

Wireless RS485 Adapter

Wireless Sensor Network Based on LoRa Technology



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Introduction

R718PC supports RS485 serial port transparent transmission.

The device can send the read commands to sensors supporting RS485 protocol according to the configured cycle. The information returned by the sensor will be directly reported to the gateway, and be displayed on the interface of the gateway. It adopts SX1276 wireless communication module.

Main Characteristic

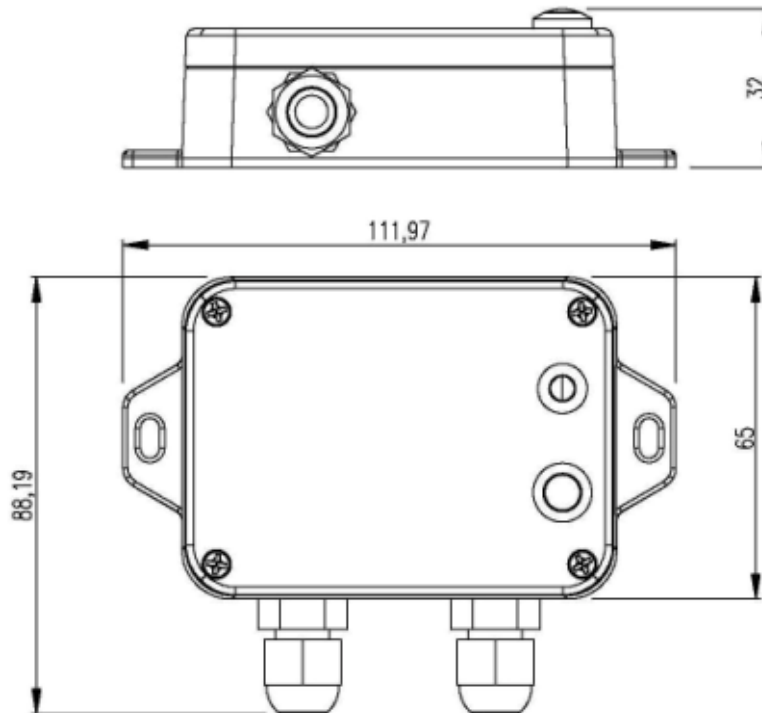
- Adopt SX1276 wireless communication module
- DC 12V adapter power supply
- Protection level IP65/IP57 (optional)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- RS485 serial port transparent transmission
- Compatible with LoRaWAN™ Class C
- Frequency hopping spread spectrum technology
- Configuring parameters and reading data via third-party software platforms, and set alarms via SMS text and email (optional)
- Applicable to third-party platforms: Actility / ThingPark, TTN, MyDevices / Cayenne

Application

- RS485 serial port transparent transmission

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Dimension



(Unit: mm)

Electric

Power Supply	DC 12V adapter power supply
Operating Current	35mA (without external sensor)

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

Frequency

Frequency Range	863MHz-928MHz 470MHz-510MHz
Power Output	US915 20dbm AS923 16dbm AU915 20dbm CN470 19.15dbm EU868 16dbm KR920 14dbm IN865 20dbm
Receiving Sensitivity	-136dBm (LoRa, Spreading Factor=12, Bit Rate = 293bps) -121 dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)

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Antenna Type	Built-in antenna
Communication Distance	10 km (visible linear obstacle-free transmission distance, actual transmission distance depends on the environment)
Data Transfer Rate	0.3kbps to 50k bps
Modulation System Mode	LoRa/FSK (Note: choose one of them)
Supportable LoRaWAN Band	EU863-870, US902-928, AU915-928, KR920-923, AS923, CN470-510 (Note: The frequency band is optional and needs to be configured before shipment)

Physical

Dimension	L: 112 mm*W: 88.19 mm*H: 32 mm
Main Unit Weight	About 160g
Ambient Temperature Range	- 20°C to 55°C
Ambient Humidity Range	<90% RH (no condensation)
Storage Temperature Range	- 40 °C ~ 85 °C