

# 产品规格承认书

Product specifications  
acknowledgment

承认厂商: \_\_\_\_\_

(Recognized manufacturers)

制造厂商: 深圳市蝙蝠无线技术有限公司

(Manufacturer)

产品名称: 北斗\GPS 有源陶瓷天线

(Description)

## 产品选型表:

(Product Type)

型号	说明	备注
BWGPSCNX20-20AY4L120	A 为焊接接口 Y4 有源 4mm 厚陶瓷片 线长 120mm	参数均可订制
BWGPSCNX20-20B1Y4L120	B1 IPEX1 端子 Y4 有源 4mm 厚陶瓷片 L120 线长 120mm	参数均可订制
BWGPSCNX20-20B4Y2L120	B4 IPEX4 端子 Y2 有源 2mm 厚陶瓷片 线 长 120mm	参数均可订制

## 供应商承认签栏

制表者	审核者	核准者

## 客户承认栏

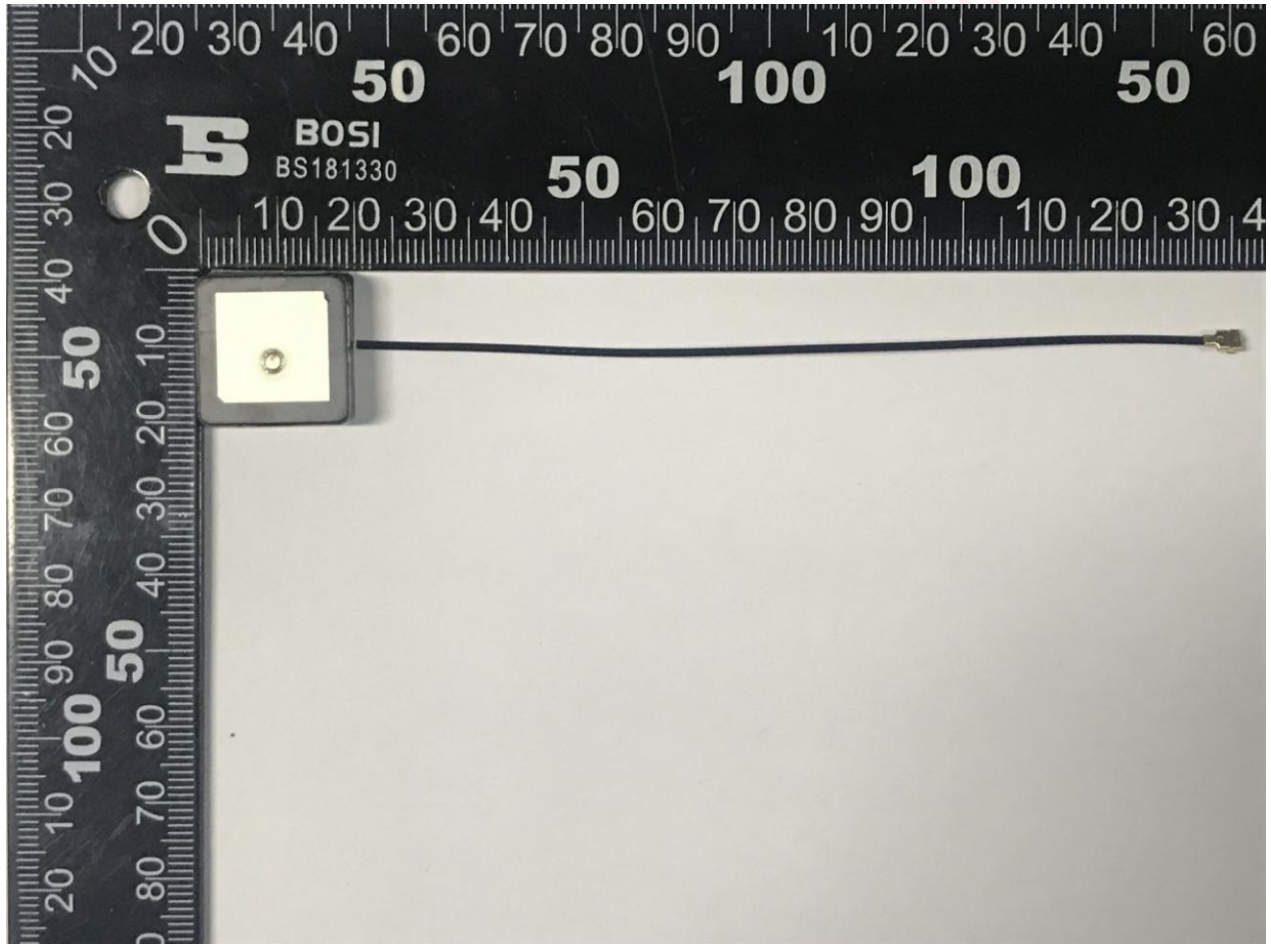
审核者	核准者

## 1.1 Specifications

天线型号 Antennas Type	BWGPSCNX20-20B1Y4L120
频率范围 Frequenc Range (MHz)	1575.42±5MHz
输入阻抗 Input Impedence ( $\Omega$ )	50 $\Omega$
电压驻波比 V. S. W. R	<1.8
增益 Gain (dBi)	16-18dBi(可定制)
极化形式 Polarization Type	右旋圆极化
功率容量 Power Capacity (w)	50
雷电保护 Lingtning Protection	None
工作电压 DC Voltage (V)	3.3-4.6v
天线尺寸 Dimension (mm)	20x20x6.5
接口形式/Connector Type:	IPEX-1
电缆型号 Cable type (mm)	$\phi$ 1.13
电缆长度 Cable length(mm)	120
辐射体 Radiator	None
天线颜色 Color	银白色
重量 Weight (g)	None
工作温度 Operating Temperature ( $^{\circ}$ C)	-40~80
储藏温度 Storage Temperature ( $^{\circ}$ C)	-20~85

\*注：以上数据仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。

## 1.2 Antenna Picture



上图型号：BWGPSCNX20-20B1

(定制客户中间连接线长度定制，天线形状定制)

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## 2. Electrical Specification

### 2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8753/E5071 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

### 2.2 Test Setup

#### 2.2.1 Frequency Range

#### 2.2.2 VSWR

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



Figure.1

#### 2.2.3 Radiation pattern and Gain

- A. The 3D chamber provides less than -40dB reflectivity from 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).



Figure.2



Figure.3

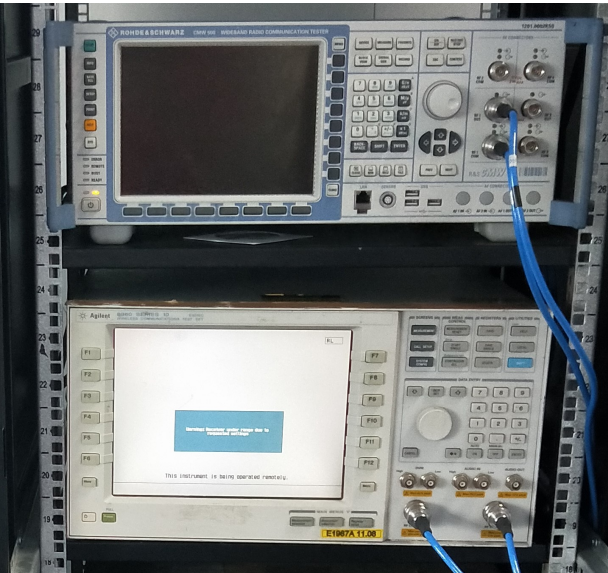


Figure.4

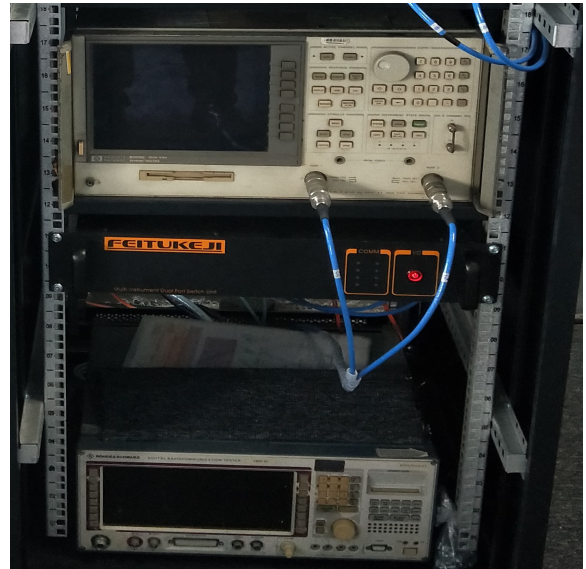
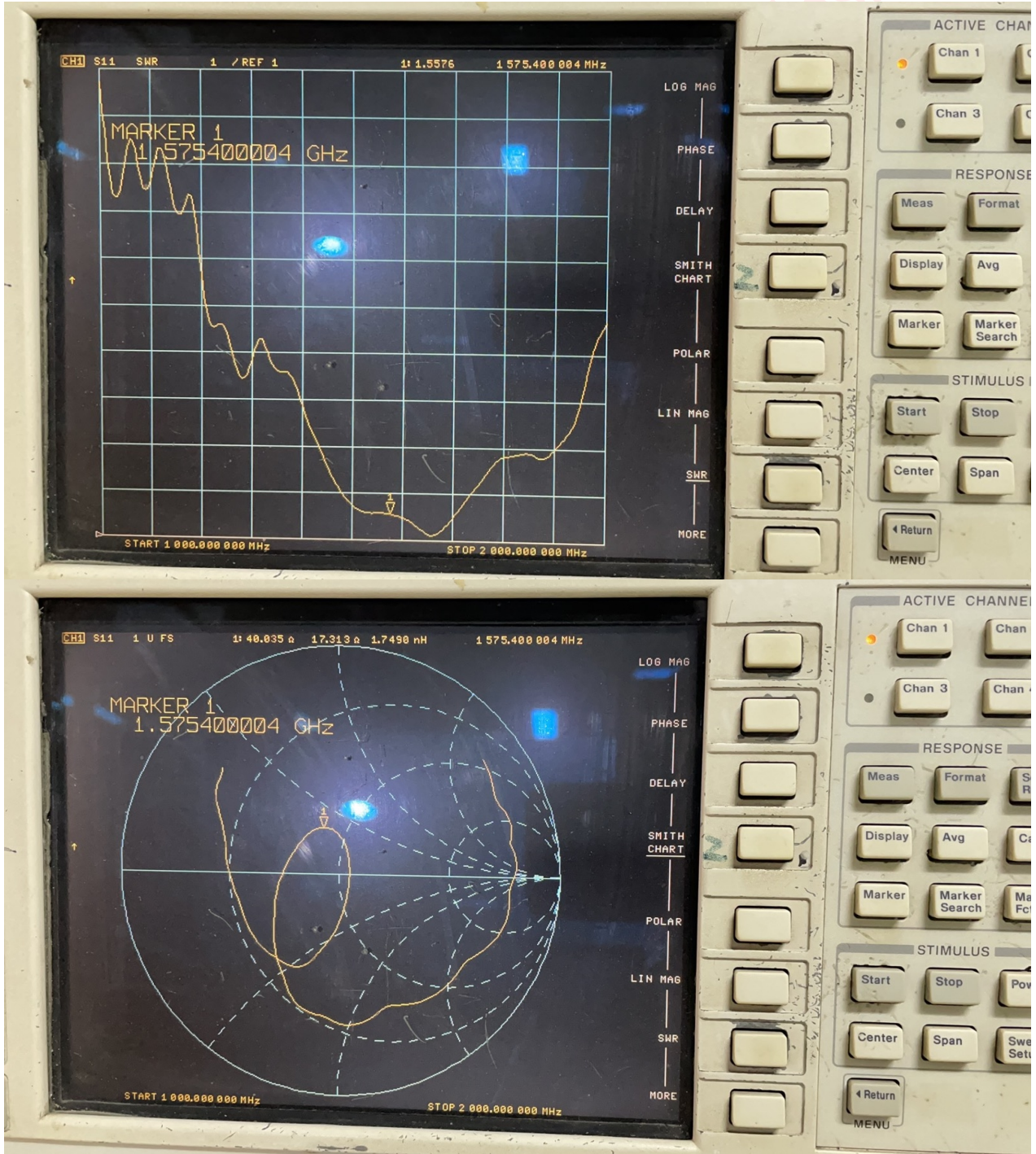


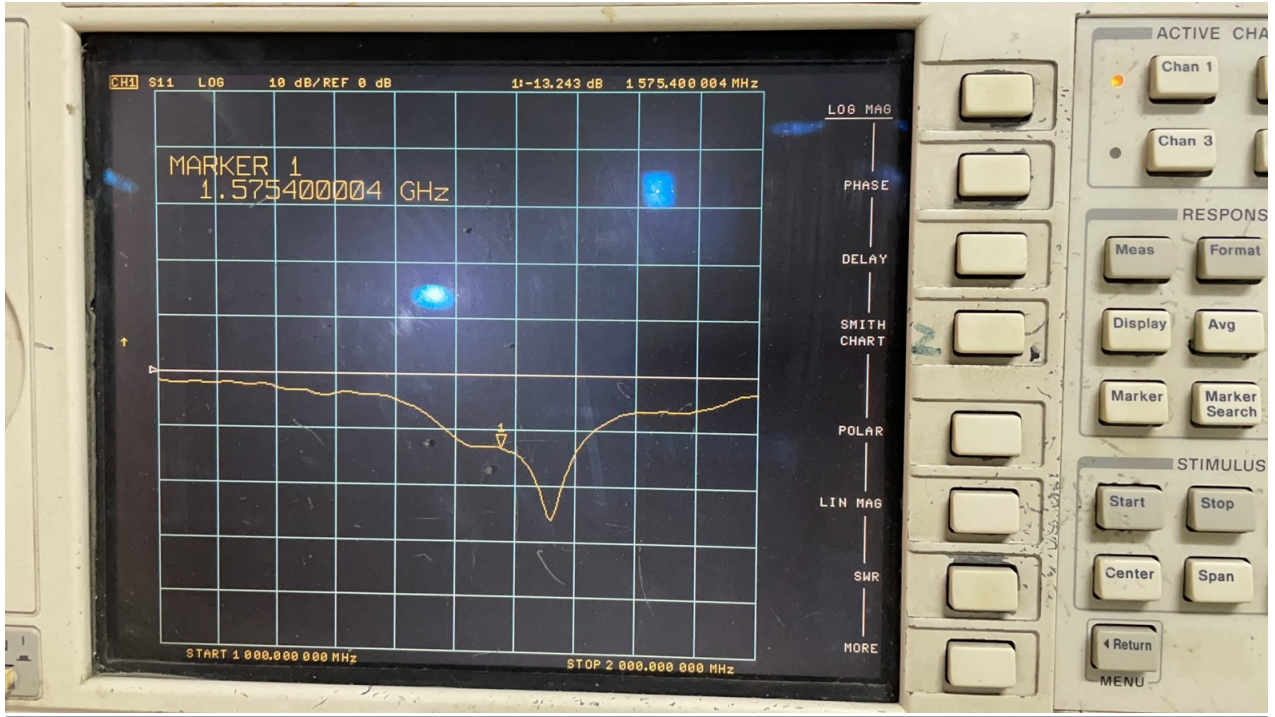
Figure.5

### 3. Performance Data

#### 3.1 Passive data

VSWR (电压驻波比) / Return Loss (回波损耗) / Smith Chart (史密斯圆图)

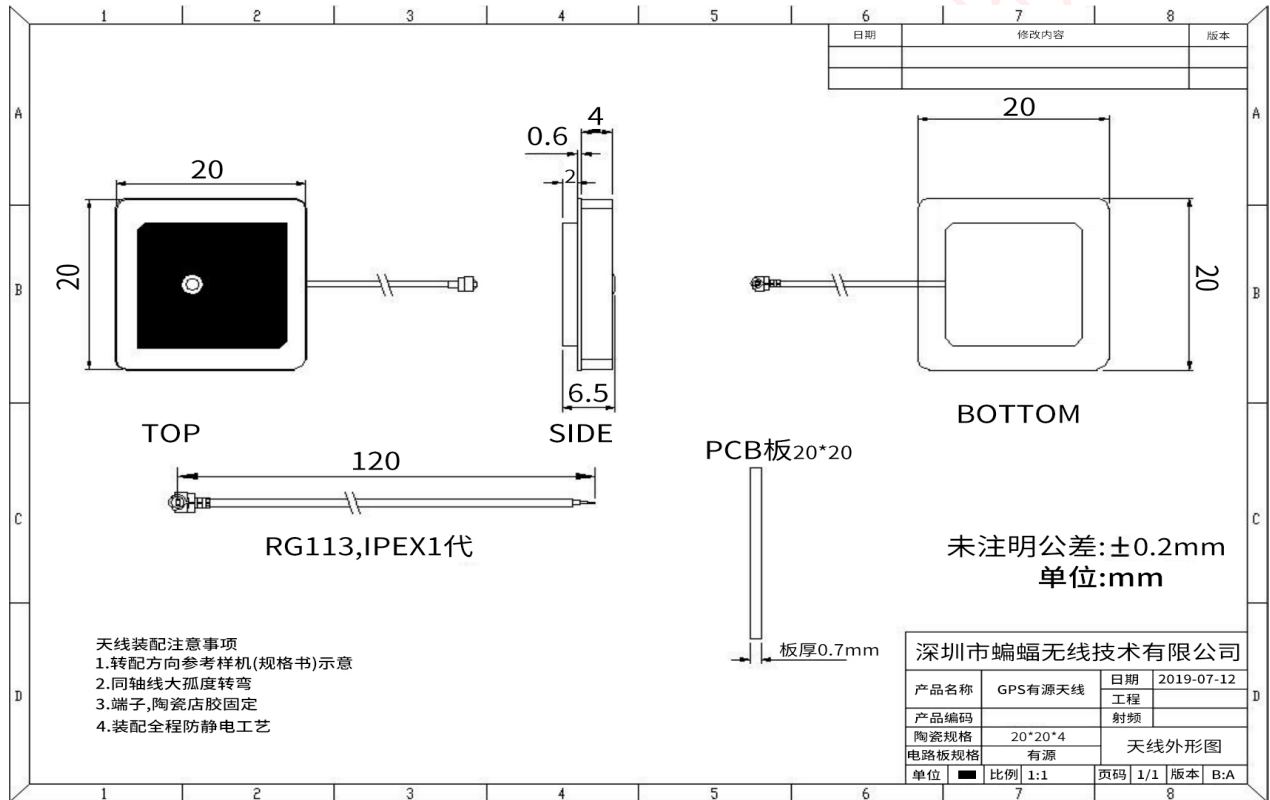




\*注：以上为实测数据，仅供参考；因天线功能较为敏感，主体周边机构有变更请通知我们评估。

## 4. Mechanical Specification

### 4.1 Assembly Drawing





## 5. RF113

### 1. 适用范围

本规格书制定了电线的结构和电气特性

同轴线

AWG 32

### 1. Scope

This specification covers the construction and the electrical properties of wire.

Coaxial Wire

AWG 32

### 2. 结构/Construction

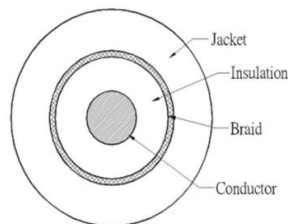
单位/Unit: mm

项目/Item	单位/Unit	详细资料/Details
Conductor 导体	材料/Material	- 绞合镀银铜丝 Silver-coated copper wire
	构成/Composition	(No./mm) 7/0.08
	外径/OD.	mm 0.24
	绞向/Orientation	- S
Insulation 绝缘层	材料/Material	- FEP(进口料)
	绝缘颜色/Insulation color	- 本色/Natural
	标称绝缘厚度/ Nom. Thickness	mm 0.22
	绝缘线径/OD.	mm 0.69
Braid Shield 编织	材料/Material	- 镀锡铜丝 Tinned copper wire
	构成/Composition	(No./mm) 16/4/0.05
	编织密度/Coverage	(%) ≥90
Jacket 外被	材料/Material	- FEP
	标称绝缘厚度/ Nom. Thickness	mm 0.12
	外径/OD.	mm 1.13±0.10

### 3. Electrical Properties (at 20°C) /电气特性(20°C时)

项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω/km	571 (Max.)
绝缘电阻/Insulation Resistance	MΩ · km	100 (Min.)
耐压强度(AC)/Dielectric Strength(AC)	V/ 1 Min	500
特性阻抗/Impedance	Ω	50±3
耐温等级/ Temperature	°C	200
额定电压/rated voltage	V	30

### 4. 电线截面图示如下:



## 6.免责声明(Disclaimer)：

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