BRA-02 Antenna Product Manual

Product model

BRA-02 Antenna

The functions and features of the product

Electrical performance: The general-purpose antenna suitable for RFID application scenarios in the UHF band features high gain and low standing wave.

Mechanical properties: Aesthetically pleasing and compact in size, it features a dual waterproof design with a waterproof ring and silicone. The casing is equipped with reinforcing ribs, making it suitable for use in various harsh environments.

Main uses and applicable scope

The BRA-02 antenna can be conveniently applied in RFID scenarios in the UHF band such as access control, warehousing, logistics, and retail.

Performance index

Frequency range: 920MHz～925MHz

Voltage standing wave ratio: ≤1.3:1

Gain: 6.29dBi

H HPBW: 90°

E HPBW: 90°

Polarization: Circular polarization

Relative humidity: 5%～95%

Input impedance: 50 Ω

Mechanical indicators

Size:128mm×128mm×20mm

Weight: 0.3kg(Excluding the bracket)

Materials: Engineering plastic ASA, aluminium

Colour: Milky white

Protection grade: IP67

Working temperature: -40℃~+ 85℃

Storage temperature: -40℃~+ 85℃

Figure 1 Physical object of the BRA-02 antenna

Installation

The BRA-02 antenna can be installed on the steel frame structure or pillar through its own bracket or the bracket provided by the user, and is connected to the reader via a coaxial line. The antenna can be installed horizontally or vertically, depending on the installation position of the bracket. After installation, the Angle of the antenna can be adjusted according to the actual situation.

The antenna bracket is an alternative component. Customers can choose it according to their needs.

Antenna size

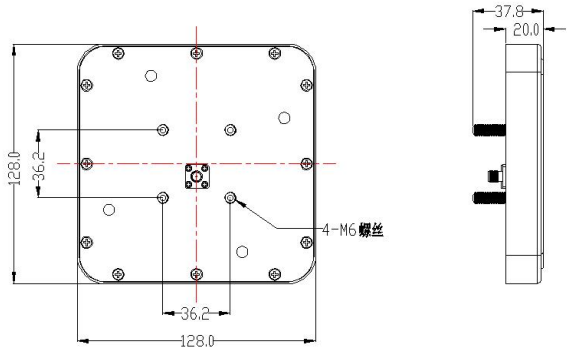


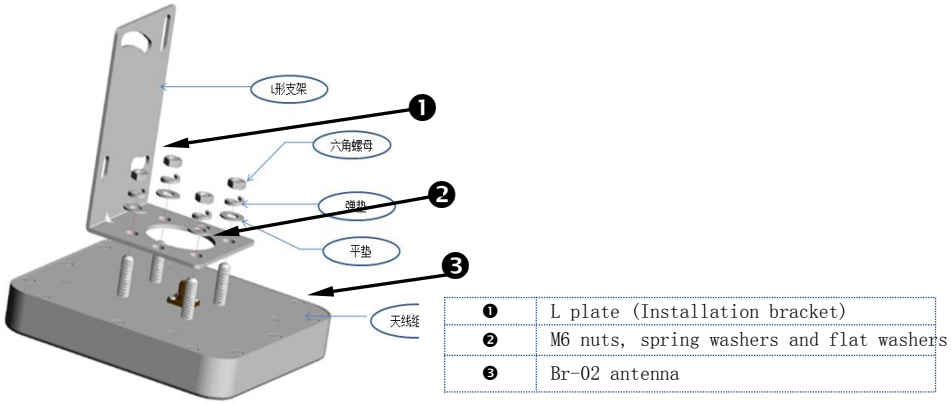
Figure 2 Installation dimension diagram

Installation steps

1. **Installation**

Step One:

Fix the L plate to the antenna with the "M6 nut, flat gasket and spring gasket", as shown in Figure 3.



❶	L plate (Installation bracket)
❷	M6 nuts, spring washers and flat washers
❸	Br-02 antenna

Figure 3 Overall installation diagram of the BRA-02 antenna

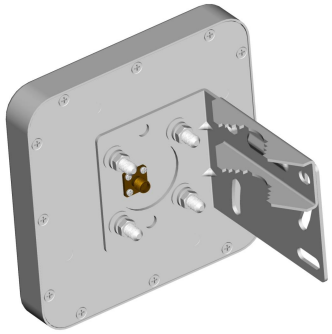
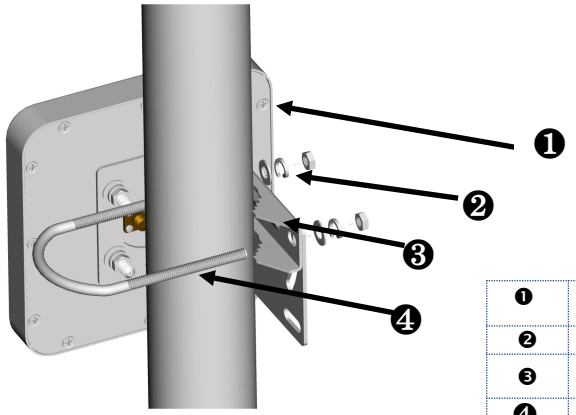


Figure 4 The installation of the L board is completed

After the L plate is fixed on the antenna, see Figure 4.



❶	Br-02 antenna
❷	M6 nuts, spring washers and flat washers
❸	Dog teeth
❹	U-bolt

Figure 5 The BRA-02 antenna is installed on the pillar

Step 2: Use "M6 U-bolts, nut spring washers and flat washers" and "dog teeth" to fix the antenna on the vertical steel frame structure or pillar, as shown in Figure 5.

Antenna performance diagram

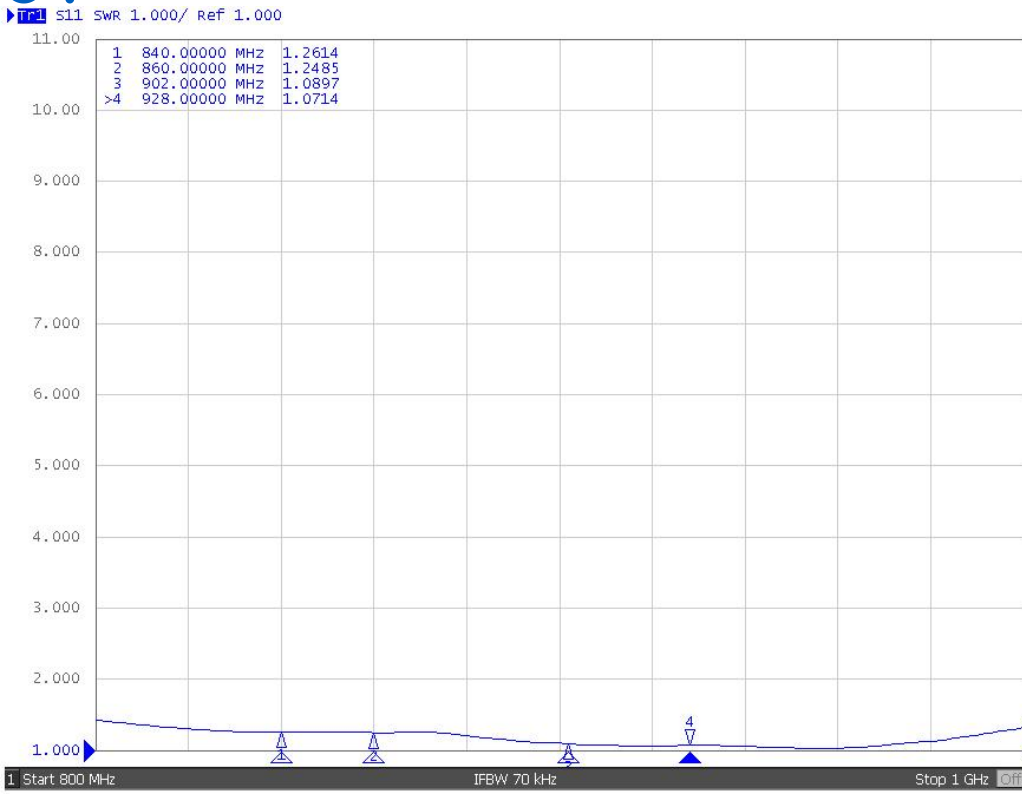


Figure 6 Test diagram of the standing wave ratio of the BRA-02 antenna

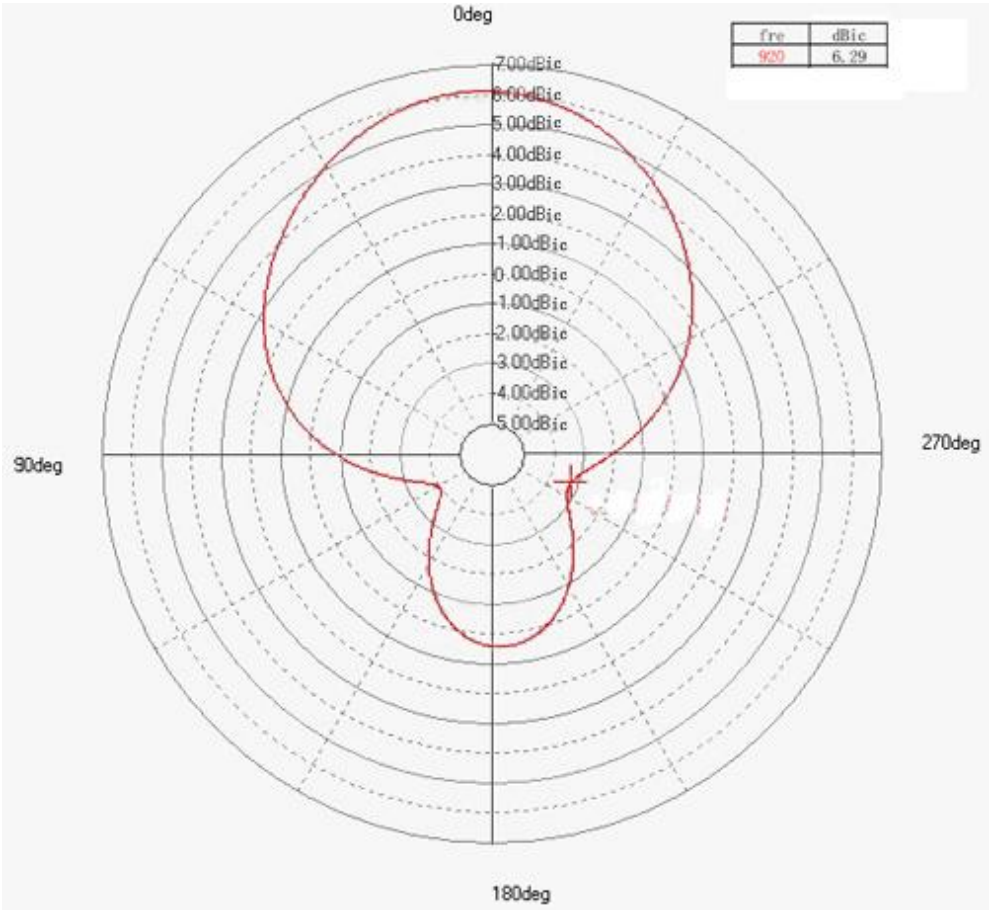


Figure 7 Pattern of BRA-02 antenna (two-dimensional pattern, gain display greater than 6 dBic)