

**BSC300T Project Antenna Material
Requirements Specification**

Client : Wuhan Qiwu Technology Co.,Ltd.

Name : **BSC300T**

Material : Steel sheet

Specifications : Please see the BOM list for details.

Material Code :

Table of contents

1.Overview.....	3
1.1 Scope of application.....	3
1.2 Basic information of the project.....	3
2.Technical index requirements.....	3
2.1 Test items and equipment introduction.....	3
2.2.1 Test Description.....	3
2.2.2 GPS-Antenna passive parameters.....	4
2.2.3BT-1-Antenna passive parameters.....	4
2.2.4 BT-2-Antenna passive parameters.....	5
2.2.5 Environmental treatment.....	5
2.2.6 Antenna location.....	6
3. Engineering drawings.....	7
4. Bill of Materials.....	9
5. Packaging diagram.....	10

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements for BSC300T products.

This requirement applies to the antenna selection, testing and acceptance of BSC300T products.

1.2 Basic information of the project

Antenna Name:	BSC300T
Antenna frequency band:	GPS: 1575.42MHz BT: 2400MHz-2500MHz BT: 2400MHz-2500MHz
Antenna Material:	Steel sheet

2. Technical index requirements

2.1 Test items and equipment introduction

List	Test items	equipment
S11 Parameters	VSWR, return loss	Network Analyzer
Active test	TRP,TIS	Comprehensive tester, microwave darkroom
Passive test	Gain, efficiency	Network Analyzer

2.2.1 Test Description

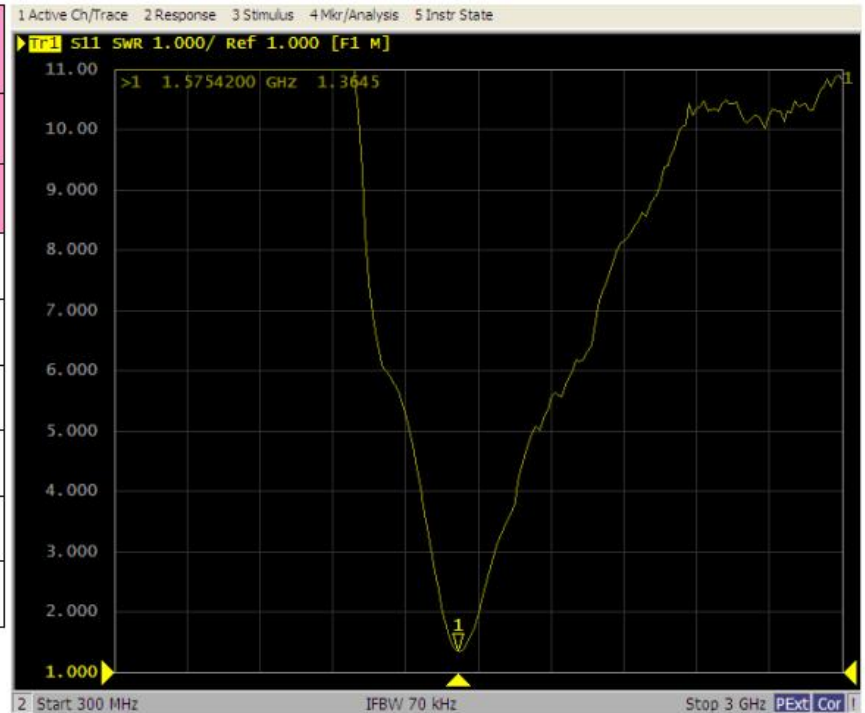
Test tools: Agilent8960 comprehensive tester, R&SCMW500, full radio wave far-field ETS darkroom, high-precision positioning system and its controller, and computer with automatic test program

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

Test method: The DUT is fixed with its H-surface at the center of the turntable, on the same horizontal line as the center of the horn antenna. The positioning system allows the DUT to rotate on the entire sphere, meeting high-precision three-dimensional positioning. Each RF instrument, turntable controller, and PC with automatic test software communicate via the GPIB interface.

2.2.2 GPS-antenna passive parameters

Passive Test		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
1560.0	45.3%	1.25
1565.0	47.5%	1.61
1570.0	49.1%	1.83
1575.0	50.5%	2.06
1580.0	49.2%	1.75
1585.0	47.4%	1.51



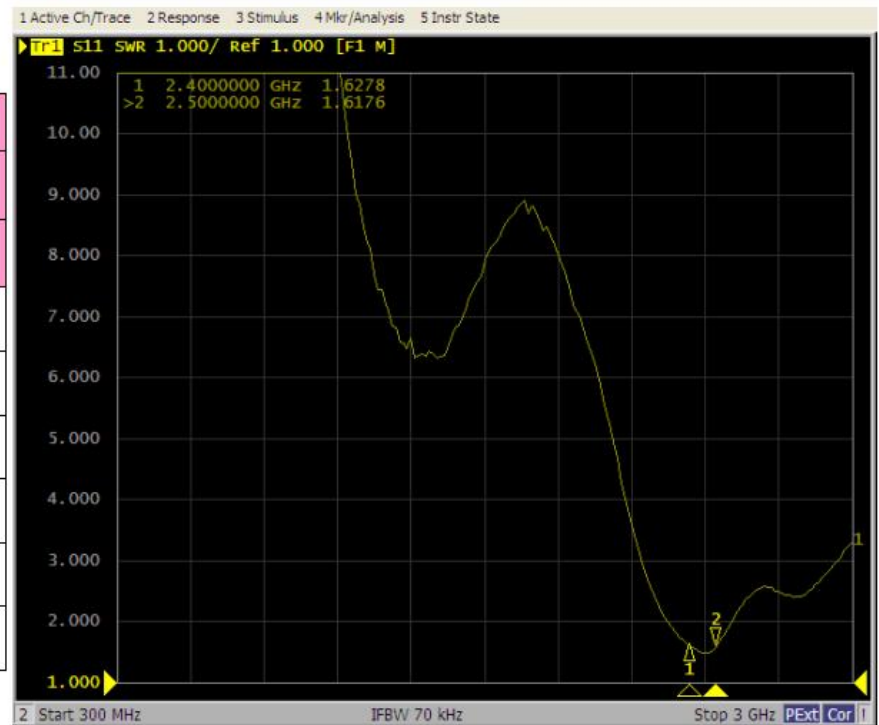
2.2.3BT-1- Antenna Passive Parameters

Passive Test		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400.0	40.3%	0.15
2420.0	42.5%	0.27
2440.0	44.1%	0.42
2460.0	45.8%	0.59
2480.0	45.0%	0.48
2500.0	43.2%	0.35



2.2.4 BT-2-antenna passive parameters

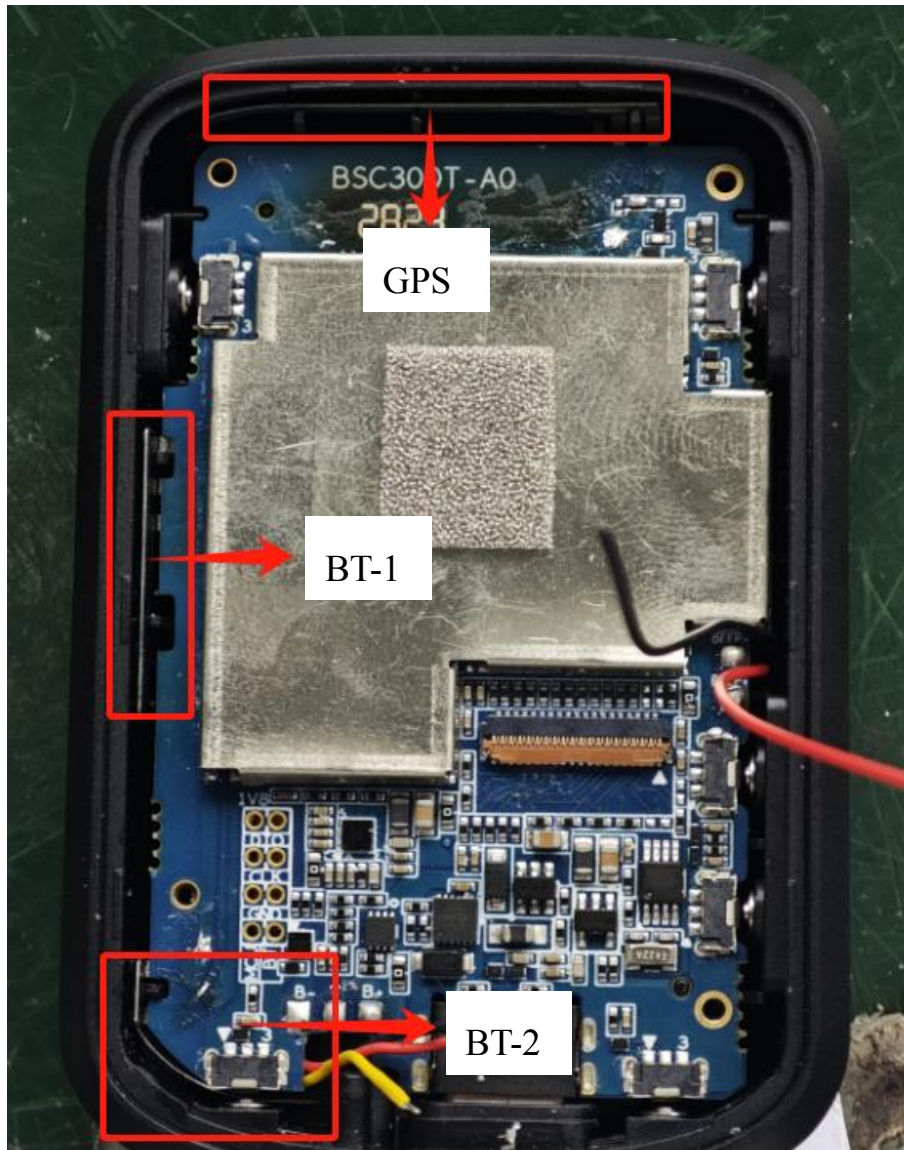
Passive Test		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400.0	35.4%	-0.27
2420.0	36.9%	-0.02
2440.0	38.2%	0.16
2460.0	40.1%	0.28
2480.0	38.5%	0.11
2500.0	36.4%	0.02



2.2.5 Environmental treatment

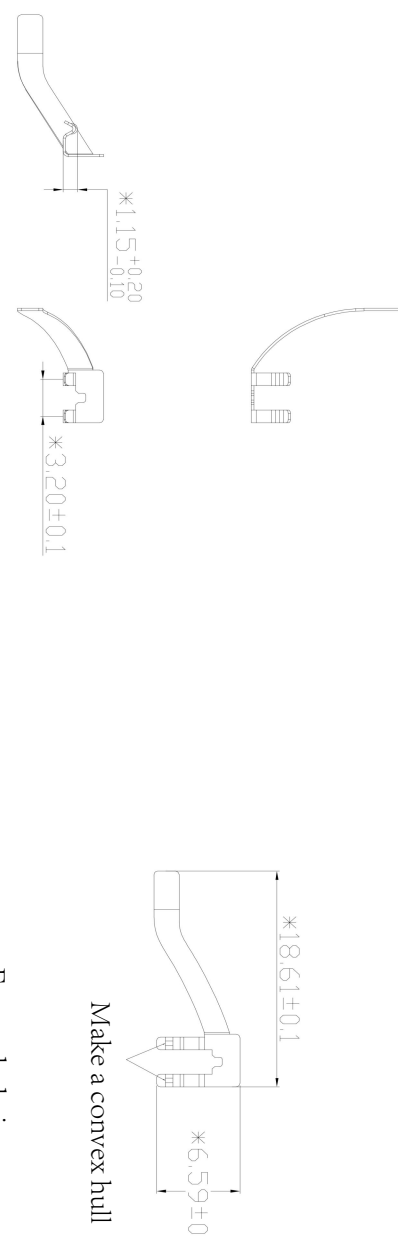


2.2.6 Antenna Location

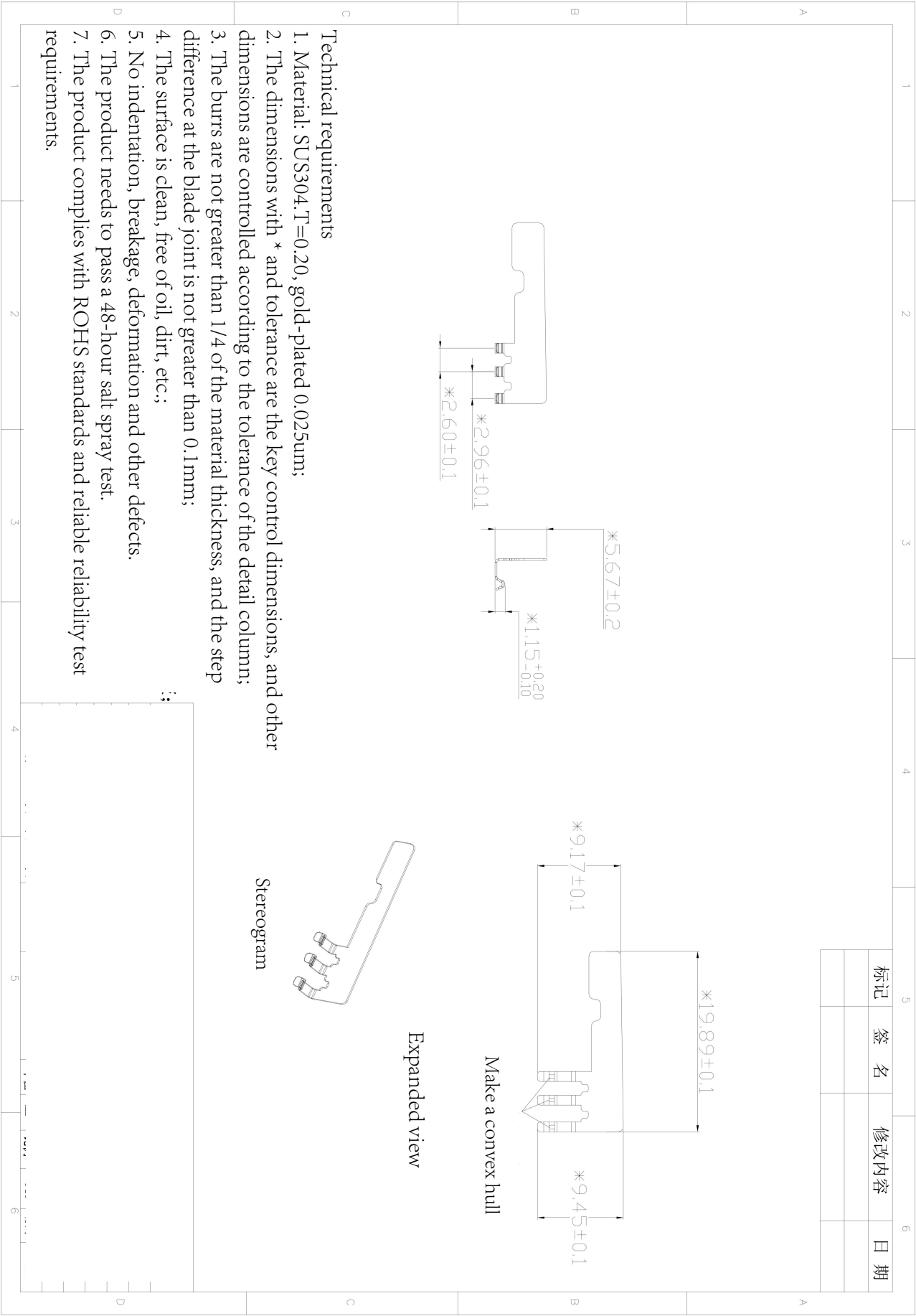


3. Engineering drawings

Steel sheet-1

1	2	3	4	5	6																																										
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">标记</td> <td style="width: 25%;">签 名</td> <td style="width: 25%;">修改内容</td> <td style="width: 25%;">日期</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	标记	签 名	修改内容	日期																																							
标记	签 名	修改内容	日期																																												
																																															
Technical requirements 1. Material: SUS304T=0.20, gold-plated 0.025um; 2. Dimensions with * and tolerance are key control dimensions, and other dimensions are controlled according to the tolerance of the detail column; 3. The burrs are not greater than 1/4 of the material thickness, and the step difference at the blade joint is not greater than 0.1mm; 4. The surface is clean, free of oil, dirt, etc.; 5. No indentation, fracture, deformation, etc. 6. The product needs to pass a 48-hour salt spray test. 7. The product meets ROHS standards and reliable reliability test requirements																																															
Stereogram  Expanded view																																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">第三视角</td> <td colspan="2" style="text-align: center;">项目名称</td> <td colspan="2" style="text-align: center;">日期</td> </tr> <tr> <td style="text-align: center;">0~3</td> <td style="text-align: center;">±0.05</td> <td style="text-align: center;">BSC300T</td> <td style="text-align: center;">设计</td> <td colspan="2" style="text-align: center;">20240808</td> </tr> <tr> <td style="text-align: center;">3~30</td> <td style="text-align: center;">±0.08</td> <td style="text-align: center;">BLE1 薄片</td> <td style="text-align: center;">审核</td> <td style="text-align: center;">MD</td> <td style="text-align: center;">BZ</td> </tr> <tr> <td style="text-align: center;">30~50</td> <td style="text-align: center;">±0.10</td> <td style="text-align: center;">产品料号</td> <td style="text-align: center;">批准</td> <td style="text-align: center;">RF</td> <td style="text-align: center;">ZJY</td> </tr> <tr> <td style="text-align: center;">50~80</td> <td style="text-align: center;">±0.12</td> <td style="text-align: center;">材料</td> <td colspan="3"></td> </tr> <tr> <td style="text-align: center;">角度</td> <td style="text-align: center;">±3°</td> <td style="text-align: center;">SUS304 T=0.20</td> <td style="text-align: center;">单位</td> <td style="text-align: center;">mm</td> <td style="text-align: center;">比例</td> </tr> <tr> <td colspan="2" style="text-align: center;">第 1 页, 共 1 页</td> <td colspan="2" style="text-align: center;">FIT</td> <td style="text-align: center;">版本</td> <td style="text-align: center;">R.A</td> </tr> </table>						第三视角		项目名称		日期		0~3	±0.05	BSC300T	设计	20240808		3~30	±0.08	BLE1 薄片	审核	MD	BZ	30~50	±0.10	产品料号	批准	RF	ZJY	50~80	±0.12	材料				角度	±3°	SUS304 T=0.20	单位	mm	比例	第 1 页, 共 1 页		FIT		版本	R.A
第三视角		项目名称		日期																																											
0~3	±0.05	BSC300T	设计	20240808																																											
3~30	±0.08	BLE1 薄片	审核	MD	BZ																																										
30~50	±0.10	产品料号	批准	RF	ZJY																																										
50~80	±0.12	材料																																													
角度	±3°	SUS304 T=0.20	单位	mm	比例																																										
第 1 页, 共 1 页		FIT		版本	R.A																																										

钢片-2





Shenzhen Yusheng Communication Equipment Co.,LTD

4. Bill of Materials



Shenzhen Yusheng Communication Equipment Co.,LTD

641005 (BSC300T) BOM表

Edition:T:A

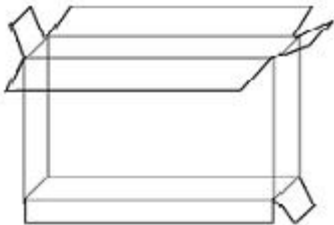
Customers: 641

Model:641005

Date:2024/08/21

Item	code	*name	model	Specification	Color	*Unit	Amount
1	641005-IA-TA	BLE_1 antenna finished product	BSC300T	SUS304 T=0.20MM Gold-plated 0.025um 6.59*18.61*0.2mm	gold	PCS	1
1.1	641005-IA-01-TA	BLE_1-Steel sheet	BSC300T	SUS304 T=0.20MM Gold-plated 0.025um	gold	PCS	1
2	641005-IB-TA	BLE_2 antenna finished product	BSC300T	SUS304 T=0.20MM Gold-plated 0.025um	gold	PCS	1
2.1	641005-IB-01-TA	BLE_2-Steel sheet	BSC300T	SUS304 T=0.20MM Gold-plated 0.025um	gold	PCS	1

5.Packaging diagram

Packaging diagram																
Product Name	Antenna assembly															
Part Number	641005															
Project Model	BSC300T															
Packing details	Carton size 1: 270*260*200MM Carton size 2: 260*200*200MM Carton size 3: Depends on order quantity/volume															
	Packing method	The minimum package is 100 pieces per bag, which are packed in waterproof bags one by one. A waterproof bag can hold up to 1,000 items.														
	Total number of packing	Packing according to order quantity														
Labeling requirements	Label Size 1: Universal 100*100mm Label Size 2: According to customer requirements	Shenzhen Yusheng Communication Equipment Co.,LTD <table><tr><td>客户名称</td><td>*****</td></tr><tr><td>订单编号</td><td>*****</td></tr><tr><td>项目名称</td><td>*****</td></tr><tr><td>物料编码</td><td>*****</td></tr><tr><td>数 量</td><td>***pcs</td></tr><tr><td>出货日期</td><td>****年**月**日</td></tr><tr><td colspan="2">地址：深圳市光明新区光明大道南太云创谷园区2栋4楼4A</td></tr></table>	客户名称	*****	订单编号	*****	项目名称	*****	物料编码	*****	数 量	***pcs	出货日期	****年**月**日	地址：深圳市光明新区光明大道南太云创谷园区2栋4楼4A	
客户名称	*****															
订单编号	*****															
项目名称	*****															
物料编码	*****															
数 量	***pcs															
出货日期	****年**月**日															
地址：深圳市光明新区光明大道南太云创谷园区2栋4楼4A																
Precautions																
1.Due to order quantity restrictions, the packing method for each material is based on the total order quantity or physical volume.																
2.Storage temperature: room temperature																
3.Storage conditions: Store in a cool and dry place																