

Wireless Temperature Sensor

Wireless Network Based on LoRa Technology



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Wireless Temperature Sensor

Introduction

R711A is mainly used to detect the temperature of indoor air. It transmits the collected data to other devices for display through the wireless network communication module.

Main Characteristic

- 2 * AA alkaline battery power supply
- LoRaWAN™ Class A compatible
- Temperature detection
- Frequency Hopping Spread Spectrum (FHSS)
- Third Party online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email (optional)
- Applicable to the third-party platform: Actility/ ThingPark, TTN, MyDevices/Cayenne
- Low consumption and long battery life

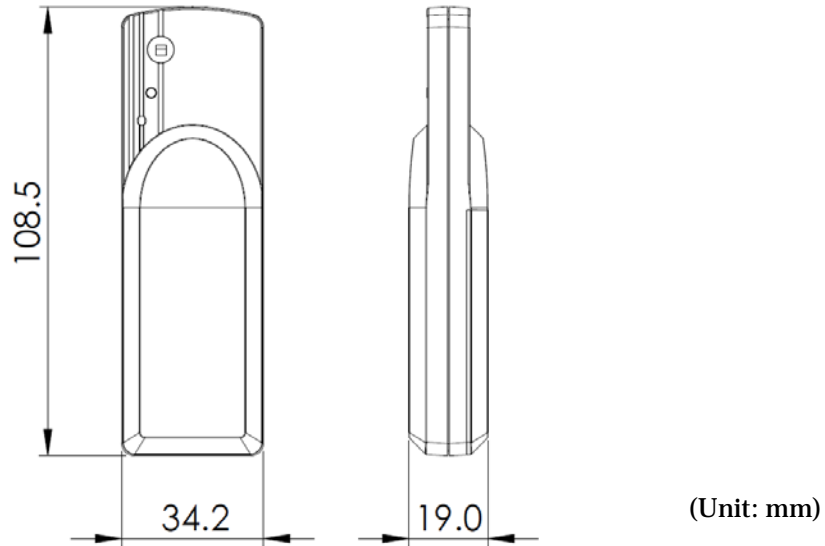
Battery Life*2:

Please refer to web: http://www.netvox.com.tw/electric/electric_calc.html

At this website, users can find battery lifetime for various models at different configurations.

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Technical Specifications



Electric

Input power	2 x 1.5V AA alkaline battery
Operating Voltage Range	2.3V to 3V
Standby Current	15uA/3V
Wake-up Current	The range of wake-up current: 0.8mA-20mA (When there is no transmitting and receiving data of LoRa)
Battery Measurement Accuracy	±0.1V
Low Voltage Threshold	2.4v

Module - R100H

Wake-up Current	(0.8mA-8mA) @3V
RF Receiving Current	11mA @3V
RF Transmitting Current	120mA @3V

* Specific electrical characteristics may vary depending on the power supply voltage.

Temperature Sensor

Temperature Measurement Range	-20°C to 55°C
Temperature Measurement Accuracy	±2°C

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Frequency

Frequency Range	863MHz-928MHz 470MHz-510MHz
TX Power	US915 20dbm AS923 16dbm AU915 20dbm CN470 19.15dbm EU868 16dbm KR920 14dbm IN865 20dbm
Receive Sensitivity	-121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps) -136dBm (LoRa, Spreading Factor=12, Bit Rate=293bps)
Antenna Type	Built-in antenna
Communication Distance	10km (visible linear obstacle-free transmission distance, actual transmission distance depending on the environment)
Data Transfer Rate	0.3kbps ~ 50kbps (LoRa) 1.2kbps ~ 300kbps (FSK)
Modulation Method	LoRa / FSK (Note: choose one of them)
Supportable LoRaWAN Band	EU863-870,US902-928,AU915-928,KR920-923,AS923-1,AS923-2 ,AS923-3,IN865-867,CN470-510 (Note: optional, to be done in the factory configuration)

Physical

Dimension	L 108.5mm* W 34.2mm* H 19mm
Weight	83.8g
Operating Temperature Range	-20°C to 55°C
Storage Temperature Range	-40°C to 85°C
Operating Humidity Range	<90%RH (No condensation)