

# Unit RFID-UHF

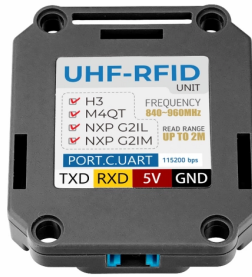
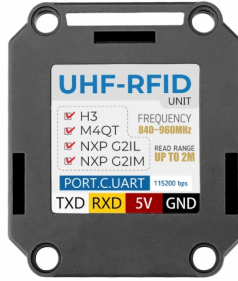
SKU:U107

UNIT  
UHF-RFID



- ✓ H3
  - ✓ M4QT
  - ✓ NXP G21L
  - ✓ NXP G21M
- 56x48x11.5mm

115200bps  
**UART**  
INTERFACE  
READ RANGE UP TO 2M  
FREQUENCY: 840~960MHz



## Description

**Unit RFID-UHF** is an ultra-high frequency (UHF) embedded wireless radio frequency read/write module. It adopts the JRD-4035 module solution with a built-in ceramic antenna, completely eliminating the technical uncertainties associated with the external antenna requirements of conventional UHF modules. The optimized RF design delivers low power consumption and high performance. Featuring a serial communication interface paired with a built-in AT command set, the module achieves plug-and-play functionality, providing an excellent development and user experience. It is well-suited for applications such as warehouse logistics management and smart retail, meeting the demands of monitoring and reading multiple product tags simultaneously.

## Features

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- Detection range: 1m
- Operating frequency range: 840 ~ 960 MHz
- Air interface protocol:
  - EPCglobal UHF Class 1 Gen 2
  - ISO/IEC 18000-6C
- UART communication interface (baud rate: 115200bps)
- Buffer capacity up to 200 tags
- Sensitive and stable tag recognition

## Includes

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- 1 x Unit RFID-UHF
- 1 x HY2.0-4P Grove Cable (20cm)
- 1 x RFID Tag (840 ~ 960 MHz)

## Applications

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- Warehouse logistics pallet management
- Vehicle management
- Smart retail

## Specifications

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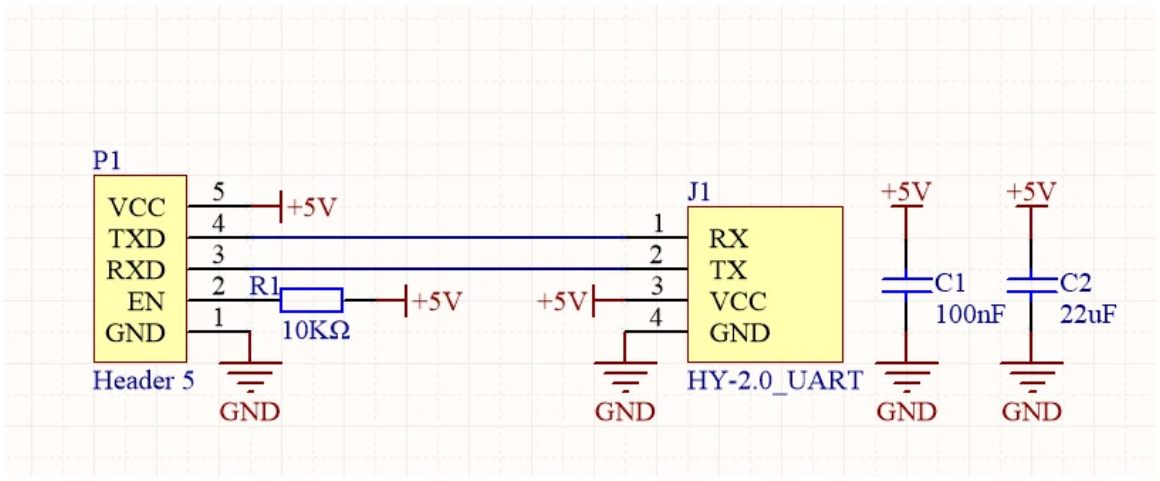
Specification	Parameter
Air Interface Protocol	EPCglobal UHF Class 1 Gen 2 ISO/IEC 18000-6C
Supported Regions	United States, Canada and other regions following FCC Europe and other regions following ETSI EN 302 208 Mainland China, Taiwan, Japan, Korea, Malaysia
Operating Frequency Range	840 ~ 960 MHz
Output Power Range	18 ~ 26 dBm
Tag Buffer	200 tags
Communication Protocol	UART (baud rate: 115200bps)
Shell Material	Plastic (PC)
Product Size	56.0 x 48.0 x 11.5mm
Product Weight	41.0g
Package Size	88.0 x 61.0 x 21.0mm
Gross Weight	58.8g

## Learn

### Reading Range Notice

Regarding the reading range of the Unit UHF-RFID: if the actual reading distance does not reach the 1m specification stated in the documentation, there are two aspects to check. First, confirm that the transmission power has been set to its maximum value. Second, the antenna frequency of this device is fixed at 922MHz — if the frequency configured in software deviates significantly from the antenna frequency, it will also result in a reduced reading range.

## Schematics

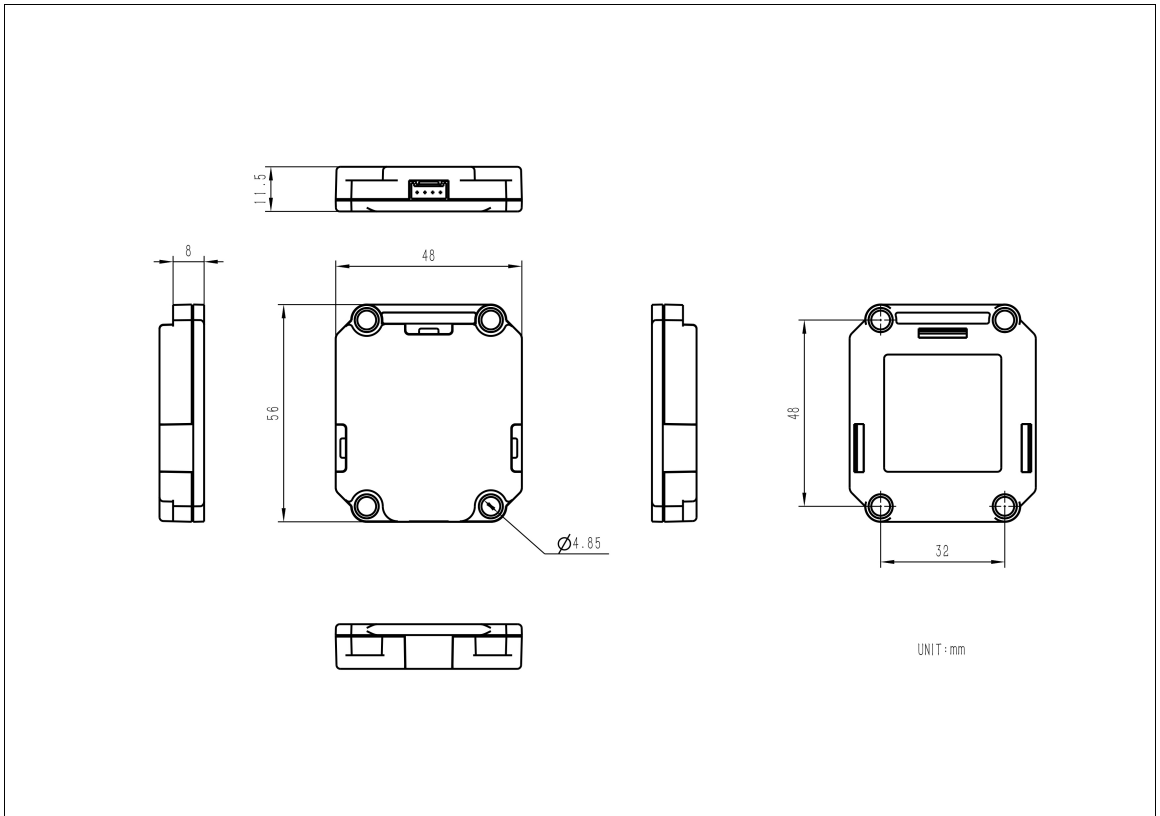


## PinMap

### Unit RFID-UHF

HY2.0-4P	Black	Red	Yellow	White
PORT.C	GND	5V	UART_RX	UART_TX

## Model Size



## Datasheets

- [UHF RFID Unit \(JRD-4035\) Specification](#)

## Softwares

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### Arduino

- [Unit RFID-UHF Arduino Tutorial](#)
- [Unit RFID-UHF Arduino Driver Library & Test Example](#)

### Protocol

- [Unit RFID-UHF Common Control Commands](#)

### Easyloader

Easyloader	Download	Note
<a href="#">Unit RFID-UHF Test Easyloader</a>	<a href="#">download</a>	/

### UiFlow2

- [Unit RFID-UHF UiFlow2 Docs](#)

## Video

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[UHF-RFID\\_VIDEO.mp4](#)