



# SPECIFICATION

Shenzhen DreamLNK Technology Co., Ltd.  
深圳市骏晔科技有限公司

## 433Mhz Rubber Rod Antenna

### Product Specification

Client Name		Frequency Band	433MHz
Wire Name		Version	A1
Customer's Part Number		DreamLNK's Part Number	J010
RF Designer	James Wang	RF Manager	Knight Ai
Structural Designer		Structural Design Manager	
Technical Director		Date	2018-08-19

Client confirmation:

Whether the product meets your requirements?  OK  NG

# Contents

Cover .....	1
Contents .....	2
1. Photos .....	3
2. Parameters .....	3
3. S11 Data .....	4
4. Structure diagram .....	5
5. Environmental reliability experiment report .....	6
6. Contact us .....	7

The information provided by us should be kept strictly confidential, and it is not allowed to disclose to anyone else or other companies, without prior written consent

---

## 1. Photo

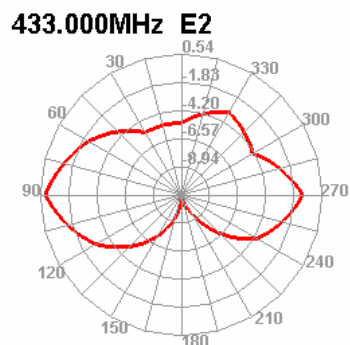
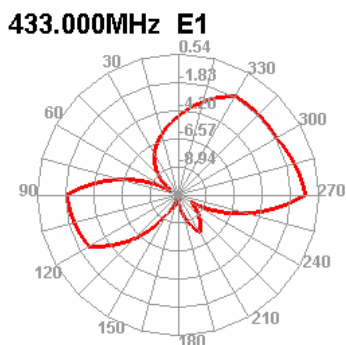
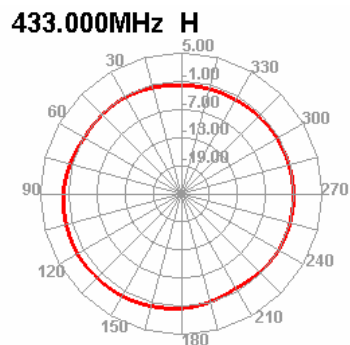
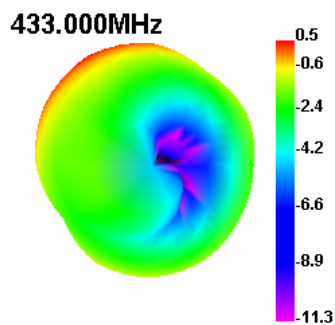
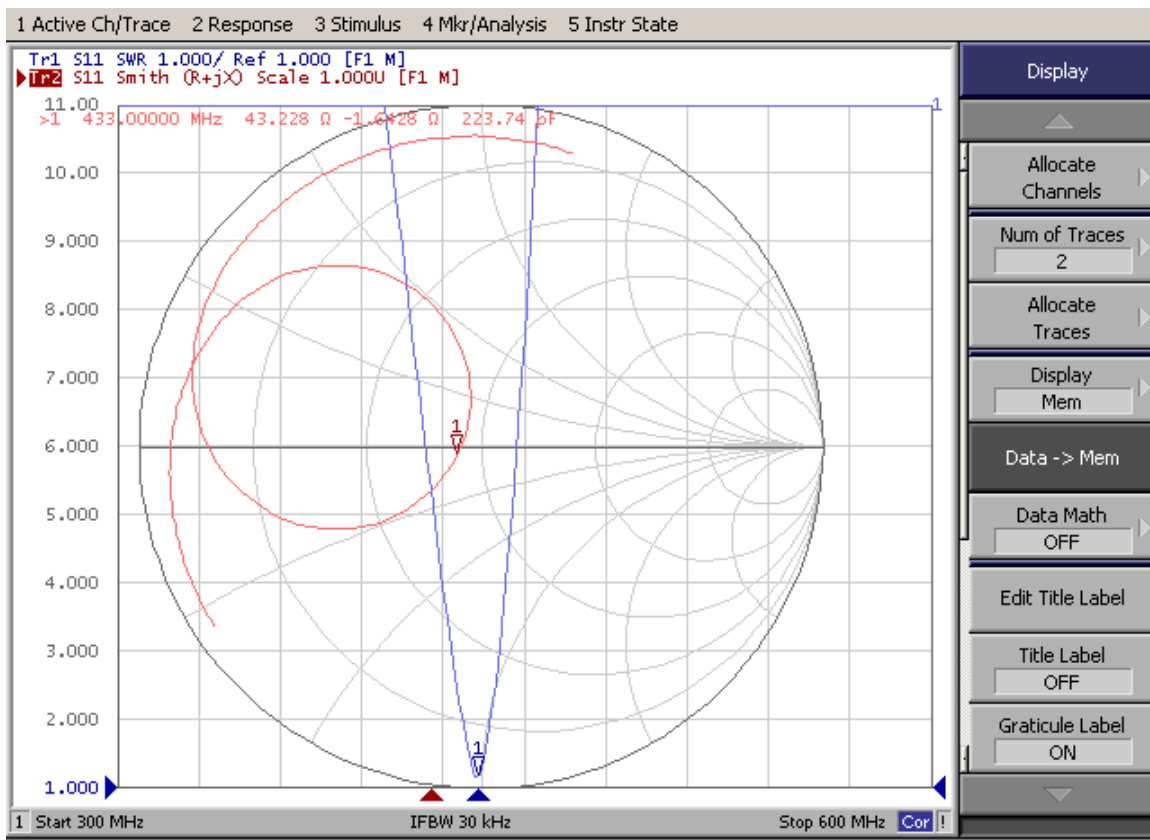


## 2. Parameters

Test parameters			
Product Name	433M Rubber Rod Antenna	Model No	J010
Electrical Specifications			
Frequency Range	433MHZ	Polarization	Vertical
Input Impedance	50 Ω	Radiation direction	Full direction
VSWR	≤2.0	Power Capacity	10W
Gain	2.5dBi	Bandwidth	/
Mechanical Specifications			
Dimensions	44*10 ±0.1mm	Color	Black
Connector Model	SMA-J	Cable Length	/
Antenna Material	ABS + Copper	Voltage	/
Working Temperature	-30℃ ~ +60℃	Relative Humidity	40~85%

The information provided by us should be kept strictly confidential, and it is not allowed to disclose to anyone else or other companies, without prior written consent

### 3. S11 Data ( VSWR, Return loss, Smith)



### 4. Structure diagram

标注前有“\*”重点检验尺寸

图面产品均符合ROHS标准

部件材质工艺说明:

序号	物料名称	产品描述	数量
①	Antenna Shell	ABS/TPE BLACK	1
②	Live knot	ABS/TPE BLACK	1
③	CONNECTOR	SMA PLUG/Standard	1

备注:

- 1:图中所标注尺寸为 I Q C 必测尺寸.
- 2:各零部件组装要牢固可靠.
- 3:成品信号参数要达到指定数值.
- 4:产品需定数按要求包装好,运输过程中不能有明显挤压变形等现象.
- 5:未经过本司工程确认,材质及工艺要求等不能随意更改.

深圳市骏晔科技有限公司

公差	.X X.X X.XX ANGULAR @5~	±0.30 ±0.20 ±0.10
图法		

变更记录	日期	变更者	品名	料号
比例	A4		型号	
单位	MM	绘图	图号	
版本	A	审核	日期	2020.08.19
			页码	1/1

The information provided by us should be kept strictly confidential, and it is not allowed to disclose to anyone else or other companies, without prior written consent

---

Note: The antenna design process needs to consider the placement position, angle, distance/ height (from the floor and from the PCB substrate), which is highly related to the product shape and structure, the position of the RF module signal input and output interface, as well as the position of the interference source inside the product etc.

The  $\pi$ -type network is reserved to match the antenna. When debugging the antenna, be sure to provide the entire product casing and internal PCBA function board, please also take into account external interference sources and parasitic capacitance, so that the antenna achieves the best performance index and working efficiency.

The above picture is just FYI. The PCB trace of the matching network refers to the 0.5mm line width, and the grounding on both sides of the network refers to the 0.35mm pitch to maintain good impedance characteristics.

If you have any questions, please send PCB documents to this e-mail [support@dreamlnk.com](mailto:support@dreamlnk.com)

## 5. Environmental reliability experiment report

Item	Test condition	Specification
Storage environment	Tested temperature, humidity and air pressure as following without specifying: 1. The temperature is $-30\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$ 2. Relative humidity is 45% -85% 3. The air pressure is 86kpa-106kpa	The electrical mechanical performance is normal
High and low temperature test	Perform 5 cycles between $70\text{ }^{\circ}\text{C}$ and $40\text{ }^{\circ}\text{C}$ , then check the appearance quality, under normal conditions 1-2H	The size should meet the requirements for mechanical and electrical performance
Resistant to constant heat and humidity	Test Relative humidity: $95 \pm 3\%$ , Test temperature: $40\text{ }^{\circ}\text{C}$ . After continuous 2H running, take out the sample, and measure its electrical properties within 5 minutes, put the sample in a normal condition for another 1-2H, check the appearance quality	The size should meet the standard, and meet for mechanical and electrical performance
Vibration test	Vibration frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M / S, frequency of sweeping cycle: 30 times	Normal electrical and mechanical performance
Drop test	1M high-altitude free fall 3 times, in the direction of mutually perpendicular axes	Normal electrical and mechanical performance

## 6. Contact us

The information provided by us should be kept strictly confidential, and it is not allowed to disclose to anyone else or other companies, without prior written consent

---

## Shenzhen DreamLnk Technology Co., Ltd

★ Data collection, Smart home, Internet of Things applications, Wireless remote control technology, Remote active RFID, Antennas ★

Office Add.: Room 603, Unit C, Zone A, Huameiju Business Center, Xihu Rd., Bao'an District, Shenzhen, Guangdong Province, China

Factory Add.: 5th Floor, Building B, Huazhi Innovation Valley, No. 7 Yuhua Street, 138 Industrial Zone, Tangxia Town, Dongguan, Guangdong Province, China

TEL.: +86-755-29369047

FAX: +86-755-27844601

Mobile: +86 13760215716

Wechat: wsj\_james

E-mail: [james@dreamlnk.com](mailto:james@dreamlnk.com)

Web: [www.iot-rf.com](http://www.iot-rf.com)