

# Antenna componentst

Frequency range	433MHz
Antenna Gain	0dBi
Input Impedance	50 ( Ω )
Polarization	Vertical Polarization
(3dB) HPW	180° H-plane 120° E-plane
Manufacturer	Heyuan Chengxing Technology Co., Ltd
Manufacturer address	2nd floor, on the right side of the gate of Anliang Bomei Garden in Zicheng Town, Zijin County, Heyuan City, China
Model	CXD1

## 1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the **433MHz** antenna program.

## 2 General Description

### 2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

## 3 Mechanical Description

## 4 Electrical Performance

### 4.1 Set-up

#### 4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

#### 4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quite zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

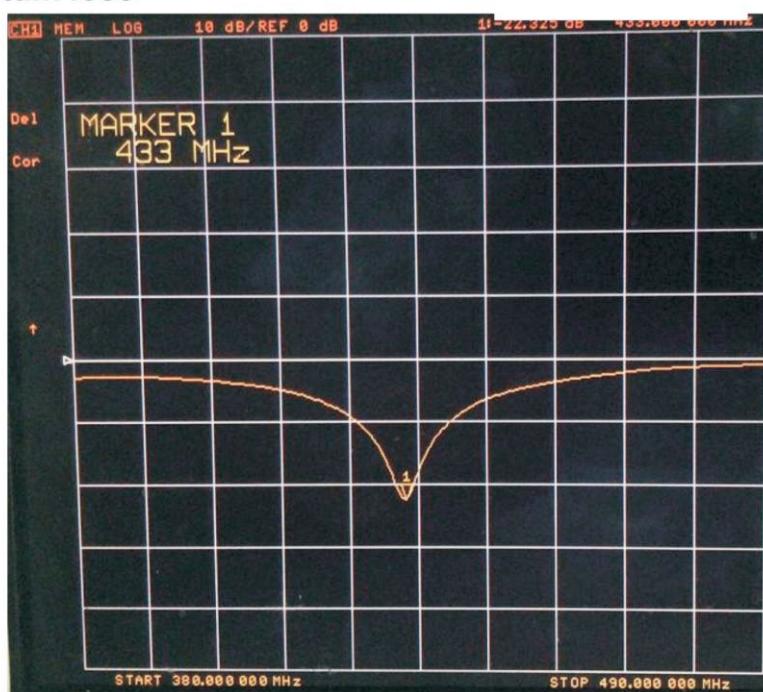
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## 4.2 Plots

### 4.2.1 VSWR



### Return loss



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## 6 Mechanical drawing

