



# SYSIOT SR-RU471B UHF RFID Fixed Reader Instruction Manual

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**SYSIOT SR-RU471B UHF RFID Fixed Reader**



## Specifications

**Model:** SR-RU471B

**Main Function:** UHF RFID Fixed Reader

**Protocol:** EPC Global UHF Class 1 Gen 2 / ISO 18000-6C **RFID Parameter:**

- **Frequency:** 902-928MHz at option; FHSS
- **Tag Reading Distance:**  $\geq 45\text{m}$
- **Writing Distance:**  $\geq 10\text{m}$
- **Multiple Tag Reading Speed:**  $\geq 1,000\text{pcs/s}$

## Communication Parameter:

- **Interface:** USB, RS232, RS485/Weigand, RJ45(TCP/IP, UDP) 4 GPIO, including 2 GPI and 2 GPO
- **Baud Rate:** 115200bps

## Power Parameter:

- **Operating Voltage:** DC 12.0V (9V~24V)
- **Operating Current:**  $\leq 600\text{mA}$  / DC 12V
- **Standby Current:**  $\leq 100\text{mA}$  / DC 12V
- **PoE Support:** Yes, at option

## Working Environment:

- **Operating Temperature:**  $-20^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- **Storage Temperature:**  $-30^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- **Operating Humidity:**  $<95\%\text{RH}$  ( $+25^{\circ}\text{C}$ ) Non-condensing

## Product Usage Instructions

### Powering the Reader

Ensure the operating voltage is within the range of 9V to 24V.

Connect the power source to the reader using the appropriate interface.

### Tag Reading

To read tags, place them within the specified reading distance of 45m from the reader. The reader supports reading multiple tags simultaneously at a speed of 1,000pcs/s.

### Communication Setup

Choose the desired communication interface (USB, RS232, RS485/Weigand, RJ45) based on your setup requirements. Set the baud rate to 115200bps for optimal communication.

## Environmental Considerations

Avoid exposing the reader to extreme temperatures outside the specified operating range (-20°C to +55°C). Ensure proper storage within the temperature limits of -30°C to +85°C.

## Frequently Asked Questions (FAQ)

### 1. Q: Can the reader support Power over Ethernet (PoE)?

A: Yes, PoE support is available as an option for the SR-RU471B reader.

### 2. Q: What is the maximum writing distance of the reader?

A: The maximum writing distance of the SR-RU471B reader is 10m.

### 3. Q: What is the main protocol supported by the reader?

A: The main protocol supported is EPC Global UHF Class 1 Gen 2 / ISO 18000-6C.

## General Description

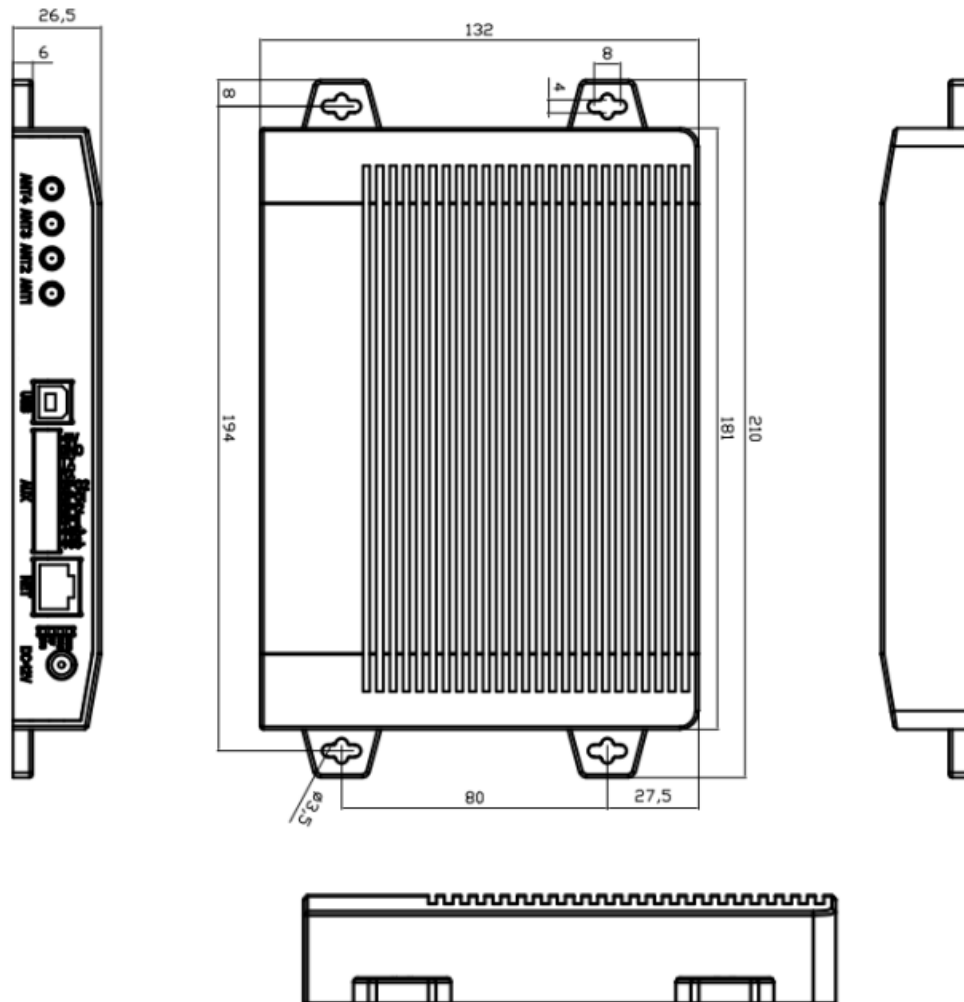
The SR-RU471B is an ultra-high-performance UHF RFID fixed reader that combines a proprietary and efficient collision processing algorithm to achieve rapid reading of electronic tags while maintaining a high reading rate. Write processing has the characteristics of long reading distance, fast recognition speed, various interface types, small size and easy installation. It can be widely used in various applications such as logistics tracking, commodity inventory, cargo sorting, vehicle management, personnel management, asset management, medical systems, cold chain management, temperature monitoring, power monitoring, anti-counterfeiting systems and production process control.

## Features

- Based on IMPINJ E710 chip design, fully supports EPC C1G2 (ISO18000-6C) protocol
- Support EU 840~868MHz, US 902~928MHz working frequency (or Customized)
- Optimized multi-label inventory algorithm, the peak tags inventory speed reaches 1,000 /second
- Works in broad spectrum frequency hopping (FHSS)
- Tag buffer area 1000 tags @ 96bit EPC
- Support command, polling, and trigger mode
- Supports independent and combined inventory of EPC, TID, and USER data areas
- Low power dissipation with single +12 DC power supply
- Interface support USB, RS232, RS485, Weigand, RJ45(TCP/IP, UDP)
- Support 4 antenna SMA port
- Number of tag caches up to 800pcs (96-bit EPC length)
- Provide DEMO and SDK for development
- Support development based on Windows, Android, Linux etc. and C, C#, JAVA, Python etc.

## Dimension





## FCC WARNING

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, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Any 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 maintain compliance with FCC’s RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

## Documents / Resources

	<p><a href="#">SYSIOT SR-RU471B UHF RFID Fixed Reader</a> [pdf] Instruction Manual SR-RU471B, SR-RU471B UHF RFID Fixed Reader, UHF RFID Fixed Reader, RFID Fixed Reader, Fixed Reader, Reader</p>
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## References

- [User Manual](#)

### [Manuals+.](#) [Privacy Policy](#)

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