Shenzhen Yusheng Communication Equipment Co., LTD

A1300 Project Antenna Material Requirements Specification

customer name: **Shenzhen Guanglian Zhitong Technology Co., Ltd**

Customer name: A1300

Product name: the left PCB ultra-acoustic antenna component

Product specification: customer supplied material ultrasonic, PCB + coaxial welding wire-left

Material code: 205-2044

Change Content CV:

order number	edition	state	Start and end date	person liable	page number	remarks
1	R:A	editio princeps	2022-07-01	Yuan Shujun	9	
2						

The Supplier acknowledges its signature:

Responsible person / date		IQC/ date	Review / Date	Approval / Date
MD	Feng Jiwu	Zhong Qiuhong	Zeng Xiang good	
RF	He lei			

The demander acknowledged the signature (please send it back after recognizing the signature):

Demander judgment result: □ qualified □ unqualified			
Development & Design Engineer / Date	SQE Engineer / Date	Purchasing Leader / Date	Development Manager approval / Date

catalogue

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for A1300 products.

This requirement is applicable to the antenna selection, testing and acceptance of A1300 products.

1.2 Project basic information

Antenna name:	A1300
Antenna band:	WIFI-2.4G/5.8G
Antenna material:	PCB + Coaxial welding wire-L
Antenna version:	V0.1

2. Technical index requirements

2.1 Introduction of test items and equipment

inventory	test item	equipment
S11 parameter	Standing wave ratio, echo loss	network analyzer
Active test	TRP,TIS	Comprehensive tester, microwave dark chamber
Passive test	Gain, efficiency	network analyzer

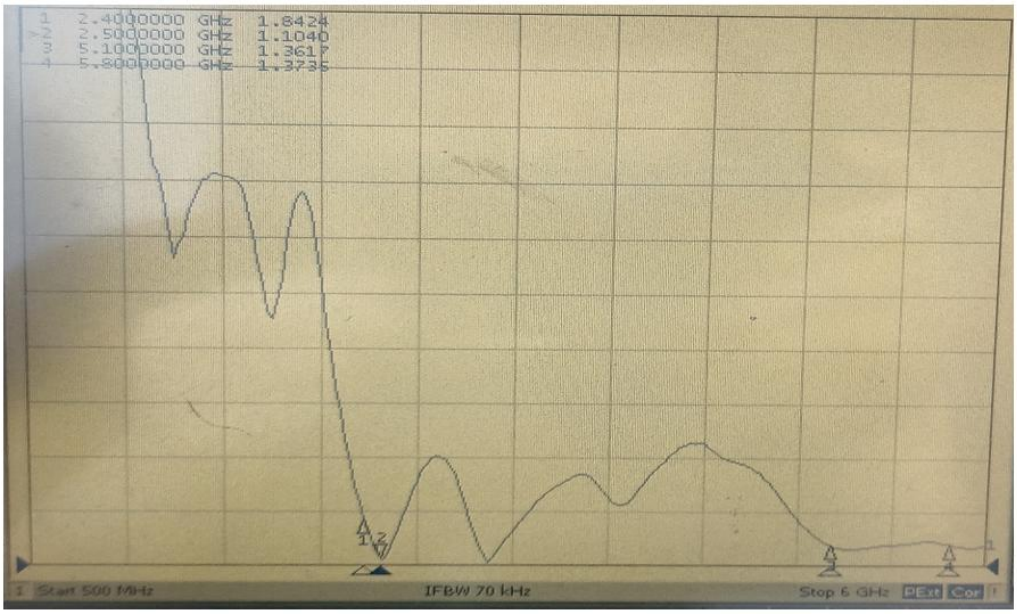
2.2.1 Test Instructions

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

Test environment: temperature 22℃± 3℃, humidity 50% ± 15%

Test method: The DUT is fixed in the center position of the turntable with the H surface, and it is on the same horizontal line as the center position of the horn antenna. The positioning system enables DUT to rotate in the whole sphere to satisfying high precision 3 D positioning. Each RF instrument and turntable controller communicate with the PC with automatic test software through the GPIB interface

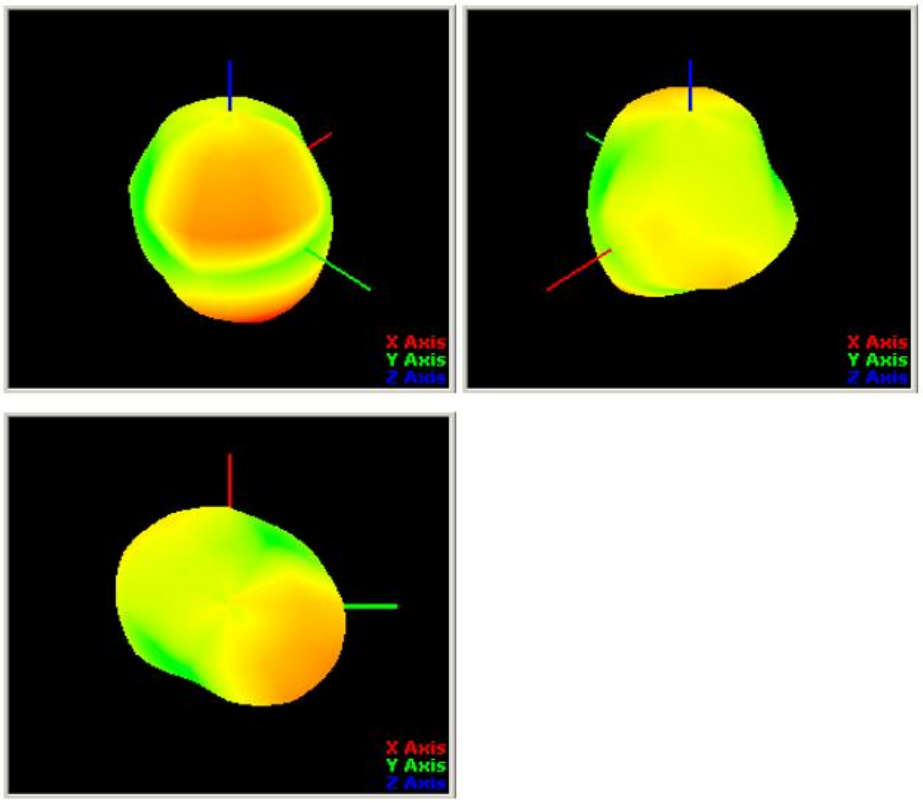
2.2.2 Antenna passive parameters



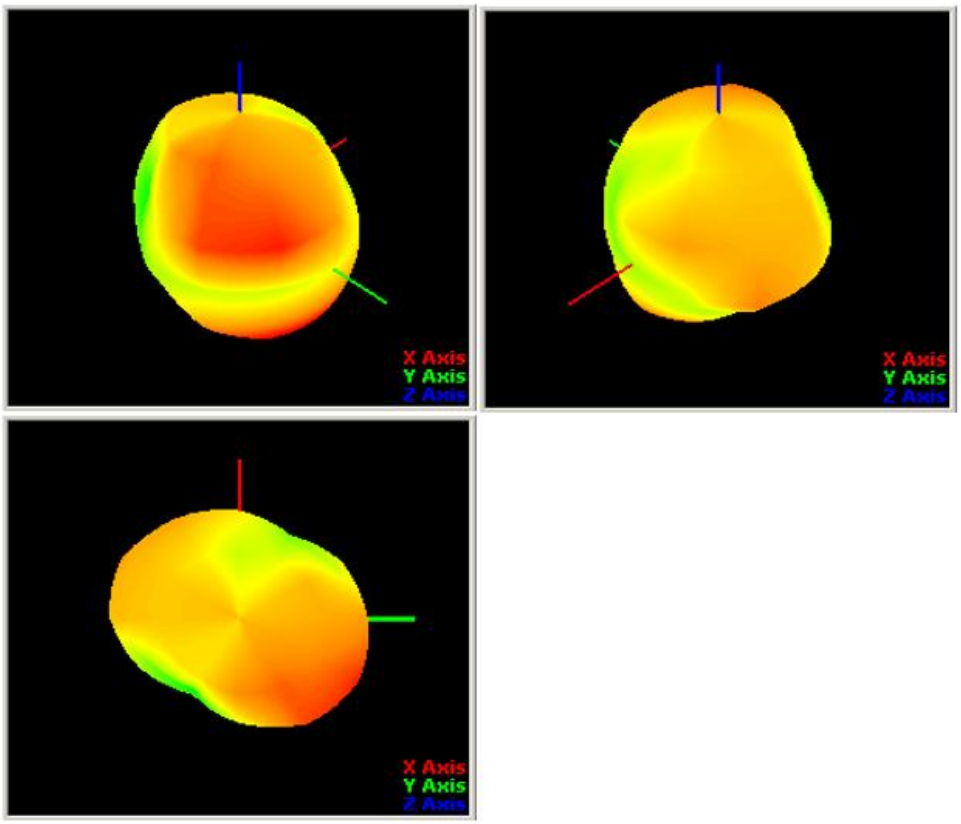
Test Point ID	1	2	3	4	5	6	7	8	9	10	11
Freq. (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	3.04	3.13	3.34	3.47	3.52	3.68	3.61	3.58	3.42	3.27	3.19
Efficiency (%)	60.3%	61.1%	61.9%	62.7%	63.8%	65.5%	64.4%	63.1%	62.2%	61.7%	61.3%

Test Point ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Freq. (MHz)	5100.0	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0
Gain (dBi)	3.56	3.78	3.93	4.03	4.11	3.99	3.84	3.62	3.47	3.28	3.45	3.68	3.81	3.69	3.61
Efficiency (%)	55.9%	57.7%	59.2%	60.3%	61.5%	62.8%	61.6%	61.5%	62.2%	60.4%	59.9%	58.3%	57.1%	56.6%	55.7%

2.2.3 Radiation Pattern For WIFI Antenna（2450MHz），Peak Gain：3.68dbi

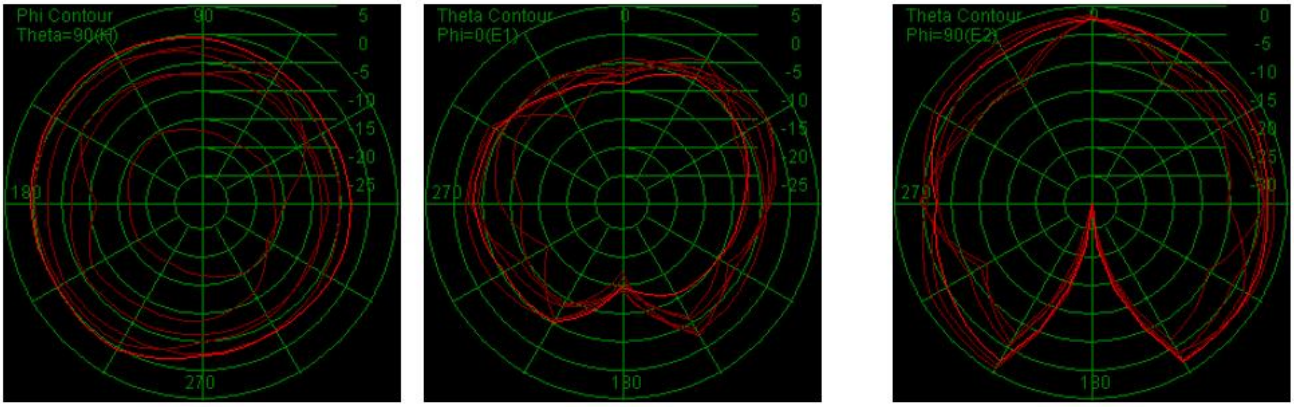


2.2.4 Radiation Pattern For WIFI Antenna（5300MHz），Peak Gain：4.11dbi



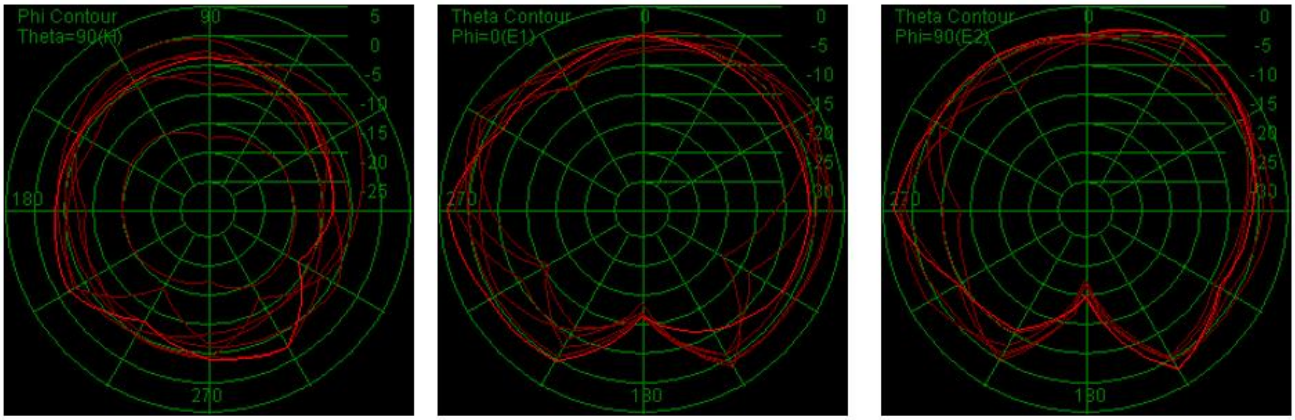
2.2.5 Antenna passive parameters-2.4G direction diagram

Thete=90（Phi=270° 为正前方）　　Phi=90°　　Phi=180°



2.2.6 Antenna passive parameter-5G direction diagram

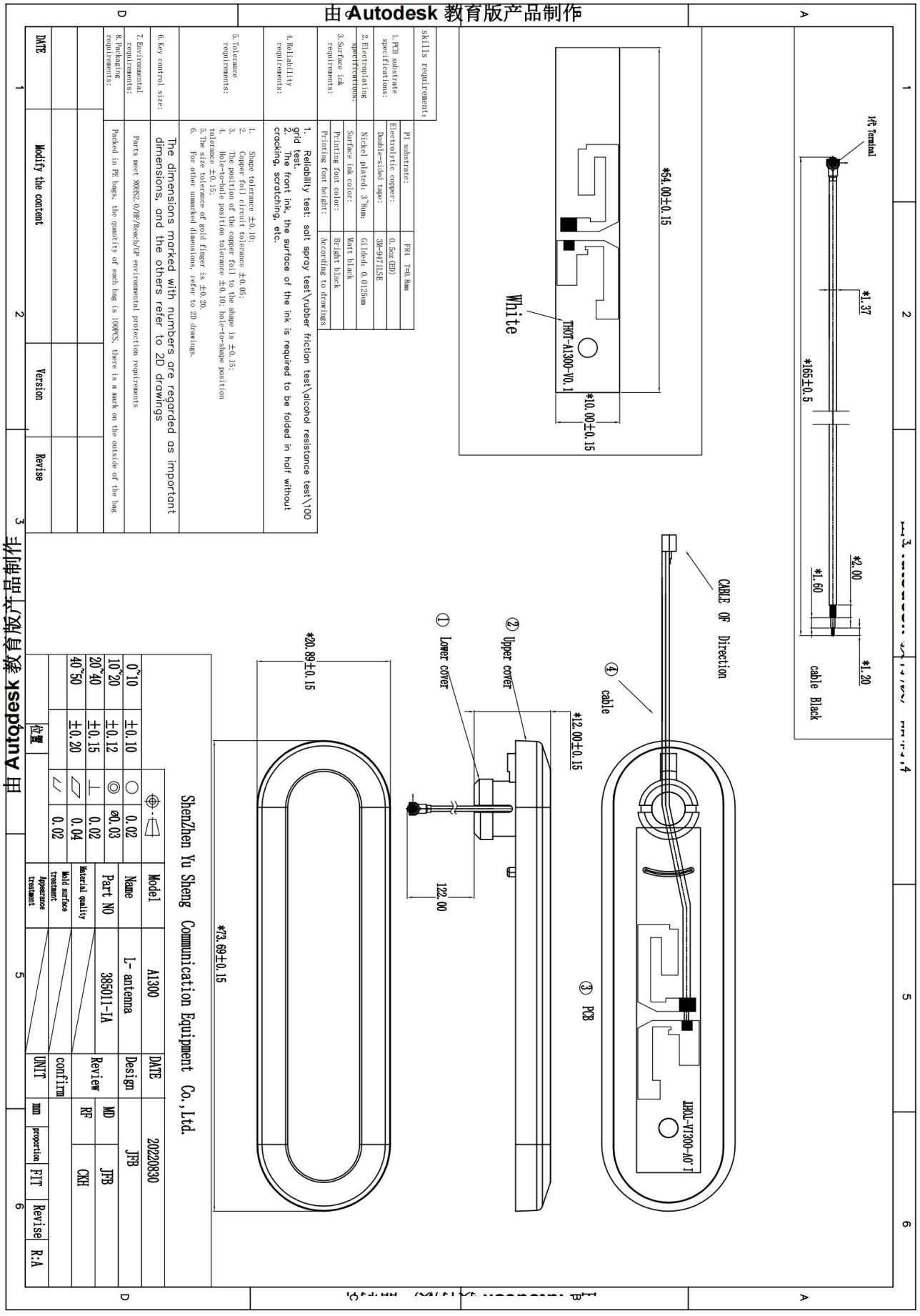
Thete=90（Phi=270° 为正前方）　　Phi=90°　　Phi=180°



2.3 Active parameters of the main antenna

Test	2.4WIFI B		
Result	1	6	11
TRP(dBm)	17.60	17.89	17.73
TIS(dBm)	-81.24	-82.23	-82.56

3.engineering drawing



4 Material list

YUSHENG COMMUNICATION TECHNOLOGY CO.,LTD.

385011(A1300)-BOM表

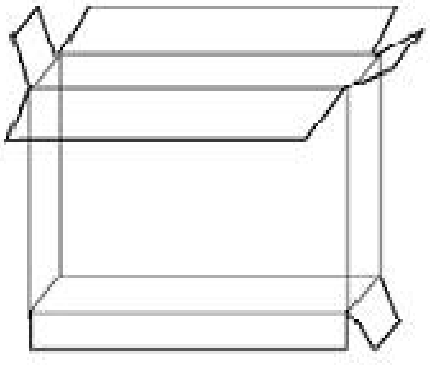
Edition: R.B　　client:381　　Model: 381008　　date: 20220321

NO	prat no	Name	Types of	version	specification	Material quality	unit	colour	Quantity	Craft
1	385011-IA	L-antenna	Z	T:A	73.69*20.89*12.59MM				PCS	1
1.1	385011-IA-01	L-PCB	Z	T: A	54.00*10.00*0.8MM	PCBT0.8MM	Tinning	Green	PCS	1
1.1.1	385011-IA-02	L-CABLE	Z	T: A	1.37*165MM	1.37 CABLE+1代 Terminal	Terminal Gilding	Black	PCS	1
1.2	385011-IA-03	Upper cover	Z	T: A	73.69*20.89*12.59MM	PC	Fine Lines	Black	PCS	1
1.3	385011-IA-04	Lower cover	Z	T: A		PC	Fine Lines	Black	PCS	1
2	385011-IB	R-antenna	Z	T:A	73.69*20.89*12.59MM				PCS	1
2.1	385011-IB-01	R-PCB	Z	T: A	54.00*10.00*0.8MM	PCBT0.8MM	Tinning	Green	PCS	1
2.1.1	385011-IB-02	R-CABLE	Z	T: A	1.37*103MM	1.37 CABLE+1代 Terminal	Terminal Gilding	Black	PCS	1
2.2	385011-IB-03	Upper cover	Z	T: A	73.69*20.89*12.59MM	PC	Fine Lines	Black	PCS	1
2.3	385011-IB-04	Lower cover	Z	T: A		PC	Fine Lines	Black	PCS	1

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

Confirmation:　　Review:　　Production: FJW

5. Packaging schematic diagram

<table>
<tr><td colspan="3">Packaging method diagram</td></tr>
<tr><td>product name</td><td colspan="2">Antenna components</td></tr>
<tr><td>P / N</td><td colspan="2"></td></tr>
<tr><td>Project model</td><td colspan="2">A1300</td></tr>
<tr><td rowspan="3">File details</td><td>Carton Size 1:
270*260*200MM
Carton Size 2:
260*200*200MM
Carton Size 3:
Depending on the order quantity / volume</td><td>  </td></tr>
<tr><td>Boating method</td><td>Minimum package * * * a bag, in turn with waterproof bags, a waterproof bag with a maximum of * * * materials</td></tr>
<tr><td>Total number of binning</td><td>Package by order quantity</td></tr>
<tr><td>labeling requirement</td><td>Tag Size 1:
Universal purpose 100 * 100mm
Tag Size 2:
According to customer requirements</td><td>深圳市昱晟通讯设备有限公司
<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></td></tr>
<tr><td colspan="3">matters need attention</td></tr>
<tr><td colspan="3">1. Due to the limit of order quantity, the packing method of each material is the box size according to the total order quantity or physical volume</td></tr>
<tr><td colspan="3">2. Storage temperature: room temperature</td></tr>
<tr><td colspan="3">3. Preservation conditions: Store in a cool and dry place</td></tr>
</table>

(This diagram shows the packaging diagram of this project, subject to the mass production object)