
深圳市雅诺讯科技有限公司

产品规格书

PRODUCT SPECIFICATION

Customer:

Customer's part number:

Product description: 550MHZ Terminal Antenna

Uni Link's part number: OLFA-550-3

Issue Date: 2018-11-9

Note: 550MHZ,TNC,

1、PRODUCT TECHNICAL SPECIFICATION

Electrical Specifications	
Frequency Range (MHz)	500–600
Bandwidth (MHz)	30
Input Impedance (Ω)	50
V.S.W.R	≤ 1.5
Gain (dBi)	-2.09
Polarization Type	Vertical
Power Capacity (w)	50
Mechanical Specifications	
Antenna Length (mm)	260

Radiator	铜 Cuprum
Connect Type	TNC-Male
Working Temp(°C)	-40~85
Radome Color	Black
Weight (g)	30

2、ELECTRIC APPLIANCE CHARACTERISTICS

ITEM		TEST CONDITION	SPECIFICATION
1	Return Loss	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 Return Loss Characteristics.	19
2	VSWR	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 VSWR Characteristics.	1.5

3	Smith chart	Using Agilent Network Analyzer 8753ET to Measure Antenna S11 Gain Response Characteristics.	50
4	Gain response	Using Agilent Network Analyzer 8753ET to Measure Antenna S21 Gain Response Characteristics.	3

3、MECHANICAL CHARACTERISTICS

1	BENDING TEST	Load 120g on the wire end 30cm away from the joint, fix the joint and perform a remote swing test. The remote swing angle is 60 degrees left and right, and the characteristics are tested after 1000 remote swings	After 1000 remote swings, the tested characteristics showed no signs of damage to the electrical performance
2	STRENG TEST	Apply a static load of 15 pounds to the bottom of the payout end for one minute	There is no visible damage to the mechanical and electrical performance

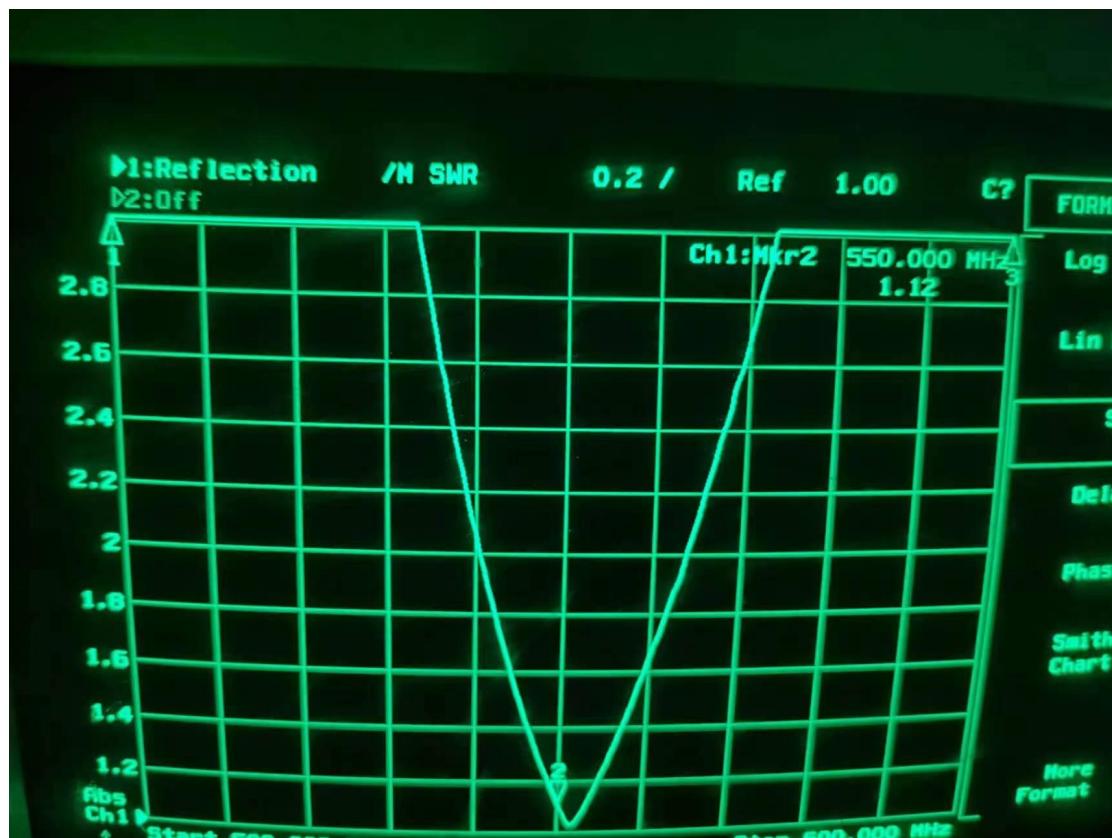
3	PULLING FORCE	Perform tensile testing between connectors and wires using a tensile tester.	Can withstand a tensile force of 7Kg without any damage to the electrical performance.
4	VIBRATION TEST	Vibration in the X-axis direction for 120 minutes, Y-axis direction for 120 minutes, and Z-axis direction for 240 minutes with an amplitude of 1.10mm and a vibration frequency of 33.30Hz/sec.	There is no evidence of damage to the electrical performance displayed.

4、DURABILITY

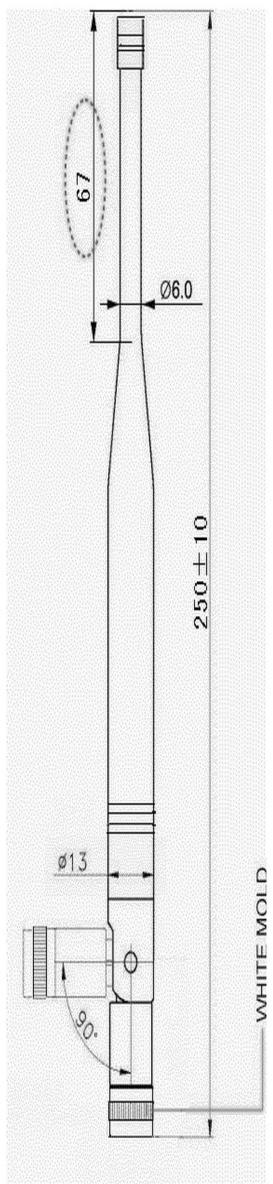
1	SAIT SPRAY TEST	<p>Salt water spray test: in accordance with GB1266-86</p> <p>Distilled water: one distillation</p> <p>PH6.5~7</p> <p>Spray volume: 1.4me80cm² / H</p> <p>Compressed air pressure: 1Kgf/cm²</p> <p>Test relative degree: 98 °</p> <p>Temperature: 45 ° ~47 °</p> <p>Pressure and temperature: 35 °</p> <p>Test time: 96hr</p>	<p>48 hours</p> <p>All specifications vary by an initial value of 30%</p>
2	HEAT TEST	85+2°C for 96 hours, after keep in normal condition for 30min the to test.	All characteristic range is 30% of the initial value

3	HUMIDITY TEST	40+2°C 90-95%RH for 96hours, after keep in normal condition for 30min the to test.	
4	COLD TEST	-40+2°C for 96hours, after keep in normal condition for 30min the to test.	

5、STATIONARY WAVE PATTERN



6. Product images



天线增益与效率 Antenna gain and efficiency

天线		
Freq(MHz)	Efficiency (%)	Gian(dBi)
550 MHz	15.67	-3.19
555 MHz	14.83	-3.17
560 MHz	14.14	-3.24
565 MHz	16.41	-2.53
570 MHz	18.13	-2.09
575 MHz	15.75	-2.71
580 MHz	13.69	-3.4
585 MHz	11.57	-4.23
590 MHz	10.37	-4.89
595 MHz	9.25	-5.34
600 MHz	8.74	-5.63

天线辐射方向图 Antenna Radiation Pattern

