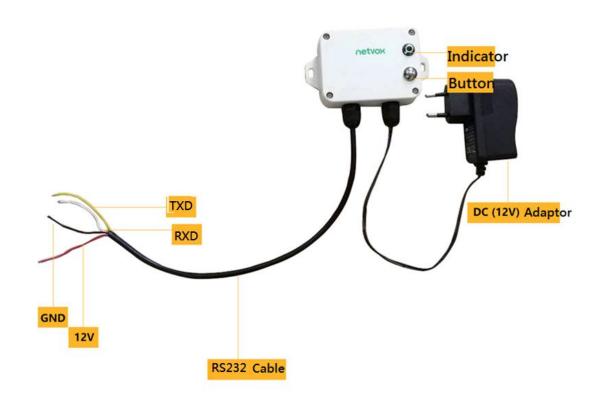


Wireless RS232 Adapter R718PDA Data Sheet

Wireless Sensor Network Based on LoRa Technology



R718PDA (subject to actual object)

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History

Version	Date	Note
0.1	2019-11-20	Initial Release

Notes:

Hardware Version 61R718p6801V0.4

Overview

Wireless RS232 Adapter

This sensor can only supports RS232 serial pass-through. It can be configurated to send a read command to the sensor according to a cycle of time. The returned message from the sensor is reported directly to the gateway, and the gateway of the interface that is displayed, which employs SX1276 Wireless communication.

Working principle

The module performs serial communication with external RS232 type equipment.

Main features

- Using SX1276 wireless communication module
- DC 12V adapter power supply
- Main body Protection class IP65 / IP67 (optional)
- The base is equipped with a magnet, which can be attracted to iron objects
- RS232 serial port transparent transmission
- Compatible with LoRaWAN™ Class C
- Using frequency hopping spread spectrum technology
- Can configure parameters through third-party software platform, read data and set alarms via SMS text and email (optional)
- Applicable to third-party platforms: Actility / ThingPark, TTN, MyDevices / Cayenne

Application scenario

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

Size:

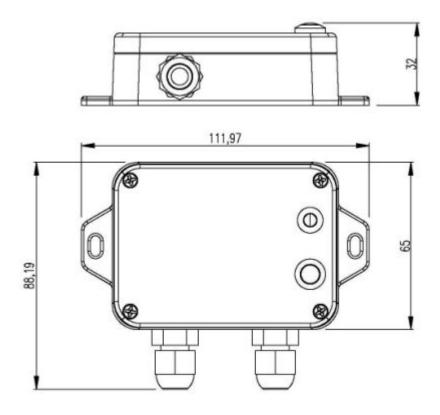


Fig 1. Main Body Size

Main Body Size: 112mm x 88.19mm x 32mm

Electrical characteristics

Power supply	DC 12V adapter power supply
Working current	TBD

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

RF characteristics

Frequency range	863MHz-928MHz 470MHz-510MHz
Power output	$19 \text{ dBm} \pm 1 \text{dBm}$
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	Up to 10 km (the actual transmission distance depends
	on the environment)



Wireless RS232 Adapter

Data transfer rate	0.3 kbps ~ 50 k bps
Modulation system mode	LoRa / FSK (Choose one of them)
Supported LoRaWAN Band	EU863-870, US902-928, AU915-928, KR920-923, AS
	923, CN470-510 (Note: Band optional, to be
	configurated before shipment.)

Physical properties

Size	L: 112 mm * W: 88.19 mm * H: 32 mm,
Ambient temperature range	-20°C ~ 55°C
Body weight	160g
Ambient humidity range	<90% RH (no condense)
Storage temperature range	-40°C ~ 85°C