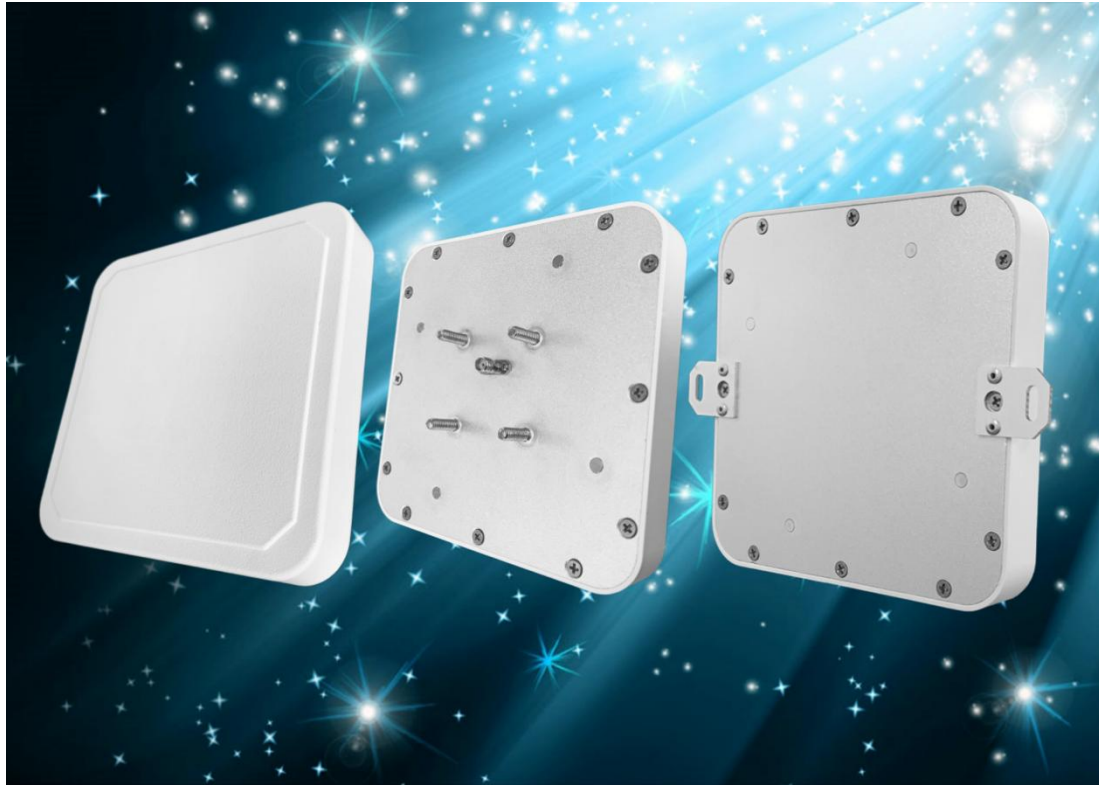


# RDA-9W128R 6dBi Polarized antenna(128)

## 1. Product picture



graph 1 6dBi Picture of the front and back side of the circularly polarized antenna

## 2. Product application field

6 dBi circular polarization antenna (128) is a universal far-field antenna suitable for UHF band RFID applications. It has the characteristics of small volume, high gain, low standing wave, good symmetry of orientation diagram and low axis ratio. Can be easily used in access control, warehousing, logistics, retail and other UHF frequency band in the RFID occasions.

## 3. Technical parameters :

Table 1 6 Definition of product parameters of dBi circular polarization antenna (128)

frequency range (MHz)	902MHz~928MHz
Polarization mode	circular polarization
gain(dBi)	4.99dBi
axial ratio (dB)	<3dB
H HPBW	86°
E HPBW	86°
Impedance ( $\Omega$ )	60 $\Omega$
Voltage standing-wave ratio (VSWR)	$\leq 1.3:1$
Joint categories	SMA-KF External thread mother head
Joint position	Back feed or side feed
Product size (mm)	128mm×128mm×20mm
weight	236g (No scaffolds are included)
material	Engineering plastic, ABS + aluminum
Color	cream white
levels of protection	IP66

Way to install	Holding pole (maximum diameter 60mm) or wall hanging
working temperature (°C)	-40°C ~ +86°C

**4. Measured antenna characteristic curve in the dark room:**

(1) Gain change curve with frequency

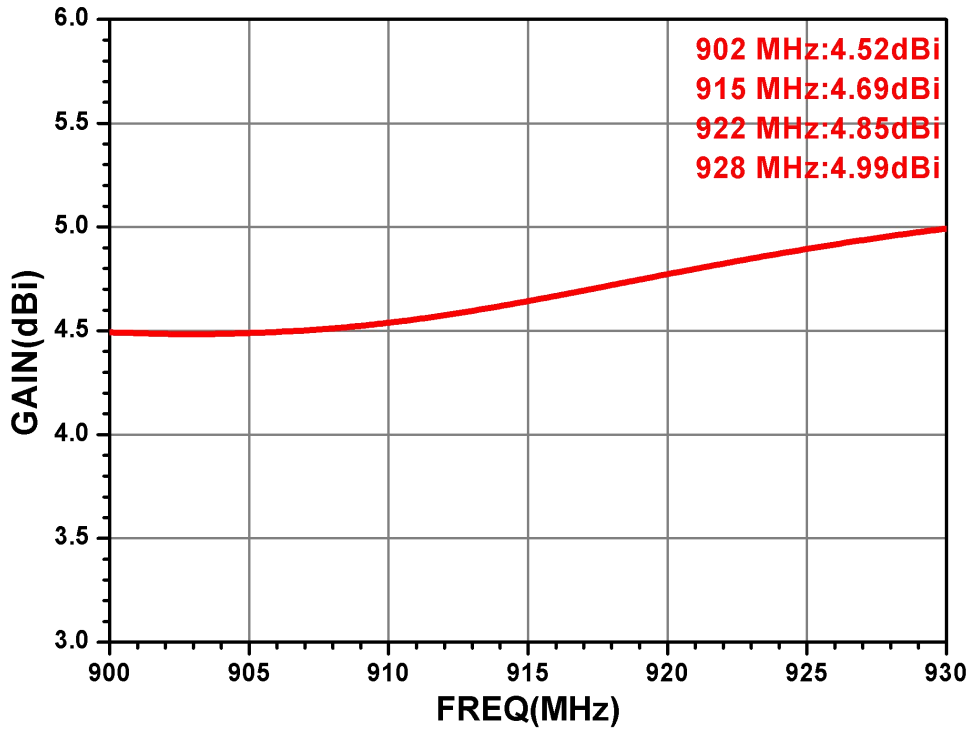


Figure 2 Gain with frequency change curve

(2) The axis ratio curve with frequency

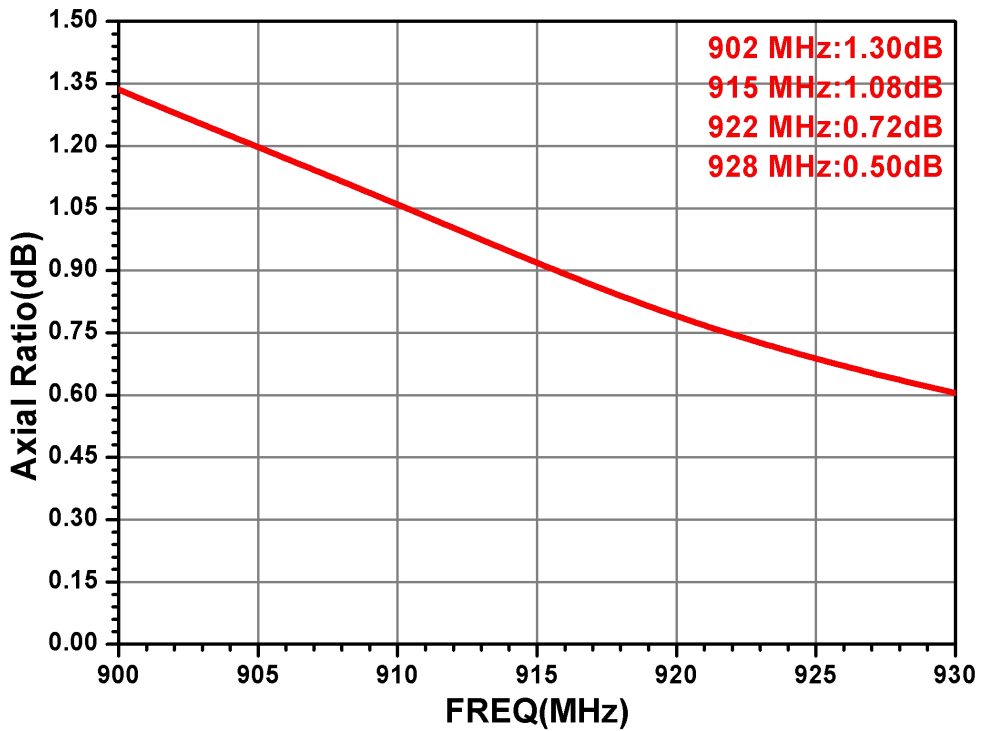


Figure 3 axis ratio curve with frequency

(3) Two-dimensional orientation diagram of H face (horizontal lobe orientation diagram)

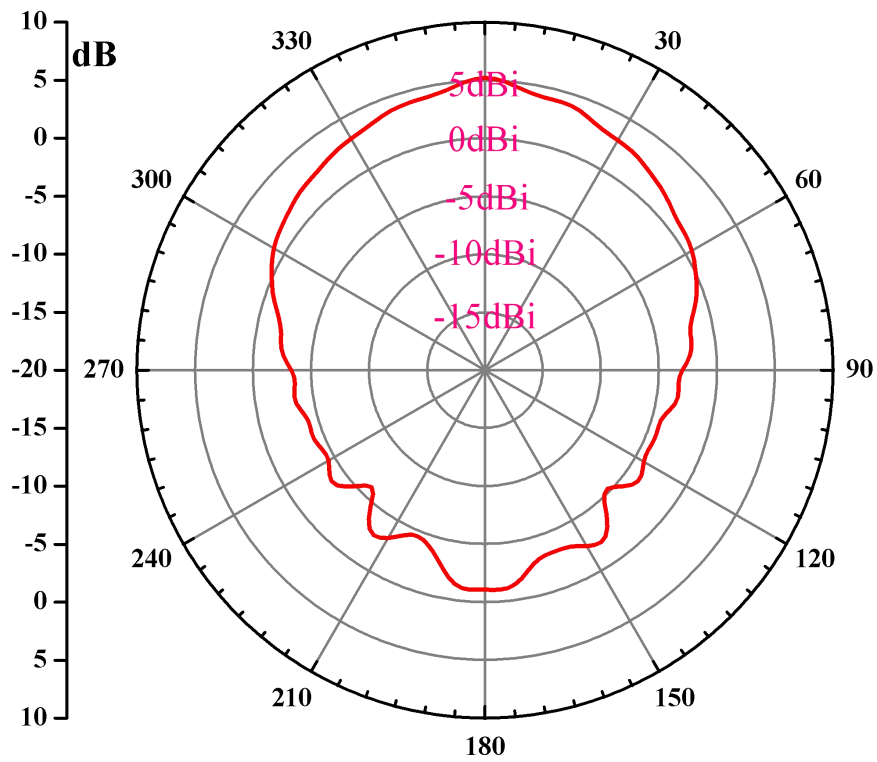
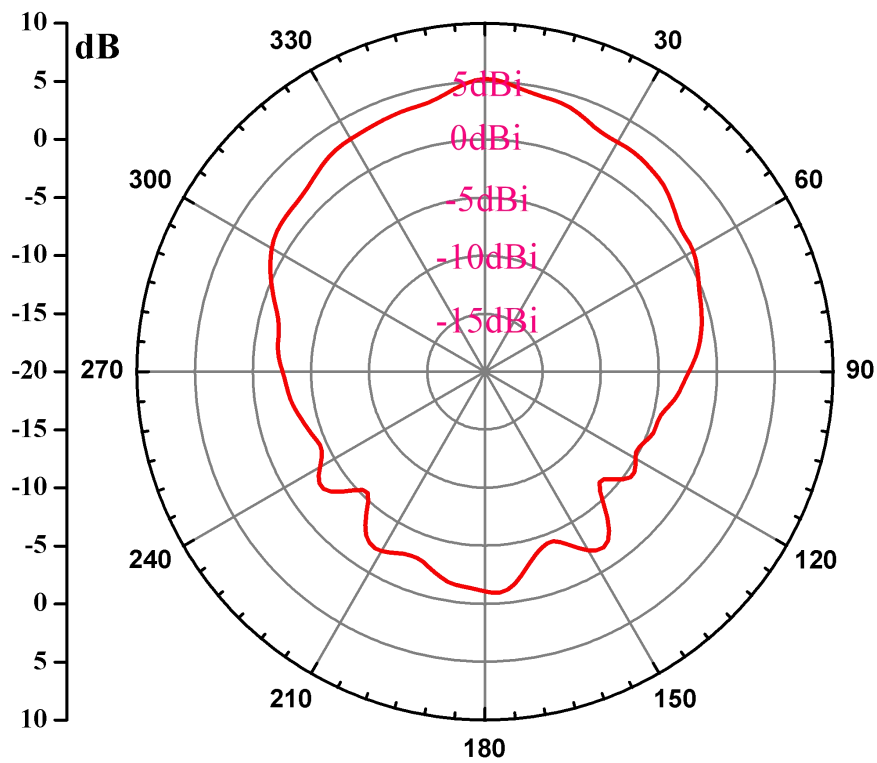


Figure 4 Two-dimensional orientation diagram of the H face

(4) Two-dimensional orientation diagram of plane E (vertical lobe orientation diagram)



graph 6 E 2 D direction diagram

(6) Echo loss S11 with frequency change curve

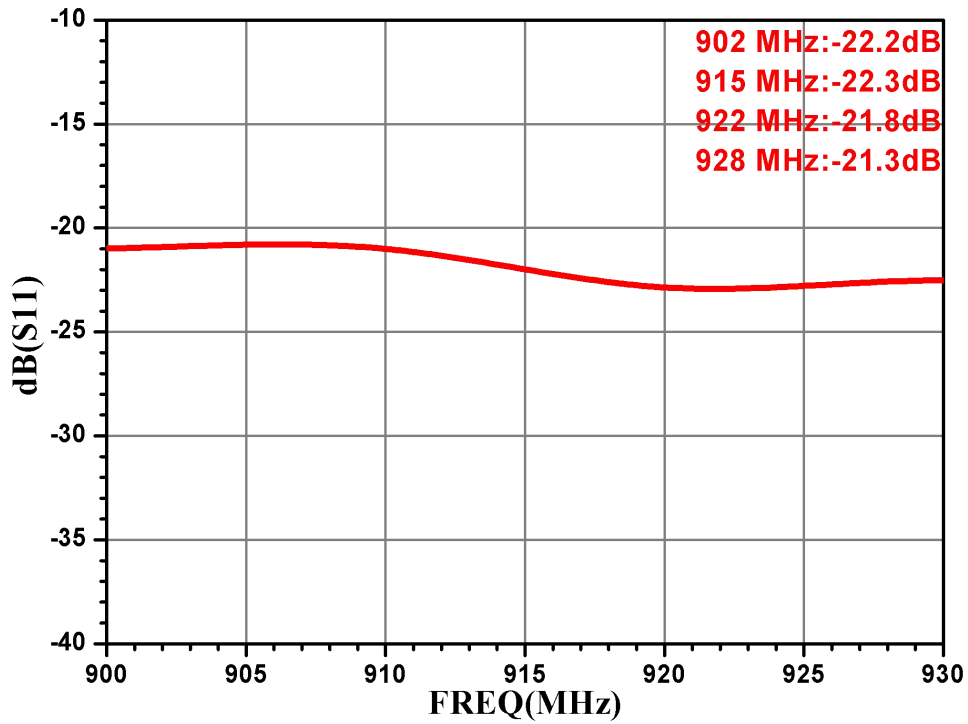


Figure 6 Curve of echo loss S11 with frequency

(6) The voltage standing wave ratio VSWR with frequency

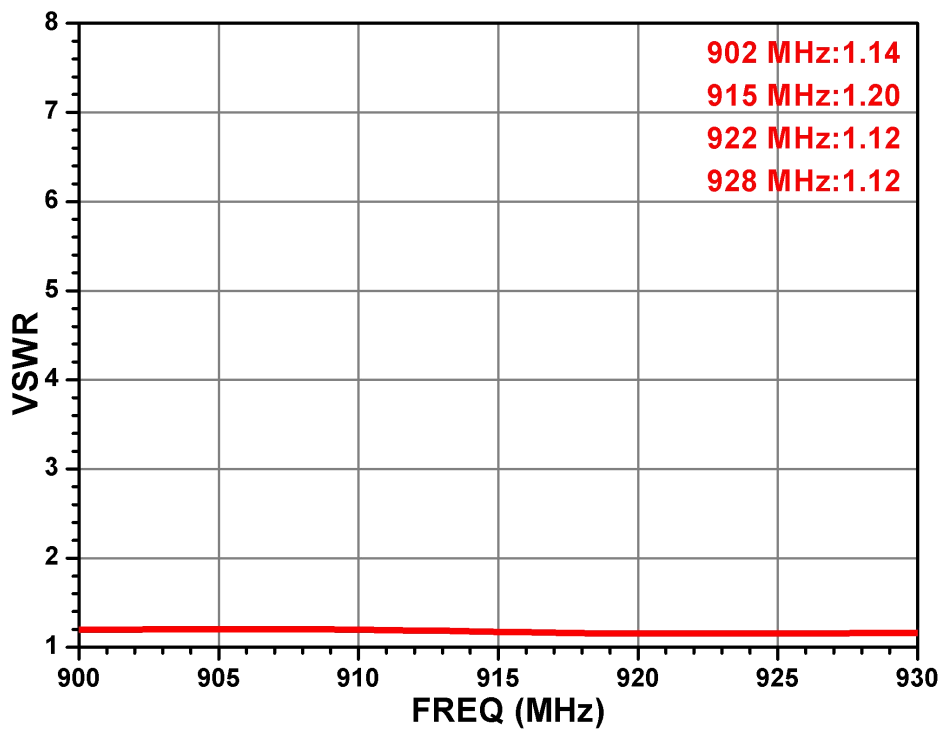


Figure 7 voltage standing wave ratio VSWR with frequency

## 5. Product size parameters

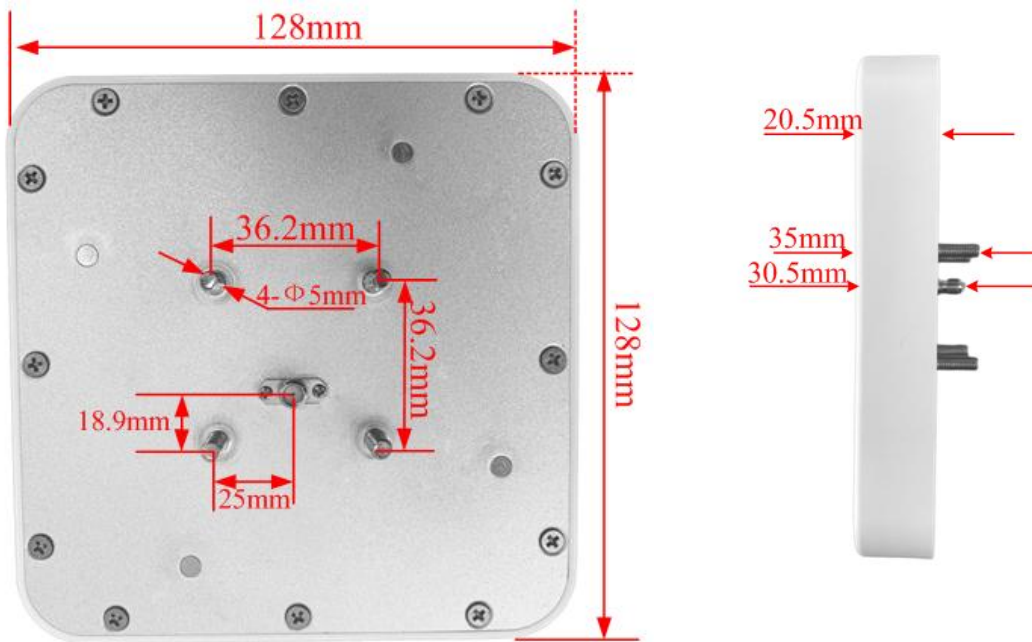


Figure 128 antenna length, width, thickness and position dimensions of rear riveting column and SMA connector

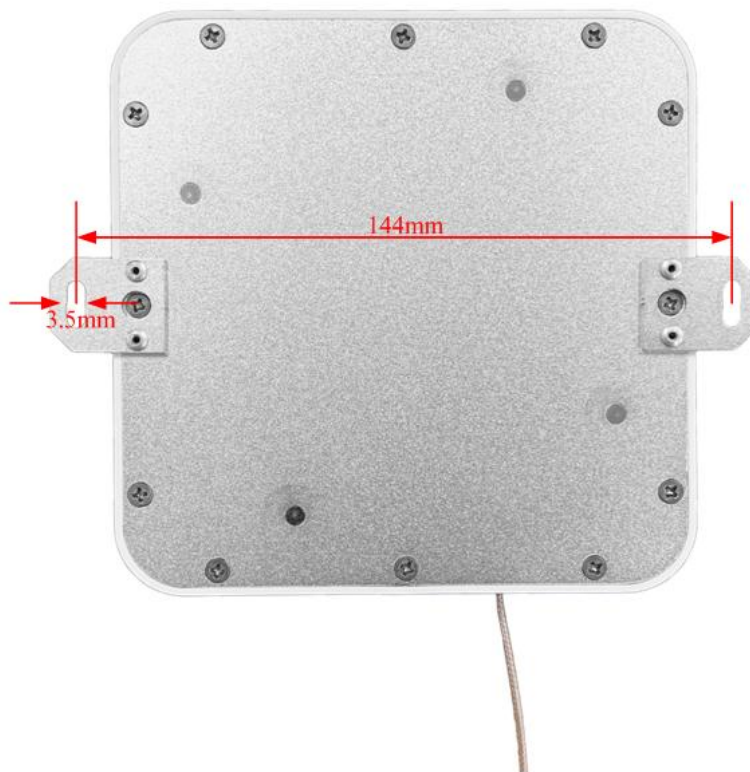


Fig. 9 128 Antenna hanging ear spacing and hole diameter dimensions