

🏠 ■ Automation Device ■ Relay ■ Specification

Relay

Download Spec

RBF Relay is a dry contact relay to control 6-36 V_{DC} power supply remotely.



Features

ON/OFF

- Physical button control
- App Control
- Smart Scene control: By Alarm, By Operation, By Fault, By Schedule

Remote setting and testing

- Setting and testing from RB Link App

Advanced features

- Power up enrolling *When sensor is powered up, it will automatically start paring to the hub nearby*
- Find me *When enabled, the device starts flashing green, which can help identify the sensor from numerous door magnetic sensors.*
- Signal strength detection *When enabled, relay starts flashing green/orange/red showing the wireless signal strength between the hub at current installation place.*

Indicator

- ON: Blue on
- OFF: Blue off
- Find me: Flashing Green
- Signal strength: Flashing Green / Orange / Red *Flashing Green: signal strength is strong, and is recommended to install device here**Flashing Orange: signal strength is medium and device can be installed here**Flashing Red: signal strength is bad or no signal, and device can not be installed here*

RBF wireless technology

Wireless signal range

- 868 MHz Relay: Up to 1,900 m in an open space with hub
- Two-way communication between hub

Frequency bands

- 868 MHz Relay: 863 ~ 870 MHz
- 915 MHz Relay: 902 ~ 928 MHz

Depends on sales region.

Maximum effective radiated power

- Up to 20 dBm Featured automatic power control to reduce power consumption and noise interference.

Wireless signal modulation

- FSK / DSSS

Encrypted communication

- All the data transmitted are protected by AES-CCM encryption with a random key.

Frequency hopping (FHSS)

- To prevent radio interference and radio signal interception.

Time division multiple access (TDMA)

- With the help of clock synchronization technology, hub will slice time into different division for different RBF wireless devices. In this way, all devices will communicate with hub in a sequence.

Electrical Characteristics

Power Supply

- 7 - 24 V_{DC} (DC only)

Maximum load current

- 5 A at 24 V_{DC}

General

Operation Temperature

- From -10°C to +55°C (14°F to 131°F)

Operation Humidity

- From 10% to 90%

Storage Temperature

- From -20°C to 60°C (-4°F to 140°F)

Dimension(W × H × D)

- 40mm × 35mm × 20mm

Weight

- xxv. 7 g

Compatibility

- Operates with all RoomBanker Home Security Hubs, RBF repeaters.

Complete set

- Relay Module
- Quick Start Guide

| Product | Quantity |
|-------------------|----------|
| Relay Module | × 1 |
| Quick Start Guide | × 1 |

Additional information

Available models

- RBAD-RL1-868
- RBAD-RL1-915

Certifications

- CE, CB
- FCC
- ICASA
- RCM

- NOM
- Anatel

Warranty

- Replacement and repair within 24 months of the date of sale. Batteries are not covered under warranty.

FCC Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

To comply with RF exposure requirements, a minimum separation distance of 20cm must be maintained between the user's body and the device, including the antenna.