

# Datasheet

Rev. 0.1

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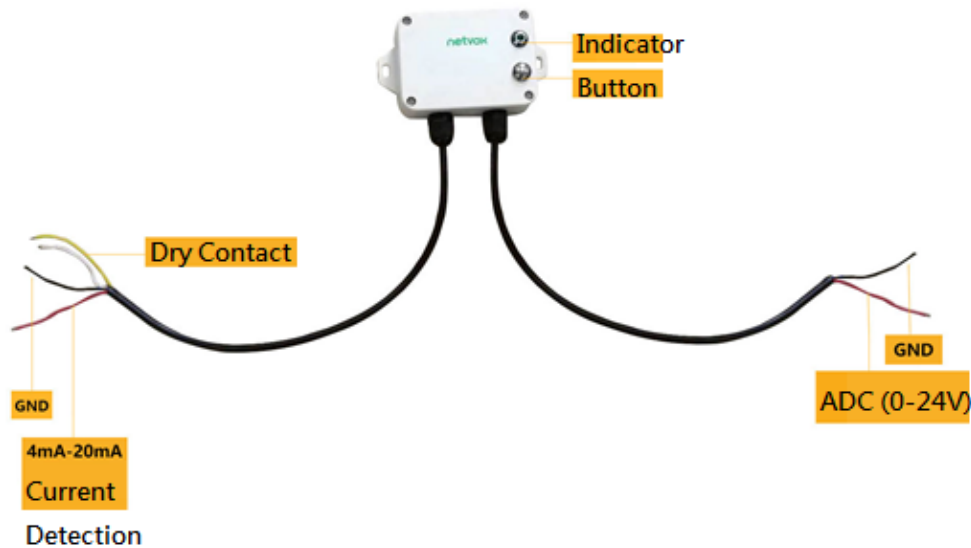


Figure 1 R718 IJK Appearance (subject to the real object)

## Overview

This device is used for detecting 4mA-20mA signal, 0-24V DC ADC samples and dry contact features which employs SX1276 wireless communication module .

R718IJK can detect 4mA-20mA signal, 0-24V DC ADC sampling signal and dry contact input signal, and send the detection signal data to the gateway, and display the collected data in the monitoring platform.

## Main features

- Using SX1276 wireless communication module
- 2 ER14505 batteries AA SIZE (3.6V / section) power supply in parallel
- Protection grade IP65
- The base is equipped with a magnet, which can be attracted to iron objects
- 4mA-20mA signal detection
- Dry contact
- 0-24V ADC detection (the red wire is connected to the positive 24V, the black wire is connected to the negative GND , be careful not to be reversed.)

### Application scenario

- Sensor
- Measuring equipment
- Instrumentation
- Other

### Dimensions

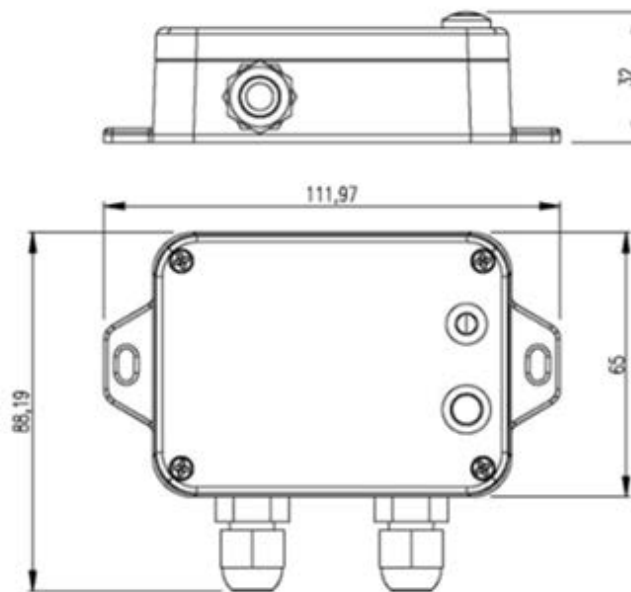


Figure 2 Dimensional drawing of mainframe

### Electrical Characteristics

Power supply	2 ER14505 lithium batteries (3.6 V, 2400mAh / section) in parallel
Battery life	Battery life of 5 years (condition: ambient temperature 25 °C, report once every 15min, txpower = 20dBm, LoRa spreading factor SF = 10)
Sleep current	22.7 uA
Wake-up current	6.3mA @ 3.3V
RF receiving current	11 mA @ 3.3V
RF emission current	120mA @ 3.3 V
Battery measurement accuracy	± 0.1V

\* Specific electrical characteristics will vary depending on the power supply voltage

### RF characteristics

Frequency range	863MHz-928MHz    470MHz-510MHz
Power output	US915    20dbm; AS923    16dbm; AU915    20dbm; CN470    19.15dbm; EU868    16dbm; KR920    14dbm; IN865    20dbm;
Receive sensitivity	-136dBm (LoRa, Spreading Factor = 12, Bit Rate = 293bps); -121 dBm ( FSK, Frequency deviation = 5kHz, Bit Rate = 1.2kbps)
Antenna type	Built-in antenna
Communication distance	Up to 10 km (visible straight - line barrier-free transmission distance, the actual transmission distance depends on the environment )
Data transfer rate	0.3kbps ~ 50k bps
Modulation system mode	LoRa / FSK (Note: choose one of them)
Supported LoRaWAN band	EU863- 870, US 902-928, AU915-928, KR920-923, AS923, CN470-510 (Note: the frequency band is optional, it needs to be configured before delivery)

### Physical properties

Size	L: 112 mm * W: 88.19 mm * H: 32 mm
Body weight	Approximately 141 g
Ambient temperature range	-20°C ~ 55°C
Ambient humidity range	<90% RH (non-condensing)