

Shenzhen Kexin Wireless Technology Co., LTD

specification

**PRODUCTSPECIFICATION**

Customer:

Customer's part number:

Product description: Unitree UWB 6.5G

Uni Link's part number: UWB IPEX 3

Company: Shenzhen KeXin Wireless Technology Co.,Ltd.

Address: 301, Building H, Hongyongli Industrial Park, Shabeili,  
Longxin Community, Baolong Street, Longgang District, Shenzhen

**Issue Date:**

**2023-05-10**

Note: 6489.6 MH z BW :499.2MHz

1 、 Product technical indicators  
(PRODUCTTECHNICALSPECIFICATION)

| Electrical performance index: Electrical Specifications |                         |
|---|-------------------------|
| Frequency range ofFrequency Range (MHz)                 | 6489.6 MH z             |
| Band Width ofBandwidth (MHz)                            | 499.2 MHz               |
| Input the impedance ofInput Impendence ( $\Omega$ )     | 50                      |
| voltage standing-wave ratio<br>V. S. W. R               | $\leq 2.0$              |
| Gain Gain (dBi)   | 6 dBi                   |
| Polarized form Polarization Types                       | Vertical Vertical       |
| Power capacity ofPower Capacity (dBm)                   | 36 dBm                  |
| Mechanical index, Mechanical Specifications             |                         |
| Cable Length: Antenna Length (mm)                       | /                       |
| Connector model number, Connect Type                    | IPEX 3                  |
| Shell color is Radome Color                             | gray Grey               |
| <b>Antenna size of The antenna size</b>                 | 57.79*57.79mm           |
| Weight ofWeight (g)                                     | To be approved by (6) g |

**2、 Product picture of Product specifications pictures**



3、 Mechanical properties (MECHAICALCHARACTERISTICS)

|   |                                     |   |  |
|---|-------------------------------------|---|--|
| 1 | Swing test<br>BENDING TEST          | Put the line end of 30CM from the joint for 120g. After fixing the joint, the remote swing test is 60 degrees, and the remote swing is tested for 1000 times. | No test characteristics after 1000 times show damage to electrical performance.              |
| 2 | strength test<br>STRENG TEST        | A 15 pound static load is applied to the bottom for one minute.   | No phenomenon shows the damage to the mechanical and electrical properties.                  |
| 3 | strain relief test<br>PULLING FORCE | Conduct the tension test with the tension joint and line room.  | The tensile tension is 1 Kg<br>No phenomenon shows any damage to the electrical performance. |

|   |                                     |  |   |
|---|-------------------------------------|--|---|
| 4 | Vibration test<br>VIBRATION<br>TEST | At 1.10mm and 120 minutes in the X direction, 120 minutes in the Y direction and 240 minutes in the Z direction. | No phenomenon shows any damage to the electrical performance. |
|---|-------------------------------------|--|---|

#### 4 、 Durability Test (DURABILITY)

|   |                                    |   |   |
|---|------------------------------------|---|---|
| 1 | salt spray test<br>SAIT SPRAY TEST | <p>Saline spray test: according to the GB1266-86 standard</p> <p>Distilled water: primary distillation<br/>PH 6.5 ~ 7</p> <p>Spray amount: 1.4me80cm<sup>2</sup>/h<br/>Compressed air pressure: 1Kgf/<br/>cm<sup>2</sup></p> <p>Test Relativity: 98°<br/>temperature:45° ~47°</p> <p>Pressure temperature: 35°</p> <p>Test time: 96hr</p> | <p>All specifications change range initial value of 30%</p> |
| 2 | hot test<br>HEAT TEST              | <p>For 96 hours in an 85 + 2°C environment and then in a normal environment for 30 minutes</p> <p>85+2°C for 96 hours, after keep in normal condition for 30mim the to test .</p>   | <p>All characteristic range is 30% of the initial value</p> |

|   |                            |   |
|---|----------------------------|---|
| 3 | cold test<br>HUMIDITY TEST | For 96 h in a $40 \pm 2^{\circ}\text{C}$ 90-95% RH environment and then in a normal environment for 30 min before testing<br>40+2°C 90-95%RH for 96hours, after keep in normal condition for 30min the to test .      |
| 4 | cold test<br>COLD TEST     | Place in the $-40 \pm 2^{\circ}\text{C}$ environment for 96 hours and then put in the normal environment for 30 minutes before testing<br>-40+2°C for 96hours, after keep in normal condition for 30min the to test . |

### 5、Antenna test drawing (STATIONARYWAVE PATTERN)



