Wireless RS232 Adapter

Wireless Sensor Network Based on LoRa Technology



(subject to the actual object)

R718PDA

Data Sheet

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Introduction

R718PDA only supports RS232 serial port transmission. The device can send the read commands to sensors supporting RS232 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.

Operating Principle

The module communicates with an external RS232 type device by serial communication.

Main Characteristic

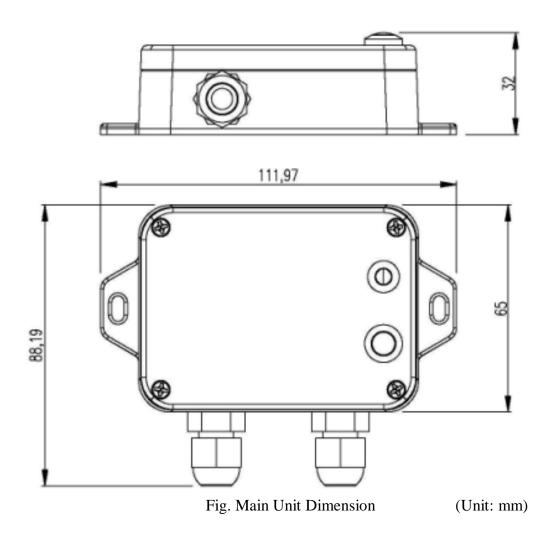
- Adopt SX1276 wireless communication module
- DC 12V adapter power supply
- Main Unit Protection level IP65/IP57 (optional)
- The base is equipped with a magnet that can be attached to the iron object
- RS232 serial port communication
- Compatible with LoRaWANTM Class C
- Frequency hopping spread spectrum 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

- Smart home products
- Health and medical equipment
- Wireless data transmission products
- Other



Dimension



Electric

Power Supply	DC 12V adapter power supply
Operating Current	Less than 45mA (without external device)
12V Output Wire Current	Less than 1A

^{*} 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)
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	LoRa: 0.3kbps~50kbps
	FSK: 1.2kbps~300kbps
Modulation System Mode	LoRa/FSK (Note: choose one of them)
Supportable LoRaWAN Band	EU863-870, US902-928, AU915-928, KR920-923, AS923-1,
	AS923-2, AS923-3, IN865, 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