据订单数量/体积而定 Subject to order quantity/volume																			
	装箱方式 Packing method		按订单数量包装 Packing as per order quantity																	
	装箱总数 Total number of cases		按订单数量包装 Packing as per order quantity																	
标签要求 Label requirement	标签尺寸 Label Size 1: 通用 100*100mm Universal 100*100mm 标签尺寸 2 Label Size 2: 根据客户要求 According to customer requirements	<table border="1"> <tr> <td colspan="2">深圳市昱晟通讯设备有限公司</td> </tr> <tr> <td colspan="2">SHENZHEN YUSHENG COMMUNICATION EQUIPMENT CO., LTD</td> </tr> <tr> <td>Customer name 客户名称</td> <td>*****</td> </tr> <tr> <td>Order reference 订单编号</td> <td>*****</td> </tr> <tr> <td>Project name 项目名称</td> <td>*****</td> </tr> <tr> <td>Material code 物料编码</td> <td>*****</td> </tr> <tr> <td>Quantity 出货数量</td> <td>****PCS</td> </tr> <tr> <td>Date 出货日期</td> <td>*****</td> </tr> <tr> <td colspan="2">Address: 407-411, Floor 4, Building 2, Yuntai Chuanggu Park, southeast of the intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen</td> </tr> </table>	深圳市昱晟通讯设备有限公司		SHENZHEN YUSHENG COMMUNICATION EQUIPMENT CO., LTD		Customer name 客户名称	*****	Order reference 订单编号	*****	Project name 项目名称	*****	Material code 物料编码	*****	Quantity 出货数量	****PCS	Date 出货日期	*****	Address: 407-411, Floor 4, Building 2, Yuntai Chuanggu Park, southeast of the intersection of Guangming Avenue and Dongchang Road, Guangming District, Shenzhen	
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注意事项 Matters needing attention 1.因订单数量限制，每款物料的装箱方式根据订单总数量或者实物体积选择箱子大小 Due to the quantity limitation of the order, the packing method of each item shall be based on the total quantity of the order or the physical volume 2.保存温度：常温 Storage temperature: normal temperature 3. 保存条件：贮藏在阴凉干燥处 Storage condition: Store in a cool and dry place																				



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SHENZHEN YUSHENG COMMUNICATION EQUIPMENT CO., LTD

THOT