Wireless 2-Input mA Current Meter Interface, 4~20 mA

Wireless Sensor Network Based on LoRa Technology

R718KA2

Data Sheet

Wireless 2-Input mA Current Meter Interface, 4~20 mA

Introduction

This device is used to detect 4mA-20mA signal equipment. It can simultaneously detect two devices with 4mA-20mA output signal. It uses SX1276 wireless communication module. The R718KA2 can detect the 4mA-20mA signal and add the detection signal data to the gateway to display the collected data in the gateway.

Main Characteristic

- Adopt SX1276 wireless communication module

- Compatible with LoRaWAN^{TM} Class A

- Frequency hopping spread spectrum (FHSS)

- The base is attached with a magnet that can be attached to a ferromagnetic material object

- Configuration parameters can be configured through third-party software platforms, data can be read and alarms can be set via SMS text and email (optional)

- Applicable to the third-party platforms: Actility/ThingPark, TTN, MyDevices/Cayenne

- Low power consumption and long battery life

Note:

 Battery life is determined by the sensor reporting frequency and other variables, please refer to http://www.netvox.com.tw/electric/electric_calc.html

On this website, users can find battery life of various models in different configurations.

Application

- Sensing

- Measuring devices

- Instrumentation

- Others
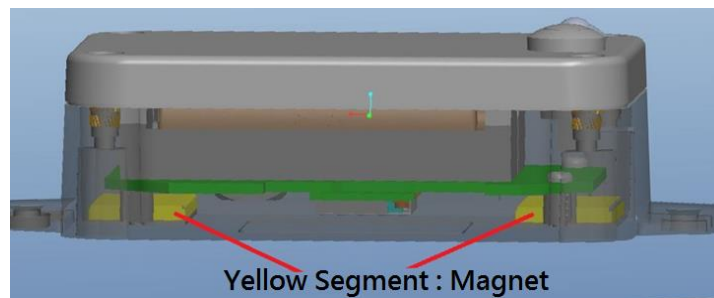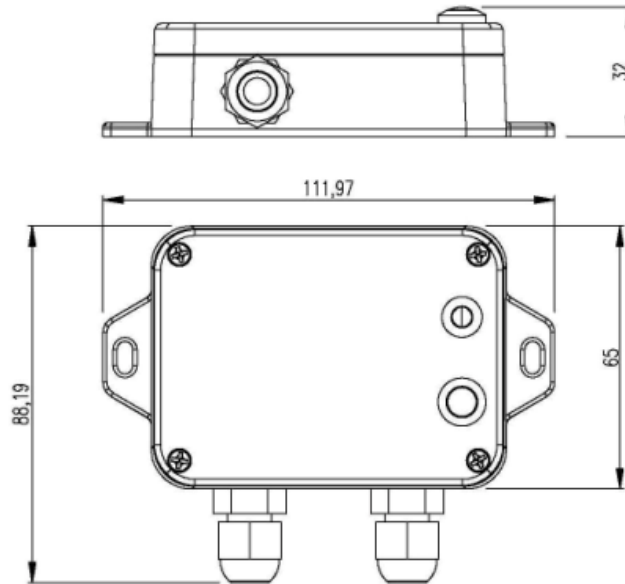
Wireless 2-Input mA Current Meter Interface, 4~20 mA

Dimension

Figure 2 Dimensions of main engine shell

Electric

Input Power	2 x 3.6V ER14505 AA lithium batteries (3.6V 2400mAh/ section）
Sleeping Current	21uA
Wakeup Current	6.3mA/ 3.3V
Receiving Current (max)	11mA/ 3.3V
Transmitting Current (max)	120mA/ 3.3V
Battery Voltage Measurement Accuracy	±0.1V
Low Voltage Threshold	3.2V

Wireless 2-Input mA Current Meter Interface, 4~20 mA

Frequency

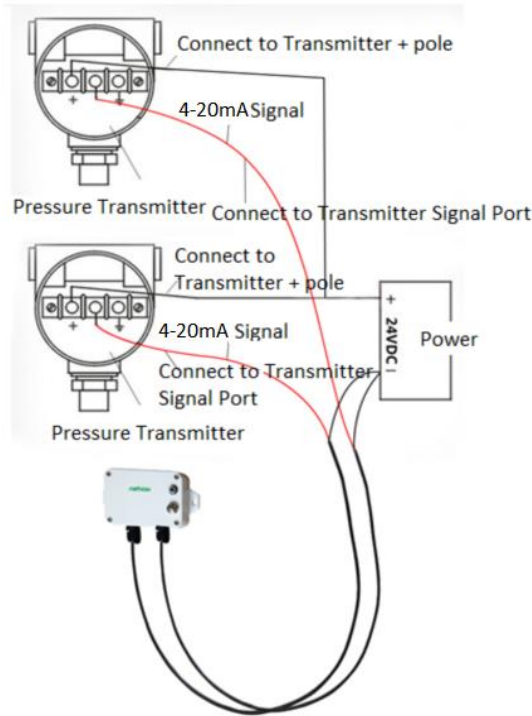|	
Frequency Range	863MHz-928MHz 470MHz-510MHz
TX Power	US915 20dbm; AS923 16dbm; AU915 20dbm; CN470 19.15dbm; EU868 16dbm; KR920 14dbm; IN865 20dbm;
Receiving Sensitivity	-136 dBm (LoRa, Spreading Factor=12, Bit Rate = 293bps) -121 dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Build-in antenna
Communication Distance	10 km (Visible linear obstacle-free transmission distance, actual transmission distance depending on the environment.)
Data Transfer Rate	0.3kbps ~ 50kbps
Modulation	LoRa / FSK (Note: choose one of them)
Supportable LoRaWAN Frequency	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	Main Part: L: 112mm*W: 65mm*H: 32mm
Weight	141g
Environment Humidity Range	<90 %RH (No condensation)
Operating Temperature	-20°C to 55 °C
Storage Temperature	-40°C to 85 °C

Wireless 2-Input mA Current Meter Interface, 4~20 mA

2-wire System Example Diagram (for wiring reference)

3-wire System Example Diagram (for wiring reference)