netvox®

Netvox LoRa Sensors & Devices

Wireless Sensor Network Based on LoRa Technology

Product Catalogue

2022

What is LoRa?

LoRa technology was developed by a company called Semtech and it is a new wireless protocol designed specifically for long-range, low-power communications. LoRa stands for Long Range Radio and is mainly targeted for M2M and IoT networks. This technology will enable public or multi-tenant networks to connect a number of applications running on the same network.

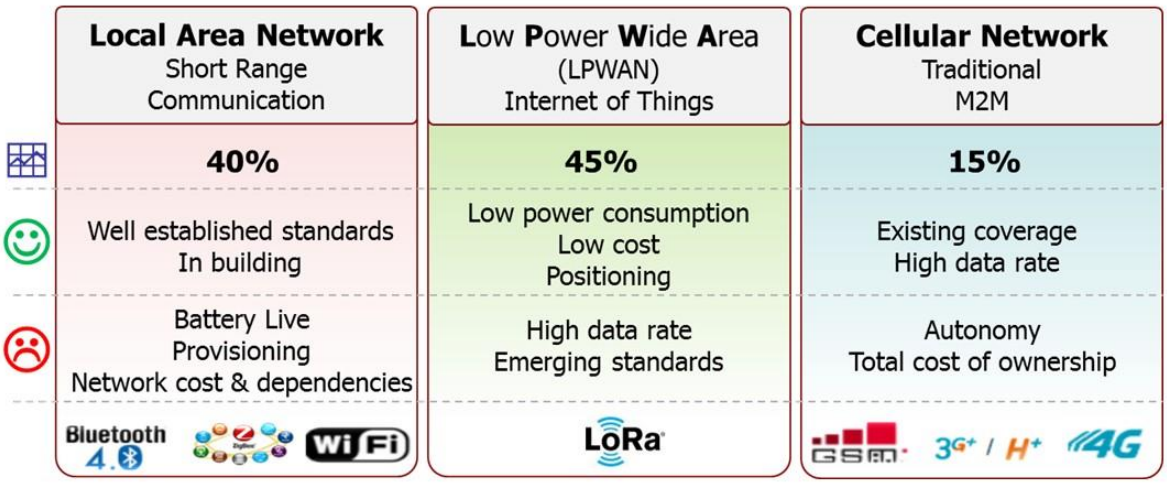
LoRa Alliance was formed to standardize LPWAN (Low Power Wide Area Networks) for IoT and is a non-profit association which features membership from a number of key market shareholders such as CISCO, actility, MicroChip, IBM, STMicro, SEMTECH, Orange mobile and many more. This alliance is key to providing interoperability among multiple nationwide networks.

Each LoRa gateway has the ability to handle up to millions of nodes. The signals can span a significant distance, which means that there is less infrastructure required, making constructing a network much cheaper and faster to implement.

LoRa also features an adaptive data rate algorithm to help maximize the nodes life and network capacity. The LoRa protocol includes a number of different layers including encryption at the network, application and device level for secure communications.

Where does LPWAN fit?

One technology cannot serve all of the projected applications and volumes for IoT. WiFi and BTLE are widely adopted standards and serve the applications related to communicating personal devices quite well. Cellular technology is a great fit for applications that need high data throughput and have a power source. LPWAN offers multi-year lifetime and is designed for sensors and applications that need to send small amounts of data over long distances a few times per hour from varying environments.



Important Factors in LPWAN?

The most critical factors in a LPWAN are:

- Network architecture
- Communication range
- lifetime or low power
- Robustness to interference
- Network capacity (maximum number of nodes in a network)
- Network security
- One-way vs two-way communication
- Variety of applications served

Reference: https://docs.wixstatic.com/ugd/eccc1a_ed71ea1cd969417493c74e4a13c55685.pdf

Intellectual System Based on LoRa Technology

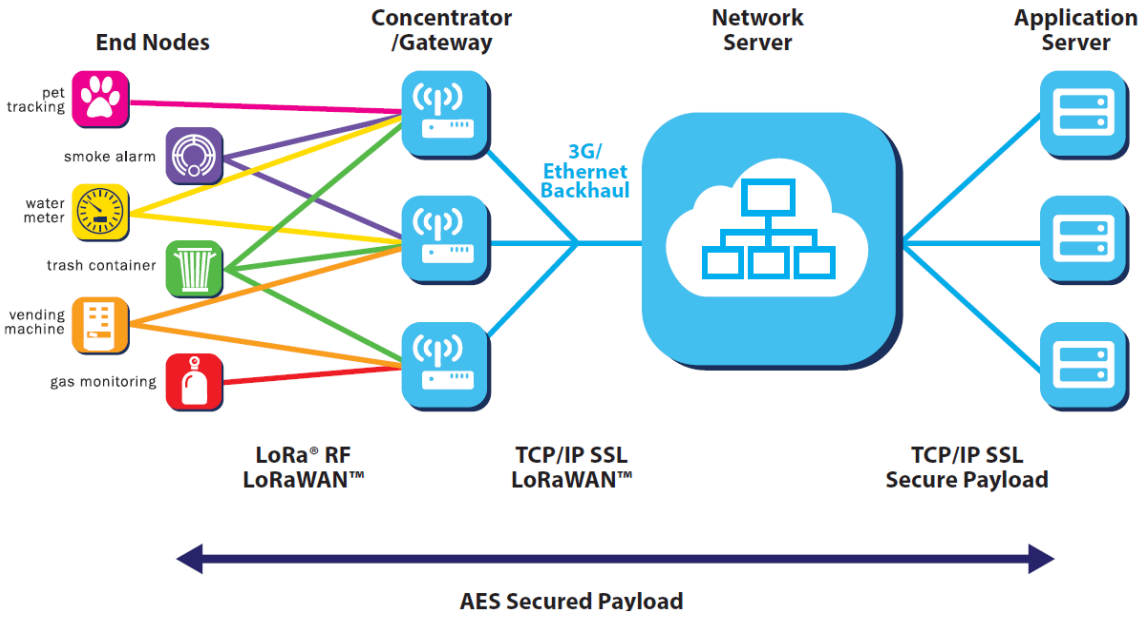
What is LoRaWAN™?

LoRaWAN™ defines the communication protocol and system architecture for the network while the LoRa® physical layer enables the long-range communication link. The protocol and network architecture have the most influence in determining the lifetime of a node, the network capacity, the quality of service, the security, and the variety of applications served by the network.

Application					
LoRa® MAC					
Class A (Baseline)		Class B (Beacon)		Class C (Continuous)	MAC options
LoRa® Modulation					
EU 868	EU 433	US 915	AS 430	…	Regional ISM band

Network Architecture

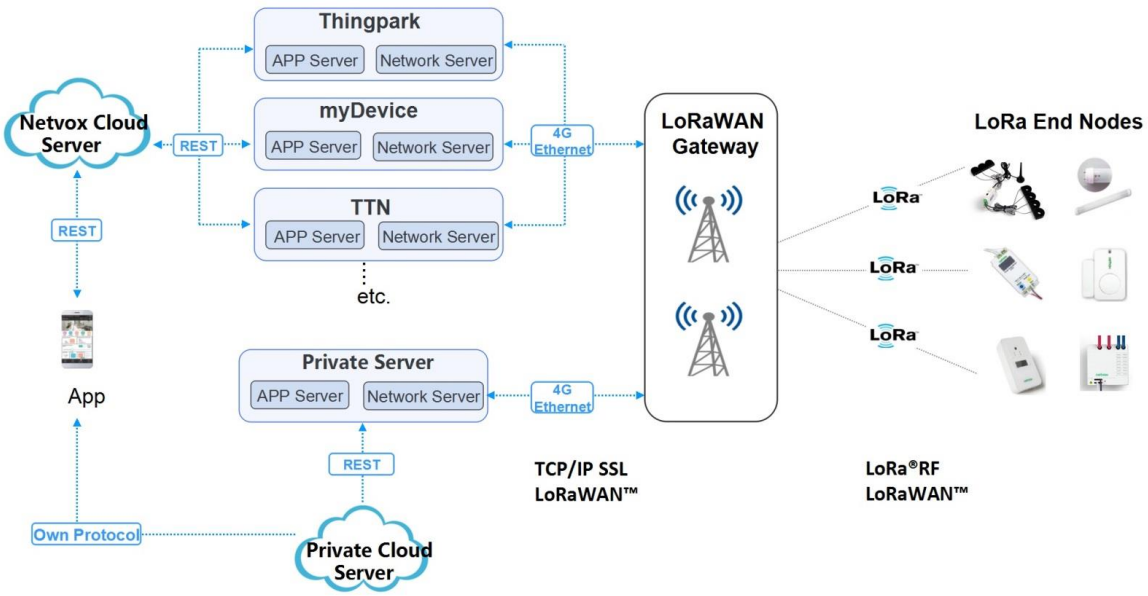
Many existing deployed networks utilize a mesh network architecture. In a mesh network, the individual end-nodes forward the information of other nodes to increase the communication range and cell size of the network.



Reference: https://docs.wixstatic.com/ugd/eccc1a_ed71ea1cd969417493c74e4a13c55685.pdf

Netvox Network Architecture

While this increases the range, it also adds complexity, reduces network capacity, and reduces lifetime as nodes receive and forward information from other nodes that is likely irrelevant for them. Long range star architecture makes the most sense for preserving lifetime when long-range connectivity can be achieved.



In a LoRaWAN™ network nodes are not associated with a specific gateway. Instead, data transmitted by a node is typically received by multiple gateways. Each gateway will forward the received packet from the end-node to the cloud-based network server via some backhaul (either cellular, Ethernet, satellite, or Wi-Fi).

The intelligence and complexity is pushed to the network server, which manages the network and will filter redundant received packets, perform security checks, schedule acknowledgments through the optimal gateway, and perform adaptive data rate, etc.

If a node is mobile or moving there is no handover needed from gateway to gateway, which is a critical feature to enable asset tracking applications–a major target application vertical for IoT.

LoRaWAN™ Regional Summery

The LoRaWAN™ specification varies slightly from region to region based on the different regional spectrum allocations and regulatory requirements. The LoRaWAN™ specification for Europe and North America are defined, but other regions are still being defined by the technical committee.

Joining the LoRa® Alliance as a contributor member and participating in the technical committee can have significant advantages to companies targeting solutions for the Asia market.

	Europe	North America	China	Korea	Japan	India
Frequency band	867-869MHz	902-928MHz	470-510MHz	920-925MHz	920-925MHz	865-867MHz
Channels	10	64 + 8 +8	In definition by Technical Committee	In definition by Technical Committee	In definition by Technical Committee	In definition by Technical Committee
Channel BW Up	125/250kHz	125/500kHz				
Channel BW Dn	125kHz	500kHz				
TX Power Up	+14dBm	+20dBm typ (+30dBm allowed)				
TX Power Dn	+14dBm	+27dBm				
SF Up	7-12	7-10				
Data rate	250bps- 50kbps	980bps-21.9kpbs				
Link Budget Up	155dB	154dB				
Link Budget Dn	155dB	157dB				

Reference: https://docs.wixstatic.com/ugd/eccc1a_ed71ea1cd969417493c74e4a13c55685.pdf

Intellectual System Based on LoRa Technology

LoRaWAN™ Features

Long Range

1. Greater than cellular
2. Deep indoor coverage
3. Star topology

Max Lifetime

4. Low power optimized
5. Long lifetime
6. >10x vs cellular M2M

Multi-Usage

7. High capacity
8. Multi-tenant
9. Public network

Low Cost

10. Minimal infrastructure
11. Low cost end node
12. Open SW

Reference: https://docs.wixstatic.com/ugd/eccc1a_ed71ea1cd969417493c74e4a13c55685.pdf

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Gateway

R206	Wireless IoT Controller
R206A	Wireless Dual-Mode IoT Controller
R206C	Wireless IoT Controller with External Antenna
R207	Wireless IoT Controller
R207C	Wireless IoT Controller with External Antenna

Security

R311A / R313A	Wireless Door/Window Sensor
R311D / R313D	Wireless Asset Sensor
R311DA / R313DA	Wireless Vibration Sensor, Rolling Ball Type
R311DB / R313DB	Wireless Vibration Sensor, Spring Type
R311W / R313W	Wireless 2-Gang Water Leak Detector
R312 / R313M	Wireless Door Bell Button
R312A / R313MA	Wireless Emergency Button
R602A	Wireless Siren
R718DA R718DA2	Wireless Vibration Sensor, Rolling Ball Type Wireless 2-Gang Vibration Sensor Rolling Ball Type
R718DB R718DB2	Wireless Vibration Sensor, Spring Type Wireless 2-Gang Vibration Sensor, Spring Type
R718F R718F2	Wireless Reed Switch Open/Close Detection Sensor Wireless 2-Gang Reed Switch Open/Close Detection Sensor
R718T R718T2	Wireless Push Button Interface Wireless 2-Input Push Button Interface
R718TB	Wireless Push Button
RA02A	Wireless Smoke Detector
RA02C	Wireless CO Detector
RB02I	Wireless Emergency Push Button
RB11E	Wireless Occupancy & Temperature & Light Sensor

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Environmental Monitoring

R311B / R313B	Wireless Light Sensor
R311CA / R313CA	Wireless Dry Contact Sensor
R311CB / R313CB	Wireless Window Sensor with Glass Break Detector
R311CC / R313CC	Wireless 2-Gang Door/Window Sensor
R311G / R313G	Wireless Light Sensor
R311K / R313K	Wireless Tilt Sensor
R311LA / R313LA	Wireless Infrared Proximity Sensor
R311WA / R313WA	Wireless Seat Occupancy Sensor
R711	Wireless Temperature and Humidity Sensor
R712	Wireless Outdoor Temperature and Humidity Sensor
R718A / R718A01	Wireless Temperature and Humidity Sensor For Low Temperature Environment
R718AB	Wireless Temperature and Humidity Sensor
R718AD	Wireless Temperature Sensor
R718B	Wireless Temperature Sensor - PT1000 Needle Probe
R718B2	Wireless 2-Gang Temperature Sensor - PT1000 Needle Probe
R718B120 R718B220	Wireless Temperature Sensor - PT1000 Round Head Probe Wireless 2-Gang Temperature Sensor
R718B121 R718B221	Wireless Temperature Sensor - PT1000 Needle Probe Wireless 2-Gang Temperature Sensor
R718B122 R718B222	Wireless Temperature Sensor - PT1000 Absorption Probe Wireless 2-Gang Temperature Sensor
R718B140 R718B240	Wireless Temperature Sensor - PT1000 Round Head Probe Wireless 2-Gang Temperature Sensor
R718B141 R718B241	Wireless Temperature Sensor - PT1000 Needle Probe Wireless 2-Gang Temperature Sensor
R718B150 R718B250	Wireless Temperature Sensor - PT1000 Round Head Probe Wireless 2-Gang Temperature Sensor
R718B151 R718B251	Wireless Temperature Sensor - PT1000 Needle Probe Wireless 2-Gang Temperature Sensor
R718CK R718CK2	Wireless Thermocouple Sensor - Type K Wireless 2-Gang Thermocouple Sensor
R718CN R718CN2	Wireless Thermocouple Sensor - Type N Wireless 2-Gang Thermocouple Sensor
R718CT R718CT2	Wireless Thermocouple Sensor - Type T Wireless 2-Gang Thermocouple Sensor

R718PA1	Wireless CO Sensor
R718PA2	Wireless NO Sensor
R718PA3	Wireless O3 Sensor
R718PA4	Wireless H2S Sensor
R718PA5	Wireless NO2 Sensor
R718PA6	Wireless SO2 Sensor
R718PA7	Wireless Noise Sensor
R718PA8	Wireless PH Sensor
R718PA9	Wireless ORP Sensor
R718PA10	Wireless Turbidity Sensor
R718PA11	Wireless Liquid Level Sensor
R718PA12	Wireless Bottom-installed Ultrasonic Liquid Level Sensor
R718PA22	Wireless Bottom-installed Ultrasonic Liquid Level Sensor
R718PB13	Wireless Soil Moisture Sensor
R718PB15	Wireless Soil Moisture/Temperature/Electrical Conductivity Sensor
R718PB15A	Wireless Soil Moisture/Temperature/Electrical Conductivity Sensor with a Waterproof Housing
R718PE / R718PE01	Wireless Top-Mounted Ultrasonic Level Sensor
R718PG	Wireless Light Sensor
R718PQ	Wireless Short-Range Occupancy Sensor
R718PQA	Wireless Toilet Occupancy Sensor
R718VA	Wireless Flush Toilet /Washing Liquid Bottle/Toilet Paper
R718VB	Wireless Flush Toilet /Washing Liquid Bottle/Toilet Paper/Non-metallic pipe
R718WA R718WA2	Wireless Water Leak Detector Wireless 2-Gang Water Leak Detector
R718WAA	Wireless Water Leakage/Temperature/Humidity Sensor
R718WB R718WB2	Wireless Water Leak Detector with Rope Sensor Wireless 2-Gang Water Leak Detector with Rope Sensor
R718WBA	Wireless Water Leak Detector (Rope Sensor) with Temperature and Humidity Sensor
R718X	Wireless Ultrasonic Distance Sensor and Temperature Sensor
R718Y	Wireless Differential Pressure and Temperature Sensor
R719A	Wireless Surface-Mounted Parking Sensor
R720A	Wireless Temperature and Humidity Sensor
R720B	Wireless Temperature and Humidity Sensor with Activity Detection Sensor

R720C	Wireless Air Pressure and Temperature Sensor
R720E	Wireless TVOC Detection Sensor
R720FLO R720FLD R718FU R718FW	Wireless Liquid Hand Soap Sensor Wireless Water Leak Detector
R72601	Wireless Outdoor CO Sensor with a Solar Panel
R72608	Wireless Outdoor Water pH Sensor with a Solar Panel
R72610	Wireless Turbidity Sensor with Solar Panel
R72611	Wireless Outdoor Liquid Level Sensor with Solar Panel
R72615	Wireless Outdoor CO2/Temperature/Humidity Sensor with Solar Panel
R72615A	Wireless CO2/Temperature/Humidity Sensor
R72616	Wireless Outdoor PM2.5/Temperature/Humidity Sensor with Solar Panel
R72616A	Wireless PM2.5/Temperature/Humidity Sensor
R72623	Wireless Outdoor PM2.5/Noise/Temperature/Humidity Sensor with Solar Panel
R72624	Wireless Outdoor Noise/Temperature/Humidity Sensor with Solar Panel
R72630	Wireless Outdoor Wind Speed/Wind Direction/Temperature/Humidity Sensor with a Solar Panel
R72632A / R72632A01	Wireless NPK Sensor
RA0701	Wireless CO Sensor
RA0708	Wireless PH Sensor
RA0710	Wireless Turbidity Sensor
RA0711	Wireless Liquid Level Sensor
RA0713	Wireless Soil Moisture Sensor
RA0715	Wireless CO2/Temperature/Humidity Sensor
RA0715Y	Wireless Outdoor CO2/Temperature/Humidity Sensor
RA0716	Wireless PM2.5/Temperature/Humidity Sensor
RA0716Y	Wireless Outdoor PM2.5/Temperature/Humidity Sensor
RA0723	Wireless PM2.5/Noise/Temperature/Humidity Sensor
RA0723Y	Wireless Outdoor PM2.5/Noise/Temperature/Humidity Environment Sensor
RA0724	Wireless Noise/Temperature/Humidity Sensor
RA0724Y	Wireless Outdoor Noise/Temperature/Humidity Sensor

RA0730	Wireless Temperature/Humidity/Atmospheric Pressure/Wind Speed /Wind Direction
RA0730Y	Wireless Outdoor Temperature/Humidity/Atmospheric Pressure/Wind Speed /Wind Direction
RA07W	Wireless Water Leak Detection and Location Sensor
R730CK2	Wireless 2-Gang Thermocouple Sensor - Type K
R730CT2	Wireless 2-Gang Thermocouple Sensor - Type T

Contol / Data Collection

R211	Wireless IR Blaster
R311FA / R313FA	Wireless Activity Detection Sensor
R311FA1 / R313FA1	Wireless Accelerometer
R311FB / R313FB	Wireless Activity Event Counter
R311FC / R313FC	Wireless Activity Timer
R716S	Wireless Portable LoRa Field Signal Meter
R718E	Wireless Accelerometer and Surface Temperature Sensor
R718EA	Wireless Tilt Angle and Surface Temperature Sensor
R718EB	Wireless Tilt Angle Sensor
R718EC	Wireless Accelerometer and Surface Temperature Sensor
R718IA R718IA2	Wireless 0-5V ADC Sampling Interface Wireless 2-Input 0-5V ADC Sampling Interface
R718IB R718IB2	Wireless 0-10V ADC Sampling Interface Wireless 2-Input 0-10V ADC Sampling Interface
R718J R718J2	Wireless Dry Contact Interface Wireless 2-Input Dry Contact Interface
R718H R718H2	Wireless Pulse Counter Interface Wireless 2-Input Pulse Counter Interface
R718LB R718LB2	Wireless Hall Type Open/Close Detection Sensor Wireless 2-Gang Hall Type Open/Close Detection Sensor
R718MA	Wireless Asset Sensor
R718MBA	Wireless Activity Detection Sensor
R718MBB	Wireless Activity Event Counter
R718MBC	Wireless Activity Timer
R718KA R718KA2	Wireless 4~20mA Current Meter Interface Wireless 2-Gang 4~20mA Current Meter Interface
R718PC	Wireless RS485 Adapter
R718PDA	Wireless RS232 Adapter

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R718N1	Wireless 1-Phase Current Meter with 1 x 30A Solid Core CT
R718N13	Wireless 1-Phase Current Meter with 1 x 30A Clamp-On CT
R718N17	Wireless 1-Phase Current Meter with 1 x 75A Clamp-On CT
R718N115	Wireless 1-Phase Current Meter with 1 x 150A Clamp-On CT
R718N125	Wireless 1-Phase Current Meter with 1 x 250A Clamp-On CT
R718N163	Wireless 1-Phase Current Meter with 1 x 630A Clamp-On CT
R718N37	Wireless 3-Phase Current Meter with 3 x 75A Clamp-On CT
R718N315	Wireless 3-Phase Current Meter with 3 x 150A Clamp-On CT
R718N325	Wireless 3-Phase Current Meter with 3 x 250A Clamp-On CT
R718N363	Wireless 3-Phase Current Meter with 3 x 630A Clamp-On CT
R718N360	Wireless 3-Phase Current Meter Interface
R718NL13	Wireless Light Sensor and 1-Phase Current Meter with 1 x 30A Clamp-On CT
R718NL17	Wireless Light Sensor and 1-Phase Current Meter with 1 x 75A Clamp-On CT
R718NL115	Wireless Light Sensor and 1-Phase Current Meter with 1 x 150A Clamp-On CT
R718NL125	Wireless Light Sensor and 1-Phase Current Meter with 1 x 250A Clamp-On CT
R718NL163	Wireless Light Sensor and 1-Phase Current Meter with 1 x 630A Clamp-On CT
R718NL37	Wireless Light Sensor and 3-Phase Current Meter with 3 x 75A Clamp-On CT
R718NL315	Wireless Light Sensor and 3-Phase Current Meter with 3 x 150A Clamp-On CT
R718NL325	Wireless Light Sensor and 3-Phase Current Meter with 3 x 250A Clamp-On CT
R718NL363	Wireless Light Sensor and 3-Phase Current Meter with 3 x 630A Clamp-On CT
R718IJK	Wireless Multi-Sensor Interface for 0-24V ADC, Dry Contact and 4-20mA Sensors
RA10	Wireless Valve Controller
R809A	Wireless Plug-and-Play Power Outlet with Consumption Monitoring
R809A01	Wireless Plug-and-Play Power Outlet with Consumption Monitoring and Power Outage Detection

R816B	Wireless Wall-Mounted Power Socket with Consumption Monitoring(US type)
R816B01	Wireless Wall-Mounted Power Socket with Consumption Monitoring and Power Outage Detection (US type)
R831A	Wireless Multifunctional Control Box
R831B	Wireless Multifunctional Control Box
R831C	Wireless Multifunctional Control Box
R831D	Wireless Multifunctional Control Box- 3 Dry Contact Inputs and 3 Dry Contact Relay Outputs
RB02B	Wireless 2-Gang Push Button
RB02C	Wireless 3-Gang Push Button

LoRa Module

R100H	LoRa Module
R100L	LoRa Module

*Actual data sheet value may vary depending on developing progress and other variables.

Please contact sales department for detail data sheet document.

Frequency Characters for All Netvox LoRa Devices

The LoRa frequency characters are shown as below. Applicable to all Netvox LoRa Devices which are equipped with SX1276 wireless communication module.

LoRa Frequency Characters

TX Power	US915 20dbm； AS923 16dbm； AU915 20dbm； CN470 19.15dbm； EU868 16dbm； KR920 14dbm； IN865 20dbm；
Rx Sensitivity	-136dBm (LoRa，Spreading Factor=12，Bit Rate=293bps) -121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Built-in antenna
Communication Range	Up to10 km, the actual transmission distance depends on the environment.
Data Transfer Rate	0.3kbps ~ 50kbps (LoRa) 1.2kbps ~ 300kbps (FSK)
Spread Technique	LoRa/FSK
Available Frequency	EU863-870，US902-928，AU915-928，KR920-923，AS923-1，AS923-2，AS923-3，IN865-867，CN470-510 Configured before shipment

Wireless IoT Controller

R206

R206 is a Cloud-Based Wireless Smart Home Controller.

As the core of the entire wireless smart IoT system,

R206 is a combination of the cloud technology, Wi-Fi, and LoRa wireless IoT technology.

R206 connects to the Internet and combines with the Netvox cloud service platform to achieve remote monitoring.

* Only used in Netvox M2 private LoRa Solution

* The LoRaWAN device is not supported

Main Characteristics

- Support LoRa
- Support Netvox cloud and Netvox M2 APP
- Support 3.5G/4G USB dongle
- Support RTC (Real-time clock)
- Support gateway / bridge / wi-fi AP mode
- Two RJ-45 interfaces (WAN/LAN)

Technical Parameter	
Input Power	Input: 100~240v AC Output: 12v/1.5A DC
Power Consumption	2.2W (28mA @230V 50Hz) (Typical)
Dimension	124mm * 155mm * 65mm
Shell Material	PC510
Operating Temperature	-10℃～50℃
Operating Humidity	0～95%RH (No condensation)
Storage Temperature	-20℃～60℃
Storage Humidity	0～95%RH (No condensation)

Available Frequency : EU/IN Region, US/AU Region, AS Region, KR Region, CN Region

Wireless Dual-Mode IoT Controller

R206A

R206A is a Cloud-Based Wireless Smart Home Controller.

As the core of the entire wireless smart IoT system,

R206A is a combination of the cloud technology, Wi-Fi, Zigbee and LoRa wireless IoT technology.

R206A connects to the Internet and combines with the Netvox cloud service platform to achieve remote monitoring.

* Only used in Netvox M2 private LoRa Solution

* The LoRaWAN device is not supported

Main Characteristics

- Support LoRa and ZigBee
- Support Netvox cloud and Netvox M2 APP
- Support 3.5G/4G USB dongle
- Support RTC (Real-time clock)
- Support gateway / bridge / wi-fi AP mode
- Two RJ-45 interfaces (WAN/LAN)

Technical Parameter	
Input Power	Input: 100~240v AC Output: 12v/1.5A DC
Power Consumption	2.2W (28mA @230V 50Hz) (Typical)
Dimension	124mm * 155mm * 65mm
Shell Material	PC510
Operating Temperature	-10℃～50℃
Operating Humidity	0～95%RH (No condensation)
Storage Temperature	-20℃～60℃
Storage Humidity	0～95%RH (No condensation)

Available Frequency : EU/IN Region, US/AU Region, AS Region, KR Region, CN Region

Wireless IoT Controller with External Antenna

R206C

R206C is a highly reliable wireless smart cloud gateway. As the core of the entire wireless smart IoT system, R206C achieves the combination of cloud technology, Wi-Fi, and Netvox LoRa. The Netvox APP (Android and iOS) can control the device. Users can also monitor all changes in the network by accessing R206C through the cloud, and easily realize real IoT remote control to achieve energy saving, carbon reduction, and green environmental protection.

* Only used in Netvox M2 private LoRa Solution

* The LoRaWAN device is not supported

Main Characteristics

- Support LoRa
- Support Netvox cloud and Netvox M2 APP
- Support 3.5G/4G USB dongle
- Support RTC (Real-time clock)
- Support gateway / bridge / wi-fi AP mode
- Two RJ-45 interfaces (WAN/LAN)
- External suction cup antenna

Technical Parameter	
Input Power	Input: 100~240v AC Output: 12v/1.5A DC
Power Consumption	2.2W (28mA @230V 50Hz) (Typical)
Dimension	124mm * 155mm * 65mm
Shell Material	PC510
Operating Temperature	-10℃～50℃
Operating Humidity	0～95%RH (No condensation)
Storage Temperature	-20℃～60℃
Storage Humidity	0～95%RH (No condensation)

Available Frequency : EU/IN Region, US/AU Region, AS Region, KR Region, CN Region

Wireless IoT Controller

R207

R207 is a Wireless IoT Controller. As the core of the entire smart home system, R207 is the first one achieving the perfect combination of cloud technology and Netvox LoRa proprietary protocol Internet of Things. R207 acts as a gateway in the LoRa network and can automatically screen and configure. The third-party software can control the device through R207, for example, the Android client side can achieve mode control. At the same time, users can monitor all the changes of home via R207 through the cloud, realize the remote control of smart home easily and have functions about energy saving, emission reduction and environmental protection.

* Only used in Netvox M2 private LoRa Solution

* The LoRaWAN device is not supported

Main Characteristics

- DC 5V power supply
- Support Netvox cloud and Netvox M2 APP
- One RJ-45 interfaces (WAN)

Technical Parameter	
Input Power	Input: 100~240v AC Output: 5v/1A DC
Power Consumption	5V/0.12A/0.6W (typical)
Dimension	76.5mm * 37.0mm * 22.0mm
Shell Material	PC510
Operating Temperature	-10℃～50℃
Operating Humidity	0～95%RH (No condensation)
Storage Temperature	-20℃～60℃
Storage Humidity	0～95%RH (No condensation)

Available Frequency : EU/IN Region, US/AU Region, AS Region, KR Region, CN Region

Wireless IoT Controller with External Antenna

R207C

R207C is a highly reliable wireless smart cloud gateway. As the core of the entire wireless smart IoT system, R207C achieves the combination of cloud technology and LoRa wireless IoT technology.

The Netvox APP (Android and iOS) can control the device. Users can also monitor all changes in the network by accessing R207C through the cloud, and easily realize real IoT remote control to achieve energy saving, carbon reduction, and green environmental protection.

* Only used in Netvox M2 private LoRa Solution

* The LoRaWAN device is not supported

Main Characteristics

- DC 5V power supply
- Support Netvox cloud and Netvox M2 APP
- One RJ-45 interfaces (WAN)
- External Antenna

Technical Parameter	
Input Power	Input: 100~240v AC Output: 5v/1A DC
Power Consumption	5V/0.12A/0.6W (typical)
Dimension	76.5mm * 37.0mm * 22.0mm
Shell Material	PC510
Operating Temperature	-10°C～50°C
Operating Humidity	0～95%RH (No condensation)
Storage Temperature	-20°C～60°C
Storage Humidity	0～95%RH (No condensation)

Available Frequency : EU/IN Region, US/AU Region, AS Region, KR Region, CN Region

Wireless Door/Window Sensor

R311A / R313A

R311A / R313A is a Wireless Door/Window Sensor.

It can detect the open/close status of the door or window.

Main Characteristics

- Door / window status detection
- R311A: Built-in antenna
- R313A:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	12uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Main Body Dimensions	R311A: 57mm x 35mm x 15mm R313A: 57mm x 38.05mm x 15mm
Magnet Dimension	43mm x 13mm x 12mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 55℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R311D / R313D

R311D / R313D is a Wireless Asset Sensor.

It has a simple positioning function which can detect the position status of itself. The device can report RSSI and SNR information to the gateway for processing periodically and locating its position.

Main Characteristics

- RSSI and SNR value detection
- R311D: Built-in antenna
- R313D:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	16uA /3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA / 3.0V
Battery Accuracy	±0.1V
Dimension	R311D: 57mm x 35mm x 15mm R313D: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Vibration Sensor, Rolling Ball Type

R311DA / R313DA

R311DA / R313DA is a Wireless Vibration Sensor.

It can detect vibrations or moving signals and transmit the detected data to other devices through the wireless network.

Main Characteristics

- Vibration detection - Rolling ball type
- R311DA: Built-in antenna
- R313DA:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Voltage Accuracy	±0.1V
Vibration Sensor Sensitivity	In a horizontal position, be easy to trigger with a shaking
Dimension	R311DA: 57mm x 35mm x 15mm R313DA: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Vibration Sensor, Spring Type

R311DB / R313DB

R311DB / R313DB is a Wireless Vibration Sensor.
It can detect vibrations or moving signals and transmit the detected data to other devices through the wireless network.

Main Characteristics

- Vibration detection - Spring Type
- R311DB: Built-in antenna
- R313DB:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Vibration Sensor Working Principle	When it is at rest, it is in the open state OFF state. When the external force is touched to reach the corresponding vibration force, or when the moving speed reaches the appropriate centrifugal force, the conductive pin will instantly reach the ON state.
Dimension	R311DB: 57mm x 35mm x 15mm R313DB: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Water Leak Detector

R311W / R313W

R311W / R313W is a 2-Gang Water Leak Detector.

When the sensor detects leaks, it will send a message to the gateway.

Main Characteristics

- Water leak detection
- R311W: Built-in antenna
- R313W:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	12uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Water Leakage Material	UL2468 28AWG
Water Line Core resistance	1.3 Ω / meter
Water Line Diameter	1mm
Water Line Length	1000mm (±5mm)
Water Line Flame Rating	VW-1
Dimension	R311W: 57mm x 35mm x 15mm R313W: 57mm x 38.05mm x 15mm

R312 / R313M

R312 / R313M is a Wireless Doorbell button.

It adopts a tact switch. When people press the button, it will report the status.

Main Characteristics

- Doorbell status detection
- R312: Built-in antenna
- R313M:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	14uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Dimension	R312: 57mm x 35mm x 15mm R313M: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Emergency Button

R312A / R313MA

R312A / R313MA is a Wireless Emergency Button. When people press the emergency button, it will send an alarm message to the gateway.

Main Characteristics

- Emergency button status detection
- R312A: Built-in antenna
- R313MA:External antenna
- Comes with key ring for easy fixing and carrying

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	13uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Dimension	R312A: 57mm x 35mm x 15mm R313MA: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R602A

R602A is a Wireless Siren.

It has four kinds of alarm sounds – fire, emergency, burglar, doorbell and a mute mode.

It also has the high-brightness alarm flasher.

Main Characteristics

- Different types of alarm sounds
- Different ways of flashing lights
- Class C device

Technical Parameter	
Input Power	DC +12V
Working Current (max)	250mA(DC 12V)
Standby Current (max)	30mA(DC 12V)
Alarm Sound Level	≧80dB
Dimension	Φ85mm * 52mm
Environment Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

Wireless Vibration Sensor, Rolling Ball Type
Wireless 2-Gang Vibration Sensor, Rolling Ball Type

R718DA / R718DA2

R718DA / R718DA2 is a Wireless Vibration Sensor. It can be used to detect vibration on mechanical equipment and on any surface.

*When the horizontal status of the device is changed, it will be triggered.

Main Characteristics

- Vibration detection-Rolling Ball Type
- IP rating: Main body IP65/IP67 (optional)
  SensorIP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Sensor Characteristic	When the vibration sensor is tilted and the tilting angle is greater than 10 degrees, it will be OFF mode. When the tilt level changes, and the triggering end is lower than tilt angle 10 degrees, it will be ON state. The module can detect open circuit OFF state and closed circuit ON state signal to detect vibration or move.
External Cable Length	1 meter
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Vibration Sensor, Spring Type
Wireless 2-Gang Vibration Sensor, Spring Type

R718DB / R718DB2

R718DB / R718DB2 is a Wireless Vibration Sensor. It can be used to detect vibration on mechanical equipment and on any surface.

*If the corresponding vibration or centrifugal force is reached, it will be triggered.

Main Characteristics

- Vibration detection-Spring Type
- IP rating: Main body IP65/IP67 (optional)
  SensorIP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Sensor Characteristic	When it is at rest, it is in the open state OFF state. When the external force is touched to reach the corresponding vibration force, or when the moving speed reaches the appropriate centrifugal force, the conductive pin will instantly reach the ON state. When the external force disappears, the switch returns to the OFF state.
External Cable Length	1 meter
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Reed Switch Open/Close Detection Sensor
Wireless 2-Gang Reed Switch Open/Close Detection Sensor

R718F / R718F2

R718F / R718F2 is a Wireless Reed Switch Open/Close Detection Sensor.

It is equipped with a reed sensor which can be used to detect the status of the door and the window.

Main Characteristics

- Reed switch status detection
- IP rating: Main body IP65/IP67 (optional)
  Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Sensor Characteristic	Inside the magnetic range, it is at on state (conducting). When out of the magnetic range, it is at off state (non-conducting). Sensing distance inside magnetic range is 2cm.
External Cable Length	1 meter
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Push Button Interface
Wireless 2-Input Push Button Interface

R718T / R718T2

R718T / R718T2 is a Wireless Push Button Interface. It can connect with an external push button and detect whether the external button is pressed.

Main Characteristics

- Button status detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Standby Current	22 uA
Wake up Current	6.3mA@3.3V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Push Button

R718TB

R718TB is a push button which detects the signal of the device.

Main Characteristics

- Button status detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Standby Current	30.17 uA
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Dimension	112mm x 65mm x 32mm
Weight	141g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Smoke Detector

RA02A

RA02A is a Wireless Smoke Detector.

It has the built-in photoelectric smoke detector, piezo buzzer and thermistor. It can detect the smoke and the high temperature in the environment.

When the smoke density exceeds the preset value or the temperature exceeds 60 ˚C, it will make a high-pitched sound.

Main Characteristics

- Smoke and high temperature detection
- IP rating:IP20

Technical Parameter	
Input Power	2 x1.5V AAA alkaline battery
Operating Voltage	DC 2.3V to 3.3V
Standby Current	12uA/3.0v
Working Current While Alarming	580mA/3.0v
Alarming Decibel	85dBm @3m
Alarming Concentration	0.65~15.5% obs/m
Dimension	D:106mm , H:36mm
Operating Temperature	-20˚C ～ 55˚C
Operating Humidity	<90%RH (no condensation)
Storage Temperature	-40˚C ～ 85˚C

Wireless CO Detector

RA02C

RA02C is a Wireless CO Detector.
It has built-in CO sensor, piezo buzzer and thermistor. It can detect the CO and high temperature in the environment. When the CO density exceeds the preset value or the temperature exceeds 60 ˚C, it will make a high-pitched sound.

Main Characteristics

- CO and high temperature detection
- IP rating:IP20

Technical Parameter	
Input Power	2 x1.5V AAA alkaline battery
Standby Current	18uA/3.0v
Average Operating Current	70uA/3.0v
Current While Alarming	20mA/3.0v
Alarming Decibel	85dBm @ 3m
CO Detection Range	0 ~ 1000ppm
Dimension	D:106mm , H:36mm
Operating Temperature	-20˚C ～ 55˚C
Operating Humidity	<90%RH (no condensation)
Storage Temperature	-40˚C ～ 85˚C

Wireless Emergency Push Button

RB02I

The RB02I is a Wireless Emergency Push Button. If people press the RB02I emergency button when there is an emergency, it will immediately send out the alarm to the gateway.

Main Characteristics

- Emergency push button status detection
- Has waterproof silicone sleeve to avoid water splashing

Technical Parameter	
Input Power	2 x1.5V AAA alkaline battery
Operating Voltage	DC 2.3V to 3V
Standby Current	14uA
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA/3.0V
Dimension	82mm*82mm*15mm
Operating Temperature	-20˚C ～ 55˚C
Operating Humidity	＜90%RH
Storage Temperature	-40˚C ～ 85˚C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Occupancy & Temperature & Light Sensor

RB11E

RB11E is a Wireless Occupancy & Temperature & Light Sensor. It combines PIR, temperature, light sensor and tamper switch. If someone or animal moves in the monitored area, RB11E will report state of occupation, temperature, illuminance and disassembled alarm.

Main Characteristics

- Occupancy, temperature, illuminance and disassembled detection
- Light sensor measurement range: 2-1100 Lux
- Detection speed: ≥0.2 meters/second
- IP rating:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Mounting Height	2 to 2.2 meters above ground level
Mounting Angle	Tilt 15° downward
Sensing Angle	Horizontal 110°, vertical 60°
Sensing Distance	2m to 12m
Temperature Accuracy	±2℃
Light Sensor Accuracy	≦15%
Dimension	78mm x 78.8mm x 82.2mm
Weight	125.8g
Operating Temperature	-20°C ~55°C
Storage Temperature	-40°C ~ 85°C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R311B / R313B

R311B / R313B is a Wireless Light Sensor.

When the illuminance exceeds the set threshold, a report will be sent immediately

Main Characteristics

- Illuminance detection (1~3000 lux)
- R311B: Built-in antenna
- R313B:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	12uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Detecting Illumination Range	1~3000 lux
Dimension	R311B: 57mm x 35mm x 15mm R313B: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

R311CA / R313CA

R311CA / R313CA is a Wireless 2-input Dry Contact Sensor.

It can connect with dry contact devices, e.g. buttons, relays and reed switches and can detect dry contact status.

Main Characteristics

- Dry contact status detection
- R311CA: Built-in antenna
- R313CA:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	10uA /3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Wire Material	UL2468 28AWG
Wire Length	1000mm (±5mm)
Wire Flame Resistance Rating	VW-1
Main Body Dimension	R311CA: 57mm x 35mm x 15mm R313CA: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Window Sensor with Glass Break Detector

R311CB / R313CB

R311CB / R313CB device has a built-in reed switch sensor and can be externally connected to the reed switch. It can be used for door and window switch status detection and externally connected to broken glass sensor to detect the glass status.

Main Characteristics

- Reed switch status / Glass break detection
- R311CB: Built-in antenna
- R313CB: External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Sensor Characteristic	Within the magnetic range, it is at off state (conducting). When out of the magnetic range, it is at on state (non-conducting).
Main Body Dimension	R311CB: 57mm x 35mm x 15mm R313CB: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless 2-Gang Door/Window Sensor

R311CC / R313CC

R311CC / R313CC is a Wireless 2-Gang Door/Window Sensor.

It connects two external reed switches and is used to detect the status of the door and window switch.

Main Characteristics

- Reed switch status detection
- R311CC: Built-in antenna
- R313CC:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	10uA /3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA / 3.0V
Battery Accuracy	±0.1V
Sensor Case Size	42mm x 13mm x 12mm
External Cable Length	1 meter
Main Body Dimension	R311CC: 57mm x 35mm x 15mm R313CC: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

R311G / R313G

R311G / R313G has the built-in light sensor. It can be used for detecting ambient light intensity and can send the ambient illumination value wirelessly.

Main Characteristics

- Illuminance detection (1~3000 lux)
- R311G: Built-in antenna
- R313G:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	12uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA/3.0V
Illuminance Detecting Range	1~3000 lux
Battery Accuracy	±0.1V
Dimension	R311G: 57mm x 35mm x 15mm R313G: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

R311K / R313K

R311K / R313K is a Wireless Tilt Sensor.

When a tilt is greater than or equal to 45 degrees in any direction, it will report the tilting status.

Main Characteristics

- Tilt status detection
- R311K: Built-in antenna
- R313K:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4 V to 3.0V
Standby Current	10uA / 3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA/ 3.0V
Battery Accuracy	± 0.1V
Conversion Angle	45±5 degrees
Contact Resistance	Less than 10 ohms
Insulation Resistance	More than 100 megohms
Installation Type	Suitable for PCB at vertical state
Dimension	R311K: 57mm x 35mm x 15mm R313K: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

R311LA / R313LA

R311LA / R313LA is a Wireless Infrared Proximity Sensor.

It has an infrared proximity sensor that can detect if there is an object existing within its detectable range.

Main Characteristics

- Infrared proximity detection
- R311LA: Built-in antenna
- R313LA:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	12uA / 3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA/ 3.0V
Battery Accuracy	± 0.1V
Sensing Distance	Approximately 5cm
Dimension	R311LA: 57mm x 35mm x 15mm R313LA: 57mm x 38.05mm x 15mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Seat Occupancy Sensor

R311WA / R313WA

R311WA / R313WAis a Wireless 2-Gang Seat Occupancy Sensor.

It will report when one of the 2-gang seat occupancy sensor detects external pressure.

Main Characteristics

- Seat occupancy detection
- R311WA: Built-in antenna
- R313WA:External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Pressure Range	200-300g
Wire Material	UL1571 26AWG
Wire Length	1000mm（±5mm）
Wire Flame Resistance Rating	VW-1
Main Unit Casing Size	R311WA: 57mm x 35mm x 15mm R313WA: 57mm x 38.05mm x 15mm
Cushion Film Sensor Size	244 mm x 196. 3 mm x 0.65 mm
Operating Temperature	-20˚C to 55 ˚C
Operating Humidity	<90 %RH (no condense)
Storage Temperature	-40˚C to 85 ˚C

Wireless Temperature Humidity Sensor

R711

R711 is an indoor Wireless Temperature Humidity Sensor. It is mainly used to measure the indoor ambient temperature and humidity.

Main Characteristics

- Temperature and humidity detection: -20˚C ~ 55˚C
- IP Rating: IP40

Technical Parameter	
Input Power	2 x 1.5V AA alkaline battery
Operating Voltage	DC 2.3V to 3.0V
Standby Current	12uA/3V
Transmitting Current (max)	120mA/3V
Receiving Current (max)	11mA/3V
Battery Accuracy	±0.1V
Temperature Range	-20˚C ~ 55˚C
Temperature Accuracy	±0.8℃ @25℃ (indoor)
Humidity Range	0%RH ~ 100%RH
Humidity Accuracy	±5%RH @25˚C
Dimension	112mm x 34mm x 17mm
Operating Humidity	＜90%RH
Operating Temperature	-20˚C ~55˚C
Storage Temperature	-40˚C ~ 85˚C

Wireless Outdoor Temperature and Humidity Sensor

R712

R712 is a Wireless Outdoor Temperature and Humidity Sensor with waterproof housing. It is mainly used to measure the outdoor ambient temperature and humidity.

Main Characteristics

- Temperature and humidity detection: -20˚C ~ 55˚C
- IP Rating: IP54

Technical Parameter	
Input Power	2 x 1.5V AA alkaline battery
Operating Voltage	DC 2.3V to 3.0V
Standby Current	12uA/3V
Transmitting Current (max)	120mA/3V
Receiving Current (max)	11mA/3V
Battery Accuracy	±0.1V
Temperature Range	-20˚C ~ 55˚C
Temperature Accuracy	±1.5℃ @25℃
Humidity Range	0%RH ~ 100%RH
Humidity Accuracy	±10%RH @25˚C
Dimension	112mm x 34mm x 17mm
Waterproof Housing Dimension	222mm x 130mm x 195mm
Operating Humidity	＜90%RH
Operating Temperature	-20˚C ~55˚C
Storage Temperature	-40˚C ~ 85˚C

Wireless Temperature and Humidity Sensor

R718A / R718A01

R718A / R718A01 is a Wireless Temperature and Humidity Sensor for low temperature environment. It can be used in general refrigerators or domestic logistics refrigerators that store and transport food, medicines, flowers and other perishable goods.

Main Characteristics

- Temperature and humidity detection: -40℃～55℃
- IP rating:IP65
- R718A01 Capable to cache 50 records of temperature and humidity data.

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Accuracy	±0.1V
Temperature Detecting Range	-40℃～55℃
Temperature Accuracy	±0.5℃ @25℃
Humidity Detecting Range	0%RH～100%RH
Humidity Accuracy	±3%RH @25℃
Dimension	112mm x 65mm x 28mm D: Ø16mm*L: 27mm (sensor cover)
Operating Temperature	-40℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature and Humidity Sensor

R718AB

R718AB is a Wireless Temperature Humidity Sensor

It is mainly used to measure the ambient temperature and humidity.

Main Characteristics

- Temperature and humidity detection: -20℃ ~ 55℃
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Accuracy	±0.1V
Temperature Range	-20℃ ~ 55℃
Temperature Accuracy	±1℃ @25℃
Humidity Range	0%RH ~ 100%RH
Humidity Accuracy	±4%RH @25℃
Dimension	112mm x 65mm x 28mm D: Ø16mm*L: 27mm (sensor cover)
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Temperature Sensor

R718AD

R718AD is a Wireless Temperature Sensor.

It is mainly used to measure the ambient temperature.

Main Characteristics

- Temperature detection: -40℃~125℃
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Accuracy	±0.1V
Temperature Detecting Range	-40℃~125℃
Temperature Accuracy	±1℃
Cable Length	1 meter
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature Sensor

R718B

R718B is a Wireless Resistance Temperature Detector. It connects an external resistance temperature detector (PT1000) to measure the temperature.

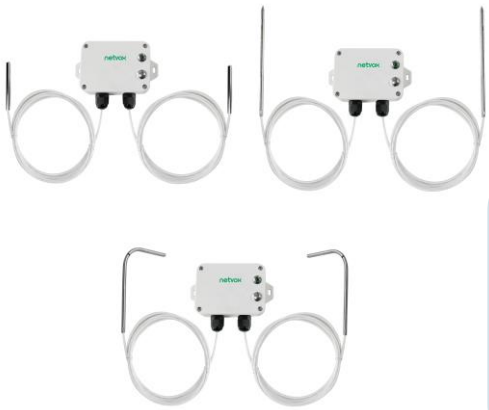
Main Characteristics

- Temperature detection: -40℃ ~ 200˚C
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 200˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.5℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -40℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.3}˚C
Lead Length	2m (default)
Probe Specifications	1: Probe diameter:5mm, Needle probe:15cm 2: Probe diameter:5mm,Round head probe:30cm 3: Probe diameter:5mm*Length 100+60mm L-type prob Choose one of the above probe specifications.

Wireless 2-Gang Resistance Temperature Detector

R718B2



R718B2 is a Wireless 2-Gang Resistance Temperature Detector. It connects two external resistance temperature detectors (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~ 200˚C
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 200˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.5℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -40℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.3}˚C
Lead Length	2m (default)
Probe Specifications	1: Probe diameter:5mm, Needle probe:15cm 2: Probe diameter:5mm,Round head probe:30cm 3: Probe diameter:5mm*Length 100+60mm L-type prob Choose one of the above probe specifications.

Wireless Temperature Sensor-Round Head Probe
Wireless 2-Gang Temperature Sensor-Round Head Probe

R718B120 / R718B220

R718B120 / R718B220 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -70℃ ~ 200˚C
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-70℃ ~ 200˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -70℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 30mm in length, round head probe

Wireless Temperature Sensor-Needle Probe
Wireless 2-Gang Temperature Sensor-Needle Probe

R718B121 / R718B221

R718B121 / R718B221 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -70℃ ~ 200˚C
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-70℃ ~ 200˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -70℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 150mm in length, needle probe

Wireless Temperature Sensor-Absorption Probe
Wireless 2-Gang Temperature Sensor-Absorption Probe

R718B122 / R718B222

R718B122 / R718B222 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -50℃ ~ 180˚C
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-50℃ ~ 180˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±1℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -50℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1.5}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 180℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.8}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter, absorption probe, NdFeB magnet

Wireless Temperature Sensor-Round Head Probe
Wireless 2-Gang Temperature Sensor-Round Head Probe

R718B140 / R718B240

R718B140 / R718B240 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~ 375˚C
- IP rating:IP65/IP67 (optional), Sensor IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 375˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -70℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 30mm in length, round head probe

Wireless Temperature Sensor-Needle Probe
Wireless 2-Gang Temperature Sensor-Needle Probe

R718B141 / R718B241

R718B141 / R718B241 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~ 375˚C
- IP rating:IP65/IP67 (optional), Sensor IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 375˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -70℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 200℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 150mm in length, needle probe

Wireless Temperature Sensor-Round Head Probe
Wireless 2-Gang Temperature Sensor-Round Head Probe

R718B150 / R718B250

R718B150 / R718B250 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~500˚C
- IP rating:IP65/IP67 (optional), Sensor IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 500˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -40℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 500℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 30mm in length, round head probe

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature Sensor-Needle Probe
Wireless 2-Gang Temperature Sensor-Needle Probe

R718B151 / R718B251

R718B151 / R718B251 is a Wireless Temperature Sensor. It connects an external resistance temperature detector (PT1000) to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~500˚C
- IP rating:IP65/IP67 (optional), Sensor IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40℃ ~ 500˚C
Measurement Accuracy	※The host body and sensor are in the same temperature range: 0℃ ≤ t ≤ 55℃, Accuracy: ±0.8℃ ※The host body and sensor are in the different temperature ranges: T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: -40℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+1}˚C ※T1: 0℃ ≤ T1 ≤ 55℃ (Host body) T2: 55℃ <T2 ≤ 500℃ (Sensor) Accuracy: ±{(0.15 + 0.002* |T2|)+0.6}˚C
Lead Length	2m (default)
Probe Specifications	5mm in diameter * 150mm in length, needle probe

Wireless Thermocouple Sensor - Type K
Wireless 2-Gang Thermocouple Sensor - Type K

R718CK / R718CK2

R718CK / R718CK2 is a Wireless Thermocouple Sensor-Type K. It connects an external thermocouple sensor to measure the temperature.

Main Characteristics

- Temperature detection: -40℃ ~ 375℃
- Whole device IP rating: IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Detecting Range	-40℃ ~ 375℃
Measurement Accuracy	※The host body and K-type thermocouple are in the same temperature range: Temperature Range: 0℃ ≤ t ≤ 55℃, Accuracy: ±1.5℃ ※The host body and K-type thermocouple are in different temperature ranges: Temperature Range T1: 0℃ ≤ T1 ≤ 55℃ (Host body) Temperature Range T2: -40℃ ≤ T2 < 0℃ (Sensor) Accuracy: ±2℃ ※Temperature Range T1: 0℃ ≤ T1 ≤ 55℃ (Host body) Temperature Range T2: 55℃ < T2 ≤ 375℃ (Sensor) Accuracy: ±2℃ * t, T1, T2 refers to temperature
Thermocouple Wire Length	1m

Wireless Thermocouple Sensor - Type N
Wireless 2-Gang Thermocouple Sensor - Type N

R718CN / R718CN2

R718CN / R718CN2 is a Wireless Thermocouple Sensor-Type N. It connects an external thermocouple sensor to measure the temperature.

Main Characteristics

- Temperature detection:-40 ℃ to 800 ℃
- Whole device IP rating: IP50

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Accuracy	±0.1V
Temperature Range	-40 ~ 800℃
Temperature Accuracy	±2℃ (-40~375℃) ±0.004t+1℃ (375˚C~800℃)
Thermocouple Wire Length	1m
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Thermocouple Sensor - Type T
Wireless 2-Gang Thermocouple Sensor - Type T

R718CT / R718CT2

R718CT / R718CT2 is a Wireless Thermocouple Sensor-Type T. It connects an external thermocouple sensor to measure the temperature.

Main Characteristics

- Temperature detection: -40 ˚C~125˚C
- IP rating: Main body IP65/IP67 (optional)
  Sensor IP rating:IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Range	-40 ˚C ~ 125˚C
Accuracy	※The host body and T-type thermocouple are in the same temperature range: Temperature Range: 0℃ ≤ t ≤ 55℃, Accuracy:±0.8℃ ※The host body and T-type thermocouple are in different temperature ranges: Temperature Range T1: 0℃ ≤ T1 ≤ 55℃ (Host body) Temperature Range T2: -40℃ ≤ T2< 0℃ (Sensor) Accuracy: ±2℃ ※Temperature Range T1: 0℃ ≤ T1 ≤ 55℃ (Host body) Temperature Range T2: 55℃ < T2 ≤ 125℃ (Sensor) Accuracy: ±1.5℃
Wire Length	1m

Wireless CO Sensor

R718PA1

R718PA1 is a Wireless CO Sensor.

It detects the concentration of CO in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- CO concentration detection: 0~2000ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
CO Measurement Range	0-2000ppm
CO Measurement Method	Electrochemical sensors
CO Measurement Accuracy	<± reading 3% (@25˚C)
Response Time	≤50s
CO Sensor Lifetime	In the air >5 years
Working Pressure Range	Standard atmospheric pressure ±10%
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

R718PA2

R718PA2 is a Wireless NO Sensor.

It detects the concentration of NO in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- NO concentration detection: 0~2000ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
NO Measurement Range	0-2000ppm
NO Measurement Method	Electrochemical sensors
NO Measurement Accuracy	<± reading 2% (@25˚C)
NO Measurement Resolution	< 1 ppm
Response time	< 60s
NO Sensor Lifetime	In the air >2 years
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless O3 Sensor

R718PA3

R718PA3 is a Wireless O3 Sensor.

It detects the concentration of O3 in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- O3 concentration detection: 0~20ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
O3 Measurement Range	0-20ppm
O3 Measurement Method	Electrochemical sensors
O3 Measurement Accuracy	<± reading 3% (@25˚C)
Response time	< 15s
O3 Sensor Lifetime	1 years
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless H2S Sensor

R718PA4

R718PA4 is a Wireless H2S Sensor.

It detects the concentration of H2S in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- H2S concentration detection: 0~100 ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Working Current	60mA (With external sensor)
H2S Measurement Range	0-100 ppm
H2S Measurement Method	Electrochemical sensors
H2S Measurement Accuracy	<± reading 2% (@25˚C)
H2S Measurement Resolution	< 0.1ppm
Response time	≤ 30s
H2S Sensor Lifetime	In the air >2 years
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless NO2 Sensor

R718PA5

R718PA5 is a Wireless NO2 Sensor.

It detects the concentration of NO2 in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- NO2 concentration detection: 0~20 ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
NO2 Measurement Range	0-20 ppm
NO2 Measurement Method	Electrochemical sensors
NO2 Measurement Accuracy	±0.6 ppm
Response Time	≤ 15s
NO2 Sensor Lifetime	2 years
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless SO2 Sensor

R718PA6

R718PA6 is a Wireless SO2 Sensor.

It detects the concentration of SO2 in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- SO2 concentration detection: 0~20 ppm
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
SO2 Measurement Range	0-20 ppm
SO2 Measurement Method	Electrochemical sensors
SO2 Measurement Accuracy	<± reading 3% (@25°C)
Response Time	≤ 15s
SO2 Sensor Lifetime	2 years
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Noise Sensor

R718PA7

R718PA7 is a Wireless Noise Sensor.

It detects the noise decibel value.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- Noise decibel detection: 30dB~130dB
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter

Input Power	DC 12V power supply
Working Current	<70mA (With external sensor)
Noise Measurement Range	30dB~130dB
Noise Measurement Accuracy	0.1dB
Noise Measurement Error	3% F.S.
Response Time	≤ 2s
Weighting Curve	A-Weighting
Frequency Response	35Hz-20Khz
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless PH Sensor

R718PA8

R718PA8 is a Wireless PH Sensor.

It detects PH value.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- PH detection: 0~14 PH
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter

Input Power	DC 12V power supply
PH Measurement Range	0~14 PH
PH Measurement Resolution	0.01 PH
Wire Length	5m (Other lengths customizable)
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless ORP Sensor

R718PA9

R718PA9 is a Wireless ORP Sensor.

It detects ORP value.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- ORP detection
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
ORP Measurement Range	-1500 ~ +1500 mV
ORP Measurement Resolution	1mV
ORP Measurement Accuracy	±6mV
Wire Length	5m (Other lengths customizable)
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Environment Temperature Range	-20℃ ～ 55℃
Environment Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Turbidity Sensor

R718PA10

R718PA10 is a Wireless Turbidity Sensor.

R718PA10 can detect the turbidity value and temperature of the solution.

Main Characteristics

- Turbidity detection: 0.1~1000 ntu
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Turbidity Range	0.1~1000 ntu
Turbidity Resolution	0.1 ntu
Turbidity Accuracy	<5% or 0.3 ntu
Maximum Depth	Underwater 10 m
Wire Length	10m (Other lengths customizable)
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Liquid Level Sensor

R718PA11

R718PA11 is a Wireless Liquid Level Sensor.

It detects the depth of liquid in the container.

Main Characteristics

- Liquid level detection: 0~10m
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Measurement Range	10m (Other range customizable)
Line Length	12m (Other lengths customizable)
Accuracy	0.25%FS（Typical）
Dimension	112mm x 88mm x 32mm
Weight	About 160g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Seawater Sensor

R718PA12

R718PA12 is a Wireless Seawater Sensor.

It can detect the seawater salinity, dissolved oxygen saturation and water temperature.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- Seawater salinity, dissolved oxygen saturation ,water temperature detection
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Working Current	<100mA (With external sensor)
Dissolved Oxygen Range	0-20mg/L
Water Temperature Range	0-50°
Dimension	112mm x 88mm x 32mm
Environment Temperature Range	-20℃ ～ 55℃
Environment Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Bottom-Mounted Ultrasonic Liquid Level Sensor

R718PA22

R718PA22 is a Wireless Bottom-Mounted Ultrasonic Liquid Level Sensor.

It can be mounted at the bottom of the tank without breaking or making holes. It can detect pure liquids, such as clear water, oil, diesel, gasoline and liquefied gas in small, medium or large capacity tanks.

Main Characteristics

- Ultrasonic liquid level sensor detection:0.12~3m
- IP rating: Main body IP65/IP67 (optional) ; Sensor:IP67

Technical Parameter	
Input Power	DC 12V power supply
Measuring Range	0.12-3m (0-0.12m is blind zone)
Beam Range	8°
Measurement Accuracy	1 %
Temperature Accuracy	±2-3° C, - 40~ 125° C (NTC thermistor)
Case Material	PVDF/ABS
Installation Method	Two- component adhesives(resin + hardener)
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Soil Moisture Sensor

R718PB13

R718PB13 is a Wireless Soil Moisture Sensor.

It can detect volumetric water content of the soil.

Main Characteristics

- Volumetric water content (VWC) detection
- IP rating: Main body IP65/IP67 (optional)

Technical Parameter

Input Power	2 x 3.6V ER14505 AA size lithium batteries
Water Content Accuracy	±3%VWC
Moisture Content Resolution	0.1% VWC in mineral soils, 0.25% VWC in growing media
Moisture Content Range	0-100%VWC
Sensor Cable Length	5 m
Dimension	112mm x 88mm x 32mm 89mm x 18mm x 1.8mm (Sensor)
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Soil Moisture/Temperature/EC Sensor

R718PB15

R718PB15 is a Wireless Soil Moisture/Temperature/ Electrical Conductivity Sensor.

It can detect soil temperature, moisture content and soil electrical conductivity.

Main Characteristics

- Soil Moisture/Temperature/EC detection
- IP rating: Main body IP65/IP67 (optional)
  Sensor IP67

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Battery Accuracy	±0.1V
Soil Temperature Range	-40℃ to 80℃
Soil Moisture Content Range	0 to 100%
Soil EC Range	0 to 20000 us/cm
Sensor Cable Length	2m
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Soil Moisture/Temperature/EC Sensor

R718PB15A

R718PB15A is a Wireless Soil Moisture/Temperature/ Electrical Conductivity Sensor with a Waterproof Housing. It can detect soil temperature, moisture content and soil electrical conductivity.

Main Characteristics

- Soil Moisture/Temperature/EC detection:
- IP rating:IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Accuracy	±0.1V
Soil Temperature Range	-40℃ to 80℃
Soil Moisture Content Range	0 to 100%
Soil EC Range	0 to 20000 us/cm
Sensor Cable Length	2m
Dimension	⌀80mm, length 134mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Top-Mounted Ultrasonic Level Sensor

R718PE / R718PE01

R718PE / R718PE01 is a Wireless Top-Mounted Ultrasonic Level Sensor. It uses ultrasound to detect the distance between the device and the detected object. The medium device detects in the air, and the detected object can be any liquid or solid that has a flat horizontal surface partly.

Main Characteristics

- Ultrasonic level detection
- IP rating: Main body IP65/IP67 (optional) ; Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Measuring Range	0.25-8m
Blind Zone	0-0.25m
Detection Angle	R718PE:15° R718PE01:20°
Measurement Accuracy	±(1+S*0.3%) cm
Dimension	112mm x 88mm x 32mm
Operating Temperature	-15℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-25℃ ～ 70℃

* R718PE is suitable for distance detection in small spaces.

* R718PE01 is suitable for the detection of objects such as grain heaps and sand.

R718PG

R718PG is a Wireless Light Sensor.

It has a built-in light sensor that can be used to detect the ambient light illuminance.

Main Characteristics

- Illuminance detection: 0.01 Lux - 157K Lux
- IP rating:IP65/IP67 (optional)

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20%
Dimension	112mm x 65mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	< 90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Short-Range Occupancy Sensor

R718PQ

R718PQ is a Wireless Short-Range Occupancy Sensor. It has a built-in PIR sensor. If the movement of people or animal is detected within the monitored area, the device will report the detected status to gateway.

Main Characteristics

- Occupancy detection
- Main body IP rating:IP65/IP67 (optional)
- The base is attached with a magnet

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Wake up Current	6.3mA@3.3V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Measuring Distance	3.8M (from the main unit)
Dimension	112mm x 65mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Toilet Occupancy Sensor

R718PQA

R718PQA is a Wireless Toilet Occupancy Sensor.
It has a reed switch sensor and a built-in PIR sensor which detects if someone enter the toilet and close the door, it will report occupancy status.

Main Characteristics

- Occupancy and reed switch detection
- IP rating: Main body IP65/IP67 (optional)
  SensorIP65
- The base is attached with a magnet

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Wake up Current	6.3mA@3.3V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Measuring Distance	3.8M (from the main unit)
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Capacitive Proximity Sensor

R718VA

R718VA is a Wireless Capacitive Proximity Sensor. It connects with a non-contacting capacitive sensor that can be mounted to the exterior of the container and is needless to contact the detected object directly. It can detect the current water level of the mounted position and the full or vacancy of liquid soap or tissue.

Main Characteristics

- The presence or absence of liquid/object detection
- IP rating: Main body IP65/IP67 (optional), Sensor IP67
- Suitable for installation in flat non-metal containers

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Sensing Container Thickness	≤20mm (Non-metal:glass, plastic etc.)
Sensitivity	The sensitivity of the non-contact capacitive sensor must be adjusted in the field according to different liquids or objects and the thickness of non-metallic containers.
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Capacitive Proximity Sensor

R718VB

R718VB is a Wireless Capacitive Proximity Sensor. It connects with a non-contacting capacitive sensor can be mounted to the exterior of the container and is needless to contact the detected object directly. It can detect the current water level of the mounted position and the full or vacancy of liquid soap or tissue.

Main Characteristics

- The presence or absence of liquid/object detection
- IP rating: Main body IP65/IP67 (optional), Sensor IP65
- Suitable for installation in uneven non-metal containers

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Sensing Container Thickness	≤20mm (Non-metal:glass, plastic etc.)
Applicable Pipe Diameter Range	≥11mm
Sensitivity	The sensitivity of the non-contact capacitive sensor must be adjusted in the field according to different liquids or objects and the thickness of non-metallic containers.
Dimension	112mm x 88mm x 32mm
Weight	About 150g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Water Leak Detector
Wireless 2-Gang Water Leak Detector

R718WA / R718WA2

R718WA /R718WA2 is a Wireless Water Leak Detector. If the R718WA detects a leak, it will send an alarm message to the gateway. When the water sensor detects that there is no water leak again, it will send a normal state message back to the Gateway.

Main Characteristics

- Water leak detection
- IP rating:IP65/IP67 (optional), Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Wire Material	UL2547 24AWG
Wire Length	1000mm (±5mm)
Wire Flame Resistance Rating	VW-1
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Water Leakage/Temperature/Humidity Sensor

R718WAA

R718WAA can detect the temperature and humidity value of the current environment and send the temperature and humidity value information to the gateway for processing.

Main Characteristics

- Water leak / temperature / humidity detection
- IP rating:IP65, Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Wire Material	UL2547 28AWG
Wire Length	1000mm (±5mm)
Wire Flame Resistance Rating	VW-1
Dimension	112mm x 93.4mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Water Leak Detector with Rope Sensor
Wireless 2-Gang Water Leak Detector with Rope Sensor

R718WB / R718WB2

R718WB / R718WB2 is a Wireless Water Leak Detector with Rope Sensor.

It can detect the leaking status through an external dual-core non-positioning water rope sensor.

Main Characteristics

- Non-positioning water leak detection
- IP rating: Main bodyIP65/IP67 (optional)
  Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Leakage Rope Material	Conductive Polyethylene + Alloy Wire
Length	3000mm (±5mm)
Breaking Strength	60 kg
Detect Core Resistance	Less than 5 ohms/100 meters
Dimension	112mm x 88mm x 32mm
Weight	About 141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Water Leak Detector (Rope Sensor) with Temperature and Humidity Sensor

R718WBA

R718WBA is a Wireless Water Leak Detector with Temperature and Humidity Sensor.
It can detect the leaking status through an external dual-core non-positioning water rope sensor. It also can detect temperature and humidity.

Main Characteristics

- Non-positioning water leak, temperature and humidity detection
- IP rating: Main body IP65; Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Length	3000mm (±5mm)
Breaking Strength	60 kg
Leakage Rope Material	Conductive Polyethylene + Alloy Wire
Detect Core Resistance	Less than 5 ohms/100 meters
Temperature Detecting Range	-20℃～55℃
Temperature Accuracy	±1˚C@25˚C
Humidity Detecting Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	112mm x 88mm x 32mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Ultrasonic Distance Sensor and Temperature Sensor

R718X

R718X is a Wireless Ultrasonic Distance Sensor.

It has a built-in ultrasonic distance sensor that can detect the distance from itself to the detected object.

R718X also can detect the temperature.

Main Characteristics

- Temperature, ultrasonic distance detection
- IP rating:IP66

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Distance of Detection	0.20~3.5m
Distance Accuracy	S±0.12m (The test object is cardboard)
Distance Blind Zone	0~0.20m
Temperature Range	-40℃ to 55℃
Temperature Accuracy	±3℃
Dimension	112mm x 65mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Differential Pressure and Temperature Sensor

R718Y

R718Y is a wireless communication device which can detect the pressure difference. It will transmit the detected data to other devices for display through the wireless network.

Main Characteristics

- Differential pressure detection: -500 Pa to 500 Pa
- IP rating:IP40

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Differential Pressure Range	-500 Pa to 500 Pa
Differential Pressure Accuracy	3% of reading ± 0.1 Pa
Allowable Overpressure	100 kPa
Rated Burst Pressure	500 kPa
Temperature Accuracy	± 3°C (-20°C to 50°C)
Media Compatibility	Air, Nitrogen, Oxygen, Non-condensing
Dimension	112mm x 65mm x 32mm
Operating Temperature	-20℃ ~ 50℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Surface-Mounted Parking Sensor

R719A

R719A is a Wireless Surface-Mounted Parking Sensor. It can be used to detect the presence or vacancy of parking vehicles in the parking space.

Main Characteristics

- Geomagnetic and radar sensor detection
- IP rating:IP67

Technical Parameter	
Input Power	2 x 3.6V ER18505 lithium batteries
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Geomagnetic Sensor- Magnetic Field Detection Range	± 50 gauss
Radar Sensor - Working Frequency	60GHZ
Radar Sensor - Detection Range	6cm-2m
Operating Humidity	< 90% RH (No condensation)
Operating Temperature	-20℃ ～ 75℃
Dimension	150mm x 150mm x 30mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature and Humidity Sensor

R720A

R720A is a Wireless Temperature and Humidity Sensor.

It detects ambient temperature and humidity.

Main Characteristics

- Temperature and humidity detection :-40℃~55℃
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Detecting Range	-40℃～55℃
Temperature Accuracy	±0.5℃ @25℃
Humidity Detecting Range	0%RH～100%RH
Humidity Accuracy	±4%RH @25℃
Dimension	Main Body: L:88mm*W:65mm*H:19mm
Operating Temperature	-40℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature and Humidity Sensor with Activity Detection Sensor

R720B

R720B is a wireless communication device that detects ambient air temperature and humidity. The R720B also detects if it is being moved.

Main Characteristics

- Vibration status, temperature and humidity detection: -40℃～55℃
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Detecting Range	-40℃～55℃
Temperature Accuracy	±0.5℃ @25℃
Humidity Detecting Range	0%RH～100%RH
Humidity Accuracy	±4%RH @25℃
3-axis Accelerometer Range	±2/4/8/16g (optional)
3-axis Accelerometer Resolution	10 bit or 4mg/lsb (full scale) 13 bit @±16g
Dimension	Main Body: L:88mm*W:65mm*H:19mm
Weight	113g
Operating Temperature	-40℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Air Pressure and Temperature Sensor

R720C

R720C detects ambient air pressure and temperature and transmits the detected data to other devices via a wireless network for display.

Main Characteristics

- Air pressure and temperature detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Temperature Detecting Range	-40°C～55°C
Temperature Accuracy	±1°C @25°C
Air Pressure Range	300-1100hPa
Air Pressure Accuracy	±1.5 hPa (950 ... 1050 hPa, 0 ... +40 ˚C)
Dimension	Main Body: L:88mm*W:65mm*H:19mm
Operating Temperature	-40°C ～ 55°C
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40°C ～ 85°C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless TVOC/Temperature/Humidity Sensor

R720E

R720E detects temperature, humility and TVOC. TVOC refers to all organic gaseous substances in a space, and generally refers to the indoor volatile organic substances. TVOC is also the much serious one of the three types of pollution affecting indoor air quality.

Main Characteristics

- TVOC concentration detection: 0 ppb~60000 ppb
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
TVOC Detecting Range	0 ppb - 60000 ppb
TVOC Detecting Resolution	0ppb-2008ppb : 1ppb 2008ppb-11110ppb : 6ppb 11110ppb-60000ppb : 32ppb
TVOC Concentration Range Reference Description	Excellent: 0-65 ppb Good: 65-220 ppb Moderate: 220-660 ppb Poor: 660-2200 ppb Unhealthy: 2200-60000 ppb
Temperature Range	-20˚C to 55˚C
Humidity Range	0%RH to 100%RH

Wireless Liquid Hand Soap Sensor

R720F series

R720F series can detect the existence of hand sanitizer / water leakage. This device is connected with two electrode rods which can be used to detect the state of the insufficient amount of hand sanitizer in the hand sanitizer box or whether there is the water leakage in the detection area.

Main Characteristics

- Electrode rod detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Electrode Rod Material	Nickel-plated phosphor bronze
Electrode Rod Length	Total length: 201.5±1.5mm 10 sections of the electrode rod have been rolled grooves for easy cutting. The length of each section is about 10mm as the figure shown.
Dimension	Host body: L 88mm* W 65mm* H 19mm

The shape and orientation of electrode rod can be selected according to the needs.

R720FLO,R720FLD,R720FU and R720FW

R720FLO
L-type probe
electrode rods upward

R720FLD
L-type probe
electrode rods downward

R720FU
U-type probe

R720FW
Water leakage
detection

Wireless Outdoor CO Sensor with a Solar Panel

R72601

R72601 is a wireless outdoor CO Sensor.

It detects the concentration of CO in the air.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- CO detection: 0~2000ppm

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
CO Measurement Range	0-2000ppm
CO Measurement Method	Electrochemical sensors
CO Measurement Resolution	0.5 ppm
CO Measurement Accuracy	<± reading 3% (@25˚C)
Working Pressure Range	Standard atmospheric pressure ±10%
Dimension	Main Body:111mm*86mm*41mm CO Sensor: 111mm*86mm*42mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Outdoor Water pH Sensor with a Solar Panel

R72608

R72608 is a wireless outdoor water pH Sensor.

It detects the pH value and water temperature.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- pH value and water temperature detection

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
PH Value Range	0-14PH
Temperature Range	0 to 65˚C
Installation Method	Immersive installation, 3/4NPT pipe thread
Wire Length	5 meters, other lengths can be customized
Operating Temperature	-20℃ ~ 55℃
Operating Humidity Range	<90%RH (No condensation)
Storage Temperature Range	-40℃ ~ 85℃

Wireless Turbidity Sensor with a Solar Panel

R72610

R72610 is a wireless communication device for turbidity detection.

R72610 can detect the turbidity of the solution.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- Turbidity detection

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
Measurement Range	0~1000 NTU (default) 0~100 NTU 0~20 NTU
Accuracy	±5% or ±3NTU(0~1000NTU) ±3% or ±2NTU(0~100NTU) ±3% or ±1.5NTU(0~20NTU) ±0.5℃
Installation Method	Immersive installation, 3/4NPT pipe thread
Wire Length	5 meters, other lengths can be customized
Operating Temperature	-20℃ ~ 55℃
Operating Humidity Range	<90%RH (No condensation)
Storage Temperature Range	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor Liquid Level Sensor with a Solar Panel

R72611

R72611 is a Wireless Outdoor Liquid Level Sensor with a Solar Panel.

It can detect the depth of the liquid in the container.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- Liquid level detection

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
Measurement Range	10m (Other range customizable)
Wire Length	12m (Other lengths customizable)
Accuracy Level	0.25%FS (Typical value)
Operating Temperature	-20 ° C ~ 55 ° C
Operating Humidity	<90% RH (no condensation)
Storage Temperature	-40°C to 85°C

*Others wire length/range can be customized. The highest range is 50m.

Wireless Outdoor CO2/Temperature/Humidity Sensor with a Solar Panel

R72615

R72615 is a Wireless Outdoor CO2/Temperature/ Humidity Sensor with a Solar Panel.

It can detect the concentration of CO2, temperature and humidity.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- CO2,temperature and humidity detection

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
CO2 Range	400ppm to 5000ppm
CO2 Accuracy	±100ppm+6% read value
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±1˚C@25˚C
Humidity Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Solar panel size: 290mm*150mm*25mm
Operating Temperature	-20 ˚ C ~ 55 ˚ C
Operating Humidity	<90% RH (no condensation)
Storage Temperature	-40˚C to 85˚C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless CO2/Temperature/Humidity Sensor

R72615A

R72615A is a Wireless CO2/Temperature Humidity Sensor.

It can detect the concentration of CO2, temperature and humidity.

Main Characteristics

- CO2 detection
- Temperature and humidity detection

Technical Parameter	
Input Power	8 x 3.6V ER14505 lithium batteries
Operating Voltage	6.8v~7.3v
CO2 Range	400ppm to 5000ppm
CO2 Accuracy	±100ppm+6% read value
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±1˚C@25˚C
Humidity Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	117mm x 114mm x 82.6mm
Operating Temperature	-20 ˚ C ~ 55 ˚ C
Operating Humidity	<90% RH (no condensation)
Storage Temperature	-40˚C to 85˚C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor PM2.5/Temperature/Humidity Sensor with a Solar Panel

R72616

R72616 is a Wireless Outdoor PM2.5/Temperature/ Humidity Sensor with a Solar Panel.

It can detect the concentration of PM2.5, temperature and humidity.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- PM2.5,temperature and humidity detection

Technical Parameter	
Input Power	3x18650 rechargeable battery
Operating Voltage	9.8V to 12.6V
Particle Measurement Range	0.3~1.0μm 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±0.8˚C
Humidity Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Solar panel size: 290mm x 150mm x 25mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless PM2.5/Temperature/Humidity Sensor

R72616A

R72616A is a Wireless PM2.5/Temperature/ Humidity Sensor.

It can detect the concentration of PM2.5, temperature and humidity.

Main Characteristics

- PM2.5 detection
- Temperature and humidity detection

Technical Parameter

Input Power	8 x 3.6V ER14505 lithium batteries
Particle Measurement Range	0.3~1.0μm 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±0.8˚C
Humidity Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Solar panel size: 290mm x 150mm x 25mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor PM2.5/Noise/Temperature/Humidity Sensor with a Solar Panel

R72623

R72623 is a Wireless Outdoor PM2.5/Noise/Temperature/ Humidity Sensor with a Solar Panel.

It can detect the concentration of PM2.5, noise, temperature and humidity.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- PM2.5,noise, temperature and humidity detection

Technical Parameter	
Input Power	9.8v ~ 12.6v(3x18650 rechargeable battery)
Particle Measurement Range	0.3~1.0 ; 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Resolution	1μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Noise Measuring Range	30dB-130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Temperature Measurement Range	-20˚C~55˚C
Temperature Measurement Accuracy	±1˚C
Humidity Detecting Range	0%RH-100%RH
Humidity Measurement Accuracy	±4%RH @25˚C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor Noise/Temperature/Humidity Sensor with Solar Panel

R72624

R72624 is a Wireless Outdoor Noise/Temperature/Humidity Sensor with a Solar Panel.

It can detect the noise, temperature and humidity.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- Noise, temperature and humidity detection

Technical Parameter	
Input Power	9.8v ~ 12.6v(3x18650 rechargeable battery)
Noise Measuring Range	30dB-130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Noise Frequency Response	35Hz-20kHz
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±1˚C
Humidity Range	0-100 %RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Solar panel size: 290mm*150mm*25mm
Operating Temperature	-20℃ ～ 55℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor Wind Speed/Wind Direction/Temperature/ Humidity Sensor with a Solar Panel

R72630

R72630 is equipped with wind speed sensor, wind direction sensor, and temperature and humidity sensor. It can detect and send the data of the wind speed, wind direction, temperature and humidity of the environment.

Main Characteristics

- Solar panel charging: 5W / 18VDC
- Speed sensor, wind direction
- Temperature and humidity detection

Technical Parameter	
Input Power	9.8v ~ 12.6v(3x18650 rechargeable battery)
Wind Speed Range	0-30m/s
Temperature Range	-20˚C~55˚C
Humidity Range	0-100 %RH
Dimension	Mask Part: D220mm*H340mm Host Body: 117mm*89mm*41mm
Operating Temperature Range	-20℃ ～ 55℃
Operating Humidity Range	<90%RH (No condensation)
Storage Temperature Range	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R72632A / R72632A01

R72632A / R72632A01 can detect and send soil nitrogen (N), phosphorus (P) and potassium (K) data. It is suitable for measuring ordinary yellow-cinnamon soil, black soil, and terra rossa.

Main Characteristics

- Soil NPK detection

Technical Parameter	
Input Power	R72632A: 2 x 3.6V ER34615 lithium batteries R72632A01:8 x 3.6V ER14505 lithium batteries
Operating Voltage	6.8V to 7.2V
Soil NPK Range	0-1999 mg/kg
Soil NPK Accuracy	±2% F.s
Installation	Fully embedded or probe fully inserted into the measured medium
Soil NPK Sensor IP Rating	IP68
Wiring Length	1.25m
Dimension	Main Body: 117 mm x 89.05 mm x 82 mm NPK Sensor: 137mm x 45mm x 15mm

Note:

1. It is not applicable to saline-alkali land, sandy land, or other powdery objects with high salinity.
2. The soil humidity shall be more than 25%

Wireless CO Sensor

RA0701

RA0701 is a Wireless CO Sensor.

It detects the concentration of CO in the air.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- DC 12V power supply
- CO concentration detection

Technical Parameter	
Input Power	DC 12V power supply
CO Measurement Range	0-2000ppm
CO Measurement Method	Electrochemical sensors
CO Measurement Resolution	0.5 ppm
CO Measurement Accuracy	<± reading 3% (@25˚C)
CO Sensor Lifetime	In the air >5 years
Working Pressure Range	Standard atmospheric pressure ±10%
Dimension	Main Body:111mm*86mm*41mm CO Sensor: 111mm*86mm*42mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless PH Sensor

RA0708

RA0708 is a Wireless PH Sensor.

It detects PH value.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- DC 12V power supply
- PH detection

Technical Parameter

Input Power	DC 12V power supply
Working Current 1	40 mA (when there is no RF signal)
Working Current 2	80 mA(when there is RF signal transmission)
PH Measurement Range	0~14 PH
Working pressure	<0.2MPa
Wire Length	5m (Other lengths customizable)
Dimension	111mm*86mm*41mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Water Turbidity Sensor

RA0710

RA0710 is a Wireless Water Turbidity Sensor.
It connects an external turbidity sensor to detect water turbidity and temperature. When a beam of light is incident on a water sample, the light is scattered because of the turbidity substance of the water sample. The intensity of the scattered light which is perpendicular to the incident light will be measured and compared with the internal calibration value to calculate the turbidity of the water sample.

Main Characteristics

- DC 12V power supply
- Turbidity detection

Technical Parameter	
Input Power	DC 12V power supply
Working Current 1	50 mA (when there is no RF signal)
Working Current 2	90 mA (when there is RF signal transmission)
Measurement Principle	Scattering light method
Turbidity Measurement Range	0~1000 ntu
Turbidity Measurement Resolution	0.1 ntu , 0.1℃
Turbidity Measurement Accuracy	±5% F.S, 0.5℃
Dimension	111mm x 86mm x 41mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Liquid Level Sensor

RA0711

RA0711 is a Wireless Liquid Level Sensor.

It detects the depth of liquid in the container.

The body and the sensor are connected via the RS485 interface, and the detected data is transmitted to other devices through the wireless network.

Main Characteristics

- DC 12V power supply
- Liquid level detection

Technical Parameter	
Input Power	DC 12V power supply
Working Current 1	80 mA (when there is no RF signal)
Working Current 2	120 mA (when there is RF signal transmission)
Liquid Level Sensor Measurement Range	10m (Other range customizable)
Liquid Level Sensor Length	12m (Other lengths customizable)
Liquid Level Sensor Accuracy	0.25%FS（Typical）
Dimension	111mm*86mm*42mm
Weight	About 160g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

*Others line length/range can be customized. The highest range is 50m.

Wireless Soil Moisture Sensor

RA0713

RA0713 is a Wireless Soil Moisture Sensor.

It can detect volumetric water content of the soil.

Main Characteristics

- Volumetric water content (VWC) detection

Technical Parameter	
Input Power	DC 12V power supply
Moisture Content Range	0-100%VWC
Water Content Accuracy	±3%VWC
Moisture Content Resolution	0.1% VWC in mineral soils, 0.25% VWC in growing media
Dimension	111mm x 86mm x 42mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless CO2/Temperature/Humidity Sensor

RA0715

RA0715 is a Wireless CO2/Temperature/Humidity Sensor. It can detect the concentration of CO2, temperature and humidity.

Main Characteristics

- DC 12V power supply
- CO2,temperature and humidity detection

Technical Parameter

Input Power	DC 12 V
Working Current 1	25mA
Working Current 2	40mA (When the sensor is working.)
CO2 Accuracy	±100 ppm+6% read value
CO2 Range	0-5000ppm
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±0.5˚C@25˚C ; Max. ±0.8˚C@20˚C~55˚C
Humidity Range	0%RH-100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	117mm*114mm*41mm
Operating Temperature	-20 ˚ C ~ 55 ˚ C
Operating Humidity	<90% RH (no condensation)
Storage Temperature	-40˚C to 85˚C

Wireless Outdoor CO_2/Temperature/Humidity Sensor

RA0715Y

RA0715Y is a Wireless Outdoor CO2/Temperature/ Humidity Sensor.

It can detect the concentration of CO2, temperature and humidity .

Main Characteristics

- DC 12V power supply
- CO2,temperature and humidity detection

Technical Parameter	
Input Power	DC 12 V
Working Current 1	40mA
Working Current 2	80mA (When the sensor is working.)
CO2 Accuracy	±100ppm+6% read value
CO2 Range	0-5000ppm
Temperature Measurement Range	-20˚C~55˚C
Temperature Measurement Accuracy	±0.5˚C@25˚C (Max. ±0.8˚C@ -20˚C－55˚C)
Humidity Detecting Range	0%RH-100%RH
Humidity Measurement Accuracy	±4%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Main part :111mm*86mm*41mm
Operating Temperature	-20 ˚ C ~ 55 ˚ C
Operating Humidity	<90% RH (no condensation)
Storage Temperature	-40˚C to 85˚C

Wireless PM2.5/Temperature/Humidity Sensor

RA0716

RA0716 is a Wireless PM2.5/Temperature/Humidity Sensor. It can detect the concentration of PM2.5, temperature and humidity.

Main Characteristics

- DC 12V power supply
- PM2.5,temperature and humidity detection

Technical Parameter	
Input Power	DC 12 V
Working Current 1	40mA
Working Current 2	80mA (When the sensor is working.)
Particle Measurement Range	0.3~1.0 ; 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Resolution	1μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Temperature Measurement Range	-20˚C~55˚C
Temperature Measurement Accuracy	±0.8˚C
Humidity Detecting Range	0%RH-100%RH
Humidity Measurement Accuracy	±4%RH @25˚C
Dimension	117mm*114mm*41mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor PM2.5/Temperature/Humidity Sensor

RA0716Y

RA0716Y is a Wireless Outdoor PM2.5/Temperature/ Humidity Sensor.

It can detect the concentration of PM2.5, temperature and humidity .

Main Characteristics

- DC 12V power supply
- PM2.5,temperature and humidity detection

Technical Parameter	
Input Power	DC 12 V
Working Current 1	40mA
Working Current 2	80mA (When the sensor is working.)
Particle Measurement Range	0.3~1.0 ; 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Resolution	1μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Temperature Measurement Range	-20˚C~55˚C
Temperature Measurement Accuracy	±1˚C
Humidity Detecting Range	0%RH-100%RH
Humidity Measurement Accuracy	±10%RH @25˚C
Dimension	Mask part: D:220mm*H:280mm Main part :111mm*86mm*41mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless PM2.5/Noise/Temperature/Humidity Sensor

RA0723

RA0723 is a wireless communication device which can detect PM2.5, noise intensity, temperature and humidity of the environment.

Main Characteristics

- DC 12V power supply
- PM2.5,Noise, temperature and humidity detection

Technical Parameter	
Input Power	DC 12V/1A
Working Current	< 150mA
Particle Measurement Range	0.3 ~ 1.0 ; 1.0 ~ 2.5um
Noise Measuring Range	30dB to 130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Noise Frequency Response	35Hz-20kHz
Temperature Range	-20˚C ~ 55˚C
Temperature Accuracy	±0.8˚C@25˚C
Humidity Range	0%RH~100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Host body - L:117mm x W:113.5mm x H:41mm Noise Sensor - L: 110 mm*W: 85 mm*H: 44mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Outdoor PM2.5/Noise/Temperature&Humidity Environment Sensor

RA0723Y

RA0723Y is a Wireless Outdoor PM2.5/Noise/Temperature/ Humidity Sensor.

It can detect the concentration of PM2.5, noise, temperature and humidity.

Main Characteristics

- DC 12V power supply
- PM2.5,noise, temperature and humidity detection

Technical Parameter	
Input Power	DC 12V
Particle Measurement Range	0.3~1.0 ; 1.0~2.5μm
Counting Efficiency	50%@0.3μ m 98%@≥0.5μ m
Effective Range(PM2.5 Standard)	0~500 μg/m^3
Resolution	1μg/m^3
Maximum Consistency Error (PM2.5 standard data)	±10% @100-500μ g/m^3 ±10μ g/m^3 @ 0-100μ g/m^3
Noise Measuring Range	30dB-130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Frequency Response	35Hz-20kHz
Temperature Measurement Range	-20˚C~55˚C
Temperature Measurement Accuracy	±0.8˚C
Humidity Detecting Range	10%RH-90%RH
Humidity Measurement Accuracy	±4%RH @25˚C

Wireless Noise/Temperature/Humidity Sensor

RA0724

RA0724 is a Wireless Noise & Temperature & Humidity Sensor. It can detect the value of noise, temperature, and humidity.

Main Characteristics

- DC 12V power supply
- Noise, temperature and humidity detection

Technical Parameter	
Input Power	DC 12V/1A
Working Current 1	About 50mA (no radio frequency signal transmission)
Working Current 2	About 80mA (a radio frequency signal emission)
Noise Measuring Range	30dB to 130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Noise Frequency Response	35Hz-20kHz
Temperature Range	-20˚C~55˚C
Temperature Accuracy	±1˚C@25˚C
Humidity Range	0%RH~100%RH
Humidity Accuracy	±4%RH @25˚C
Dimension	Host body - L:117mm x W:113.5mm x H:41mm Noise Sensor - L: 110 mm*W: 85 mm*H: 44mm

Wireless Outdoor Noise/Temperature/Humidity Sensor

RA0724Y

RA0724Y is a Wireless Outdoor Noise & Temperature & Humidity Sensor. It can detect the value of noise, temperature, and humidity.

Main Characteristics

- DC 12V power supply
- Noise, temperature and humidity detection

Technical Parameter	
Input Power	DC adapter power supply, DC 12V/1A
Working Current 1	About 50mA (no radio frequency signal transmission)
Working Current 2	About 80mA (a radio frequency signal emission)
Noise Measuring Range	30dB-130dB
Noise Measurement Error	3% F.S
Noise Resolution	0.1dB
Noise Frequency Response	35Hz-20kHz
Temperature Range	-20°C~55°C
Temperature Accuracy	±1°C@25°C
Humidity Measurement Range	0%RH~100%RH
Humidity Measurement Accuracy	±4%RH @25°C
Dimension	Mask Body: D220mm*H280mm Host body - L:117mm x W:89mm x H:41mm

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Temperature/Humidity/Pressure/Wind Speed /Wind Direction

RA0730

RA0730 is equipped with wind speed sensor, wind direction sensor, and temperature and humidity sensor. It can detect and send the data of the wind speed, wind direction, temperature and humidity of the environment.

Main Characteristics

- DC 12V power supply
- Temperature, humidity/wind speed/wind direction

Technical Parameter	
Input Power	DC 12V/1A
Temperature Measurement Range	-20° C ~ 55° C
Temperature Measurement Accuracy	±0.8° C @25° C
Humidity Measurement Range	0%RH~100%RH
Humidity Measurement Accuracy	±4%RH @25° C
Wind Speed Sensor Measurement Range	0-30m/s
Dimension	117mm x 113.5mm x 41mm
Ambient Temperature Range	-20℃ ～ 55℃
Ambient Humidity Range	<90%RH (No condensation)
Storage Temperature Range	-40℃ ～ 85℃

Wireless Outdoor Temperature/Humidity/Pressure/Wind Speed /Wind Direction

RA0730Y

RA0730Y can be connected with the sensor of the wind speed, wind direction, temperature and humidity, the values collected by the sensor are reported to the corresponding gateway.

Main Characteristics

- DC 12V power supply
- Temperature, humidity/wind speed/wind direction

Technical Parameter	
Input Power	DC 12 V
Temperature Measurement Range	-20° C ~ 55° C
Temperature Measurement Accuracy	±1.5° C @25° C
Humidity Measurement Range	0%RH~100%RH
Humidity Measurement Accuracy	±12%RH @25° C
Wind Speed Sensor Measurement Range	0-30m/s
Ambient Temperature Range	-20℃ ～ 55℃
Ambient Humidity Range	<90%RH (No condensation)
Storage Temperature Range	-40℃ ～ 85℃

Wireless Water Leak Detection and Location Sensor

RA07W

RA07W is a Wireless Water Leak Detection and Location Sensor.

It connects an external four-core positioning leak detecting sensor to detect the leaking location.

Main Characteristics

- DC 12V power supply
- Water leak location detection

Technical Parameter	
Input Power	Adapter DC powered（12V/1A）
Working Current 1	40mA
Working Current 2	80mA (When the sensor is working.)
Cable Length	100 m (max)
Leak Detection Error Range	1% ± 0.5 m
Dimension	111mm x 86mm x 41mm
Working Temperature	-20˚C ～ 55˚C
Operating Humidity	5%RH～95%RH
Storage Temperature	-40˚C ～ 85˚C

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless 2-Gang Thermocouple Sensor - Type K

R730CK2

R730CK2 is used to detect temperature of the object and medium which thermocouple is contacted.

Main Characteristics

- 2-cell rechargeable NiMH batteries power supply
- Thermocouple detection
- Main body IP rating:IP65/IP67 (optional)
- Sensor IP rating : IP60
- Type K detecting range : -40 ˚C to 375˚C

Technical Parameter	
Input Power	2-cell rechargeable NiMH batteries series (1.2V / section) power supply
Standby Current	21 uA
Operating Voltage	DC 2.3V～3V
Solar Panel Specification	5W / 4VDC
Temperature Range	-40℃ to 375℃
Temperature Accuracy	±1.5℃
Thermocouple Wire Length	1m
Dimension	267.11mm*155mm*208.2mm
Environment Temperature	-20℃ to 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ to 85℃

Wireless 2-Gang Thermocouple Sensor - Type T

R730CT2

R730CT2 is used to detect temperature of the object and medium which thermocouple is contacted.

Main Characteristics

- 2-cell rechargeable NiMH batteries power supply
- Thermocouple detection
- Main body IP rating:IP65/IP67 (optional)
- Sensor IP rating : IP65
- Type T detecting range : -40 ˚C to 125˚C

Technical Parameter	
Input Power	2-cell rechargeable NiMH batteries series (1.2V / section) power supply
Standby Current	21 uA
Operating Voltage	DC 2.3V～3V
Solar Panel Specification	5W / 4VDC
Temperature Detecting Range	-40℃ to 125℃
Temperature Accuracy	±0.5℃
Thermocouple Wire Length	1m
Dimension	267.11mm*155mm*208.2mm
Environment Temperature	-20℃ to 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ to 85℃

Wireless IR Blaster

R211

R211 is a Wireless IR Blaster.

The device can execute IR learning and IR applying. After IR learns, it can operate R211 to control electrical equipment remotely, e.g. electric fan and air conditioner.

Main Characteristics

- DC 12v power supply
- Learn infrared equipment
- Control electrical equipment remotely

Technical Parameter	
Input Power	DC 12V
Standby Current	50mA
Infrared Frequency	38KHz
Infrared Signal Range	About 32 meters
Dimension	Diameter-106mm , height-30.5mm
Weight	100g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	5% RH ~ 95% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Activity Detection Sensor

R311FA / R313FA

R311FA / R313FA is a Wireless Activity Detection Sensor.

It can detect its sudden movement or vibration and send the alarm signal to the gateway.

Main Characteristics

- Vibration status detection
- R311FA: Built-in antenna
- R313FA: External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	40uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Vibration Intensity Sensitivity	62.5mg
Dimension	57mm x 35mm x 15mm
Weight	48.9g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R311FA1 / R313FA1

When the device moves or shakes beyond the set threshold, it immediately reports the current acceleration and velocity of the X, Y, and Z axes. .

Main Characteristics

- 3-axis Acceleration and Velocity Detection
- R311FA1: Built-in antenna
- R313FA1: External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.3V to 3V
Standby Current	42uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Dimension	57mm x 35mm x 15mm
Weight	48.9g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Activity Event Counter

R311FB / R313FB

R311FB / R313FB is a Wireless Activity Event Counter.

It can count its number of movements or vibrations.

Main Characteristics

- Vibration count detection
- R311FB: Built-in antenna
- R313FB: External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	40uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Vibration Intensity Sensitivity	62.5mg
Dimension	57mm x 35mm x 15mm
Weight	48.9g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Activity Timer

R311FC / R313FC

R311FC / R313FC is a Wireless Activity Timer.

It detects the duration of the movement or vibration.

Main Characteristics

- Vibration time detection
- R311FC: Built-in antenna
- R313FC: External antenna

Technical Parameter	
Input Power	2 x 3.0V CR2450 button batteries
Operating Voltage	DC 2.4V to 3.0V
Standby Current	42uA/3.0V
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA @3.0V
Battery Accuracy	±0.1V
Vibration Intensity Sensitivity	62.5mg
Dimension	57mm x 35mm x 15mm
Weight	48.9g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Portable LoRa Field Signal Meter

R716S

R716S is developed based on LoRa technology to detect the network signal of the LoRa network. R716S can detect the LoRa signal strength of the scanned area and display the detected data through LCD.

Main Characteristics

- 2*AA size alkaline battery power supply
- Detect LoRa signal strength

Technical Parameter	
Input Power	2 AA size alkaline battery
Operating Voltage Range	DC 2.3V to 3V
Low Battery Threshold	2.4V
Battery Voltage Accuracy	±0.1V
Standby Current	28uA
Dimension	112mm x 34mm x 17mm
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Accelerometer and Surface Temperature Sensor

R718E

R718E is a Wireless Accelerometer and Surface Temperature Sensor. When the device moves or vibrates over threshold value, it reports the acceleration and velocity of the X, Y, and Z axes. It externally connects one NTC thermistor to detect the surface temperature of the measured object.

Main Characteristics

- Acceleration and velocity of the X, Y, and Z axes detection
- NTC thermistor temperature detection
- IP rating: Main bodyIP65/IP67 (optional) ; Sensor IP67

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
NTC Temperature Range	-40℃ - 120℃
NTC Temperature Accuracy	±3℃
B Value B25/50	3950k
ADC Resolution	13 Bits
3-axis Acceleration Range	±16g
Dimension	L: 112 mm *W: 88 mm *H: 32 mm
Host body Weight	About 141 g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity Range	<90% RH (No condensation)
Storage Temperature Range	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Tilt Angle and Surface Temperature Sensor

R718EA

R718EA is a Wireless Tilt Angle and Surface Temperature Sensor.

When the device detect the slope changing, it will report the angle of the X, Y, and Z axes. It externally connects one NTC thermistor to detect the surface temperature of the measured object.

Main Characteristics

- Tilt angle of the X, Y, and Z axes detection
- NTC thermistor temperature detection
- IP rating: Main bodyIP65/IP67 (optional) ; Sensor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
NTC Temperature Range	-40℃ -120℃
Temperature Accuracy	±3°C
Tilt Angle Measurement Range	±90°
Tilt Angle Resolution	1°
Dimension	L: 112 mm *W: 88 mm *H: 32 mm
Host body Weight	About 141 g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity Range	<90% RH (No condensation)
Storage Temperature Range	-40℃ ～ 85℃

Wireless Tilt Angle Sensor

R718EB

R718EB has a built-in tilt angle detection sensor. When the device is tilted (compared with the reference angle), the tilt angle will be reported, and the detected data will be transmitted to other devices through the wireless network for display.

Main Characteristics

- Tilt angle of the X, Y, and Z axes detection
- IP rating: IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Battery Accuracy	± 0.1V
Tilt Angle Measurement Range	±90°
Tilt Angle Accuracy	±3°
Tilt Angle Resolution	0.1°
Dimension	L: 112 mm *W: 65 mm *H: 32 mm
Host body Weight	About 140 g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity Range	<90% RH (No condensation)
Storage Temperature Range	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Accelerometer and Surface Temperature Sensor

R718EC

R718EC can detect the movement or vibration of the device and send the signal to the gateway for processing. Otherwise, it is connected with an external NTC thermistor which can detect the surface temperature of the measured object.

Main Characteristics

- Acceleration and velocity of the X, Y, and Z axes detection
- NTC thermistor temperature detection
- IP rating: Host body IP65/IP67, NTC thermistor IP67

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
NTC Temperature Range	-40℃ to 120℃
Temperature Accuracy	±3˚C
ADC Resolution	13 Bits
3-axis Acceleration Range	±16g
Dimension	L: 112 mm *W: 88 mm *H: 32 mm
Host body Weight	About 141 g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity Range	<90% RH (No condensation)
Storage Temperature Range	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless 0-5V ADC Sampling Interface
Wireless 2-Gang 0-5V ADC Sampling Interface

R718IA / R718IA2

R718IA /R718IA2 is a Wireless 0-5V ADC Sampling Interface. It can externally connect a device to measure ADC voltage, and the measuring range is 0 to 5v.

Main Characteristics

- ADC voltage detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
ADC Sampling Voltage Range	0-5V
ADC Resolution	12 bits
ADC Conversion Rate	1.14 Msps
External Cable Length	1m
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless 0-10V ADC Sampling Interface
Wireless 2-Gang 0-10V ADC Sampling Interface

R718IB / R718IB2

R718IB / R718IB2 is a Wireless 0-10V ADC Sampling Interface. It can externally connect a device to measure ADC voltage, and the measuring range is 0v to 10v.

Main Characteristics

- ADC voltage detection
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
ADC Sampling Voltage Range	0-10V
ADC Resolution	12 bits
ADC Conversion Rate	1.14 Msps
External Cable Length	1m
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Dry Contact Interface
Wireless 2-Gang Dry Contact Interface

R718J / R718J2

R718J / R718J2 is a Wireless Dry Contact Interface.

It can connect a dry contact device to detect output status, e.g. switch, reed switch and so on.

Main Characteristics

- Dry contact status detection
- IP rating:IP65

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
Wire material	UL2547 28AWG
Wire maximum temperature	80˚C
Wire length	1000mm（±5mm）
Wire flame resistance rating	VW-1
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Pulse Counter Interface

R718H / R718H2

R718H / R718H2 is a Wireless Pulse Counter Interface.

It can connect a pulse device to count pulse.

Main Characteristics

- Pulse counter
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Wireless Hall Type Open/Close Detection Sensor
Wireless 2-Gang Hall Type Open/Close Detection Sensor

R718LB / R718LB2

R718LB / R718LB2 is a Wireless Hall Type Sensor.

It can be used to detect the state of door and window switch.

Main Characteristics

- Open/Close Detection
- IP rating: Main partIP65/IP67 (optional)
  Sensor IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Performance Characteristics	All-pole sensing, the magnet can activate either pole.
Hall Sensor Sensing Distance	Less than 3cm.
Cable Length	1m
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

R718MA

R718MA is a Wireless Asset Sensor.

It is a simple positioning function which reports RSSI and SNR periodically.

Main Characteristics

- Reports RSSI and SNR periodically
- IP rating:IP65/IP67 (optional)

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Dimension	112mm x 65mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless Activity Detection Sensor

R718MBA

R718MBA is a Wireless Activity Detection Sensor.

It can detect its sudden movement or vibration and send an alarm signal to the gateway.

Main Characteristics

- Vibration status detection
- IP rating:IP65/IP67 (optional)

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Dimension	112mm x 65mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Activity Event Counter

R718MBB

R718MBB is a Wireless Activity Event Counter.

It can count its number of movements or vibrations.

Main Characteristics

- Vibration count detection
- IP rating:IP65/IP67 (optional)

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Dimension	112mm x 65mm x 32mm
Weight	141g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R718MBC

R718MBC is a Wireless Activity Timer.

It detects the duration of the movement or vibration.

Main Characteristics

- Vibration time detection
- IP rating:IP65/IP67 (optional)

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Operating Voltage	DC 3.1V to 3.65V
Dimension	112mm x 65mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless 4~20mA Current Meter Interface
Wireless 2-Gang 4~20mA Current Meter Interface

R718KA / R718KA2

R718KA / R718KA2 is a Wireless 4~20mA Current Meter Interface.

It converts the 4mA-20mA signal into a corresponding detection signal through the operational amplifier and then reads the current through the sampling of the ADC module.

Main Characteristics

- 4~20mA current meter interface
- IP rating:IP65

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
Measurement Range	4~20mA
Dimension	112mm x 88mm x 32mm
Weight	141g
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Wireless RS485 Adapter

R718PC

R718PC is a Wireless RS485 Adapter.

It supports RS485 serial port transparent transmission and can configure cycle time and change baud rate.

Main Characteristics

- RS485 serial port transparent transmission
- IP rating:IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Operating Current	35 mA (when there is no external sensor)
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

*It supports up to 128 bytes of data (depending on the current communication rate)

*Baudrate:115200 / 57600 / 38400 / 28800 / 19200 / 9600 / 4800 / 2400

Wireless RS232 Adapter

R718PDA

R718PDA is a Wireless RS232 Adapter.

It supports RS232 serial communication and can configure cycle time and change baud rate.

Main Characteristics

- RS232 serial port transparent transmission
- IP rating:IP65/IP67 (optional)

Technical Parameter	
Input Power	DC 12V power supply
Operating Current	45 mA (when there is no external sensor)
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

*It supports up to 128 bytes of data (depending on the current communication rate)

*Baudrate:115200 / 57600 / 38400 / 28800 / 19200 / 9600 / 4800 / 2400

Wireless 1-Phase Current Meter with 1 x 30A Solid Core CT

R718N1

R718N1 is a Wireless 1-Phase Current Meter with 1 x 30A Solid Core CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 30A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 30 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:39mm*W:14mm*H:37.5mm (CT)
Weight	141g + 48.7g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 1-Phase Current Meter with 1 x 30A Clamp-On CT

R718N13

R718N13 is a Wireless 1-Phase Current Meter with 1 x 30A Clamp-on CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 30A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 30 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:32mm*W:16mm*H:26.4mm (CT)
Weight	141g + 30g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 1-Phase Current Meter with 1 x 75A Clamp-On CT

R718N17

R718N17 is a Wireless 1-Phase Current Meter with 1 x 75A Clamp-On CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 75A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 75 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:27.5mm*W:25mm*H:42.5mm (CT)
Weight	141g + 49.6g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 1-Phase Current Meter with 1 x 150A Clamp-On CT

R718N115

R718N115 is a Wireless 1-Phase Current Meter with 1 x 150A Clamp-On CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 150A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 150 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:43.5mm*W:33mm*H:28.5mm (CT)
Weight	141g + 70.1g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 1-Phase Current Meter with 1 x 250A Clamp-On CT

R718N125

R718N125 is a Wireless 1-Phase Current Meter with 1 x 250A Clamp-On CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 250A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 250 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:46mm*W:34mm*H:66mm (CT)
Weight	141g + 150.6g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 1-Phase Current Meter with 1 x 630A Clamp-On CT

R718N163

R718N163 is a Wireless 1-Phase Current Meter with 1 x 630A Clamp-On CT. It is equipped with an external current transformer. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 1 x 630A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	5 A to 630 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:84.8mm*W:40.8mm*H:48mm (CT)
Weight	141g + 365.4g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 3-Phase Current Meter with 3 x 75A Clamp-On CT

R718N37

R718N37 is a Wireless 3-Phase Current Meter with 3 x 75A Clamp-On CT. It is equipped with three external current transformers. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 3 x 75A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 75 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:27.5mm*W:25mm*H:42.5mm (CT)
Weight	141g + 49.6*3g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 3-Phase Current Meter with 3 x 150A Clamp-On CT

R718N315

R718N315 is a Wireless 3-Phase Current Meter with 3 x 150A Clamp-On CT. It is equipped with three external current transformers. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 3 x 150A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 150 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:43.5mm*W:33mm*H:28.5mm (CT)
Weight	141g + 70.1*3g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 3-Phase Current Meter with 3 x 250A Clamp-On CT

R718N325

R718N325 is a Wireless 3-Phase Current Meter with 3 x 250A Clamp-On CT. It is equipped with three external current transformers. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 3 x 250A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 250 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:46mm*W:34mm*H:66mm (CT)
Weight	141g + 150.6*3g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 3-Phase Current Meter with 3 x 630A Clamp-On CT

R718N363

R718N363 is a Wireless 3-Phase Current Meter with 3 x 630A Clamp-On CT. It is equipped with three external current transformers. The current transformer can transform the primary high-side current into the proportional secondary low-side current to sense the current.

Main Characteristics

- Current Meter 3 x 630A detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	10 A to 630 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:84.8mm*W:40.8mm*H:48mm (CT)
Weight	141g + 365.4*3g (CT)
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)

* Only support AC current measuring

Wireless 3-Phase Current Meter Interface

R718N360

R718N360 is a 3-phase current detection device. The device provides 3-way wiring. Each wiring can be connected with a current transformer provided by the customer.

Main Characteristics

- Current Meter Interface
- Main body IP rating:IP53

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	It is recommended that the primary side current be at most 600A, and the secondary side current of the current transformer is at most 1A.
Current Resolution	1mA
Dimension	L:112mm*W: 88mm*H: 32mm
Weight	141g
Operating Temperature	-20℃ ~ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ~ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Light Sensor and 1-Phase Current Meter with 1 x 30A Clamp-On CT

R718NL13

R718NL13 is a Wireless Light Sensor and 1-Phase Current Meter with 1 x 30A Clamp-on CT.

It detects 1-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 1 x 30A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 30 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:32mm*W:16mm*H:26.4mm (CT)
Weight	141g + 30g (CT)

* Only support AC current measuring

Wireless Light Sensor and 1-Phase Current Meter with 1 x 75A Clamp-On CT

R718NL17

R718NL17 is a Wireless Light Sensor and 1-Phase Current Meter with 1 x 75A Clamp-on CT.

It detects 1-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 1 x 75A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 75 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:27.5mm*W:25mm*H:42.5mm (CT)
Weight	141g + 49.6g (CT)

* Only support AC current measuring

Wireless Light Sensor and 1-Phase Current Meter with 1 x 150A Clamp-On CT

R718NL115

R718NL115 is a Wireless Light Sensor and 1-Phase Current Meter with 1 x 150A Clamp-on CT.

It detects 1-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 1 x 150A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 150 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:43.5mm*W:33mm*H:28.5mm (CT)
Weight	141g + 70.1g (CT)

* Only support AC current measuring

Wireless Light Sensor and 1-Phase Current Meter with 1 x 250A Clamp-On CT

R718NL125

R718NL125 is a Wireless Light Sensor and 1-Phase Current Meter with 1 x 250A Clamp-on CT.

It detects 1-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 1 x 250A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 250 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:46mm*W:34mm*H:66mm (CT)
Weight	141g + 150.6g (CT)

* Only support AC current measuring

Wireless Light Sensor and 1-Phase Current Meter with 1 x 630A Clamp-On CT

R718NL163

R718NL163 is a Wireless Light Sensor and 1-Phase Current Meter with 1 x 630A Clamp-on CT.

It detects 1-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 1 x 630A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	5 A to 630 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Dimension	L:112mm*W: 88mm*H: 32mm L:84.8mm*W:40.8mm*H:48mm (CT)
Weight	141g + 365.4g (CT)
Wiring Length	About 900 mm

* Only support AC current measuring

Wireless Light Sensor and 3-Phase Current Meter with 3 x 75A Clamp-On CT

R718NL37

R718NL37 is a Wireless Light Sensor and 3-Phase Current Meter with 3 x 75A Clamp-on CT.

It detects 3-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 3 x 75A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	100mA to 75 A
CT Current Resolution	1mA
Load Resistance	10 Ω
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:27.5mm*W:25mm*H:42.5mm (CT)
Weight	141g + 49.6*3g (CT)

* Only support AC current measuring

Wireless Light Sensor and 3-Phase Current Meter with 3 x 150A Clamp-On CT

R718NL315

R718NL315 is a Wireless Light Sensor and 3-Phase Current Meter with 3 x 150A Clamp-on CT.

It detects 3-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 3 x 150A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 150 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:43.5mm*W:33mm*H:28.5mm (CT)
Weight	141g + 70.1*3g (CT)

* Only support AC current measuring

Wireless Light Sensor and 3-Phase Current Meter with 3 x 250A Clamp-On CT

R718NL325

R718NL325 is a Wireless Light Sensor and 3-Phase Current Meter with 3 x 250A Clamp-on CT.

It detects 3-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 3 x 250A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	1 A to 250 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:46mm*W:34mm*H:66mm (CT)
Weight	141g + 150.6*3g (CT)

* Only support AC current measuring

Wireless Light Sensor and 3-Phase Current Meter with 3 x 630A Clamp-On CT

R718NL363

R718NL363 is a Wireless Light Sensor and 3-Phase Current Meter with 3 x 630A Clamp-on CT.

It detects 3-phase electrical input current and ambient light illuminance.

Main Characteristics

- Current Meter 3 x 630A detection
- Illuminance detection
- Main body IP rating:IP53 sensor:IP30

Technical Parameter	
Input Power	2 x 3.6V ER14505 lithium batteries
CT Measurement Range	10 A to 630 A
CT Current Resolution	1mA
Housing Material	Flame retardant grade 94-V0 UL material
Illuminance Range	0.01 Lux - 157K Lux
Illuminance Accuracy	±20% (In the sunlight) ±10% (Test Condition: white LED light, 6500K, room temperature)
Wiring Length	About 900 mm
Dimension	L:112mm*W: 88mm*H: 32mm L:84.8mm*W:40.8mm*H:48mm (CT)
Weight	141g + 365.4*3g (CT)

* Only support AC current measuring

Wireless Multi-Sensor Interface for 0-24V ADC, Dry Contact and 4-20mA Sensors

R718IJK

R718IJK is a Wireless Multi-Sensor Interface for 0-24V ADC, Dry Contact and 4-20mA Sensors.

Main Characteristics

- 0-24V ADC detection
- 4-20mA signal detection
- Dry contact status detection
- IP rating: IP65

Technical Parameter

Input Power	2 x 3.6V ER14505 lithium batteries
ADC Measurement Range	0 to 24v
Current Measurement Range	4 to 20mA
Dimension	112mm x 88mm x 32mm
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Valve Controller

RA10

RA10 is a Wireless Valve Controller.

It can control the open/close status of the valve remotely or manually, such as water valve, gas valve and ball valve.

Main Characteristics

- Control valves -ball valve
- Apply to the pipe of diameter less than 26.5mm.

Technical Parameter

Input Power	DC 12V
Applicable Pipe Diameter	6 British inch (3/4 US inch
Actuating Arm Maximum Torque	7.5 kgf
Rotation Angle	90 degrees
Physical Size	152.99mm x 70.99mm x128.3mm
Applicable Pipe Diameter	6 British inch (3/4 US inch)
Weight	Main 0.4 kg Adapter0.11 kg
Operating Temperature	-20℃ ～ 55℃
Operating Humidity	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Plug-and-Play Power Outlet with Consumption Monitoring

R809A

R809AB
(US type)

R809A is a Wireless Plug-and-Play Power Outlet with Consumption Monitoring.

It can remotely or manually control (turn on/off) the connected electrical equipment. It will report the current, voltage, power and energy of the load.

R809AF
(EU type)

R809AG
(UK type)

R809AI
(AU type)

Main Characteristics

- Current, voltage, power and energy detection of load
- Over current alarm

Technical Parameter	
Input Power	100-240VAC, 50/60Hz
Typical Operating Current	15mA/220VAC/1W
Typical Load Characteristics	Resistive load: 16A/250VAC; P: 4000VA Inductive load: 8A/220VAC; P: 1760VA (COSφ=0.4)
Current Accuracy Range	100mA~16A
Energy Measurement Error	±1%
Dimension	95mm*58mm*42.5mm (without plug part)

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Plug-and-Play Power Outlet with Consumption Monitoring and Power Outage Detection

R809A01

R809A01B (US type)

R809A01 is a Wireless Plug-and-Play Power Outlet with Consumption Monitoring and Power Outage Detection.

It can remotely or manually control (turn on/off) the connected electrical equipment. It will report the current, voltage, power, energy of the load and power off alarm.

R809A01G
(UK type)

R809A01I
(AU type)

Main Characteristics

- Current, voltage, power and energy detection of load
- Over current alarm
- Power outage detection

Technical Parameter

Input Power	100-240VAC, 50/60Hz
Typical Operating Current	15mA/220VAC/1W
Typical Load Characteristics	Resistive load: 16A/250VAC; P: 4000VA Inductive load: 8A/220VAC; P: 1760VA (COSφ=0.4)
Current Accuracy Range	100mA~16A
Energy Measurement Error	±1%
Dimension	95mm*58mm*42.5mm (without plug part)

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

Wireless Wall-Mounted Power Socket with Consumption Monitoring

R816B

R816B is a Wireless Wall-Mounted Power Socket with Consumption Monitoring (US type).

It can remotely or manually control (turn on/off) the external connected electrical equipment. It will report the current, voltage, power, energy of the load and power off alarm.

Main Characteristics

- Current, voltage, power and energy detection of load
- Over current alarm

Technical Parameter	
Input Power	100-240VAC, 50/60Hz
Typical Operating Current	13mA/120VAC/0.8W
Typical Load Characteristics	Resistive load: 16A/250VAC; P: 4000VA Inductive load: 8A/220VAC; P: 1760VA (COSφ=0.4)
Current Measurement Range	100mA~15A
Energy Measurement Error	±1%
Flammability Rating	UL 94V-0
Dimension	113.0 mm * 69.0 mm * 39.5 mm (without wires)
Wire Length	160mm
Operating Humidity Range	5% to 85% RH (no condense)
Operating Temperature	-10° C to 50° C
Storage Temperature	-40° C to 85 ° C

* The upper socket is a general socket and cannot be controlled.
* The lower socket is a relay control output, with a power detection function.

Wireless Wall-Mounted Power Socket with Consumption Monitoring and Power Outage Detection

R816B01

R816B01 is a Wireless Wall-Mounted Power Socket with Consumption Monitoring and Power Outage Detection(US). It can remotely or manually control (turn on/off) the external connected electrical equipment. It will report the current, voltage, power, energy of the load and power off alarm.

Main Characteristics

- Current, voltage, power and energy detection of load
- Over current alarm
- Power outage detection

Technical Parameter

Input Power	100-240VAC, 50/60Hz
Typical Operating Current	13mA/120VAC/0.8W
Typical Load Characteristics	Resistive load: 16A/250VAC; P: 4000VA Inductive load: 8A/220VAC; P: 1760VA (COSφ=0.4)
Current Measurement Range	100mA~15A
Energy Measurement Error	±1%
Flammability Rating	UL 94V-0
Dimension	113.0 mm * 69.0 mm * 39.5 mm (without wires)
Wire Length	160mm
Operating Humidity Range	5% to 85% RH (no condense)
Operating Temperature	-10° C to 50° C
Storage Temperature	-40° C to 85 ° C

* The upper socket is a general socket and cannot be controlled.
* The lower socket is a relay control output, with a power detection function.

Available Frequency : EU863-870 / US902-928 / AU915-928 / KR920-923 / AS923-1 / AS923-2 / AS923-3 / IN865-867 / CN470-510

R831A

R831A is a device used to control the switch and is mainly used for the switch control of the strong electric motor control box.

Main Characteristics

- Curtain and roller shutter control
- R831 has four operating modes corresponding to the three keys of the DIP switch.

Technical Parameter	
Input Power	DC 12V
Relay Load Characteristics	AC250V/5A、DC30V/5A (contact load)
Relay Power Consumption	300mW
Relay Type	Magnetic Latching Relay
Relay Model	HFE60/5-1HSTGL2R
Dimension	66mm x 47mm x 20.3 mm
Working Temperature	-20° C ～ 55° C
Ambient Humidity Range	＜90% RH（no condense）
Storage Temperature Range	-40° C ～ 85° C

* R831A - strong electric motor mode: Toggle the DIP switch 1

This mode has two relays involved in operation which are combined for on / off / stop.

Wireless Multifunctional Control Box

R831B

R831B is a device used to control the switch and is mainly used for the switch control of the light electric motor control box.

Main Characteristics

- Curtain and roller shutter control
- R831 has four operating modes corresponding to the three keys of the DIP switch.

Technical Parameter	
Input Power	DC 12V
Relay Load Characteristics	AC250V/5A、DC30V/5A (contact load)
Relay Power Consumption	300mW
Relay Type	Magnetic Latching Relay
Relay Model	HFE60/5-1HSTGL2R
Size	66mm x 47mm x 20.3 mm
Working Temperature	-20° C ～ 55° C
Ambient Humidity Range	＜90% RH（no condense）
Storage Temperature Range	-40° C ～ 85° C

* R831B - light current motor mode : Toggle the DIP switch 2

This mode has three relays involved in the operation which are respectively for on /off / stop.

Wireless Multifunctional Control Box

R831C

R831C can control switch devices, mainly used for control electrical appliances, it can respectively control 3 relay devices through three external dry contact buttons. Users also can control the relays by pressing the external buttons instead of sending commands from network server.

Main Characteristics

- 3 relays and 3 dry contacts
- R831 has four operating modes corresponding to the three keys of the DIP switch.

Technical Parameter	
Input Power	DC 12V
Relay Load Characteristics	AC250V/5A、DC30V/5A (contact load)
Relay Power Consumption	300mW
Relay Type	Magnetic Latching Relay
Relay Model	HFE60/5-1HSTGL2R
Size	66mm x 47mm x 20.3 mm
Working Temperature	-20° C ～ 55° C
Ambient Humidity Range	＜90% RH（no condense）
Storage Temperature Range	-40° C ～ 85° C

*R831C - relay mode : Toggle the DIP switch 3 In this mode, the external dry contact can directly control the on / off of the local relay.

Wireless Multifunctional Control Box-3 Dry Contact Inputs and 3 Dry Contact Relay Outputs

R831D

R831D is designed to control switch devices, mainly for electrical appliances. R831D allows you to connect and control 3 buttons and 3 dry contacts. The connected buttons and dry contacts will not affect each other. It will report 3 relay status and 3 input status.

Main Characteristics

- 3 relays and 3 dry contacts
- R831 has four operating modes corresponding to the three keys of the DIP switch.

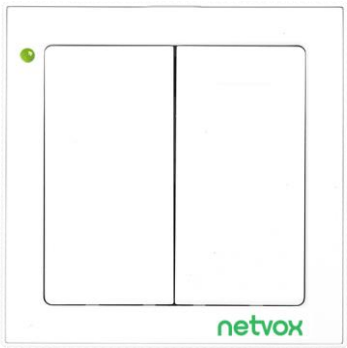
Technical Parameter	
Input Power	DC 12V
Relay Load Characteristics	AC250V/5A、DC30V/5A (contact load)
Relay Power Consumption	300mW
Relay Type	Magnetic Latching Relay
Relay Model	HFE60/5-1HSTGL2R
Size	66mm x 47mm x 20.3 mm
Working Temperature	-20° C ～ 55° C
Ambient Humidity Range	＜90% RH（no condense）
Storage Temperature Range	-40° C ～ 85° C

*R831D - relay mode : Toggle the DIP switches 1 and 2

In this mode, the external dry contact does not directly control the on/off of the local relay but reports the dry contact status and relay status.

Wireless 2-Gang Push Button

RB02B



RB02B is a Wireless 2-Gang Push Button. According to the requirement of different applications, press the trigger button of RB02B, and the device will immediately send the trigger information to the gateway.

Main Characteristics

- 2-Gang Push Button

Technical Parameter	
Input Power	2 x 1.5V AAA batteries
Operating Voltage	2.3V-3V
Standby Current	11uA
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA/3.0V
Dimension	82mm*82mm*15mm
Working Temperature	-20˚C ～ +55˚C
Storage Temperature	-40˚C ～ +85˚C
Operating Humidity	＜90%RH

Wireless 3-Gang Push Button

RB02C

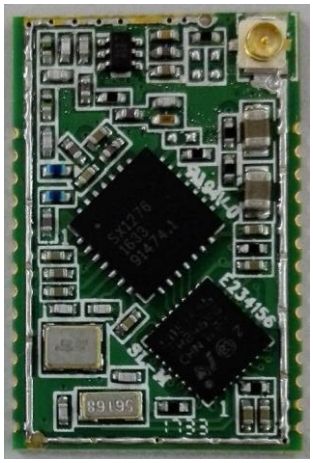
RB02C has three buttons which can control three switch devices.

Main Characteristics

- 3-Gang Push Button

Technical Parameter	
Input Power	2 x 1.5V AAA batteries
Operating Voltage	2.3V-3V
Standby Current	10uA
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA/3.0V
Dimension	82mm*82mm*15mm
Working Temperature	-20˚C ～ +55˚C
Storage Temperature	-40˚C ～ +85˚C
Operating Humidity	＜90%RH

R100H



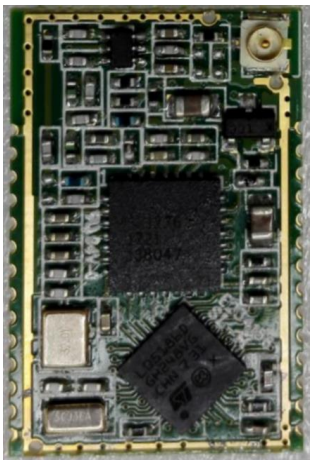
The R100H is a low power transceiver based on the SX1276 chip LoRa™ solution. The R100H is designed for SMD to mount on the main PCB. SMD installations provide the best RF performance at the lowest cost. In addition, the R100H is designed to take up minimal board space on the host PCB which has already included a rich set of interface ports and power management circuitry. As a result, it can be easily integrated into other devices without the need for RF experience and expertise. The R100H operates in the 862-1020MHz band.

Main Characteristics

- High performance and low power 32-bit ARM Cortex-M0 microprocessor
- Provide powerful and flexible development tools

Technical Parameter	
Data Transfer Rate	0.3kbps～50kbps (LoRa) / 1.2kbps～300kbps (FSK)
Bandwidth	862-928MHz
Modulation	LoRa/FSK (Remarks: Choose one of them)
Receive Sensitivity	-121dBm (Frequency deviation=5kHz,Bit Rate=1.2kb/s)
Operating Voltage	1.8 to 3.6 V DC
Receiving Current	11mA (typical value)
Emission Current	120mA (typical value)
Working Current	2mA (typical value)
Standby Current	8uA
Product Size	16.0mm x 24.5mm x 3.0mm

R100L



The Lora RF module R100L from NETVOX is a low-power transceiver based on the SX1276 chip LoRa™ solution.The R100L is designed for SMD to mount on the main PCB. SMD installations provide the best RF performance at the lowest cost. In addition, the R100L is designed to take up minimal board space on the host PCB which has already included a rich set of interface ports and power management circuitry. As a result, it can be easily integrated into other devices without the need for RF experience and expertise. The R100L operates in the 470-510MHz band.

Main Characteristics

- High performance and low power 32-bit ARM Cortex-M0 microprocessor
- Provide powerful and flexible development tools

Technical Parameter	
Data Transfer Rate	0.3kbps～50kbps (LoRa) / 1.2kbps～300kbps (FSK)
Bandwidth	470-510MHz
Modulation	LoRa/FSK (Remarks: Choose one of them)
Receive Sensitivity	-121dBm (Frequency deviation=5kHz,Bit Rate=1.2kb/s)
Operating Voltage	1.8 to 3.6 V DC
Receiving Current	11mA (typical value)
Emission Current	120mA (typical value)
Working Current	2mA (typical value)
Standby Current	8uA
Product Size	16.0mm x 24.5mm x 3.0mm

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