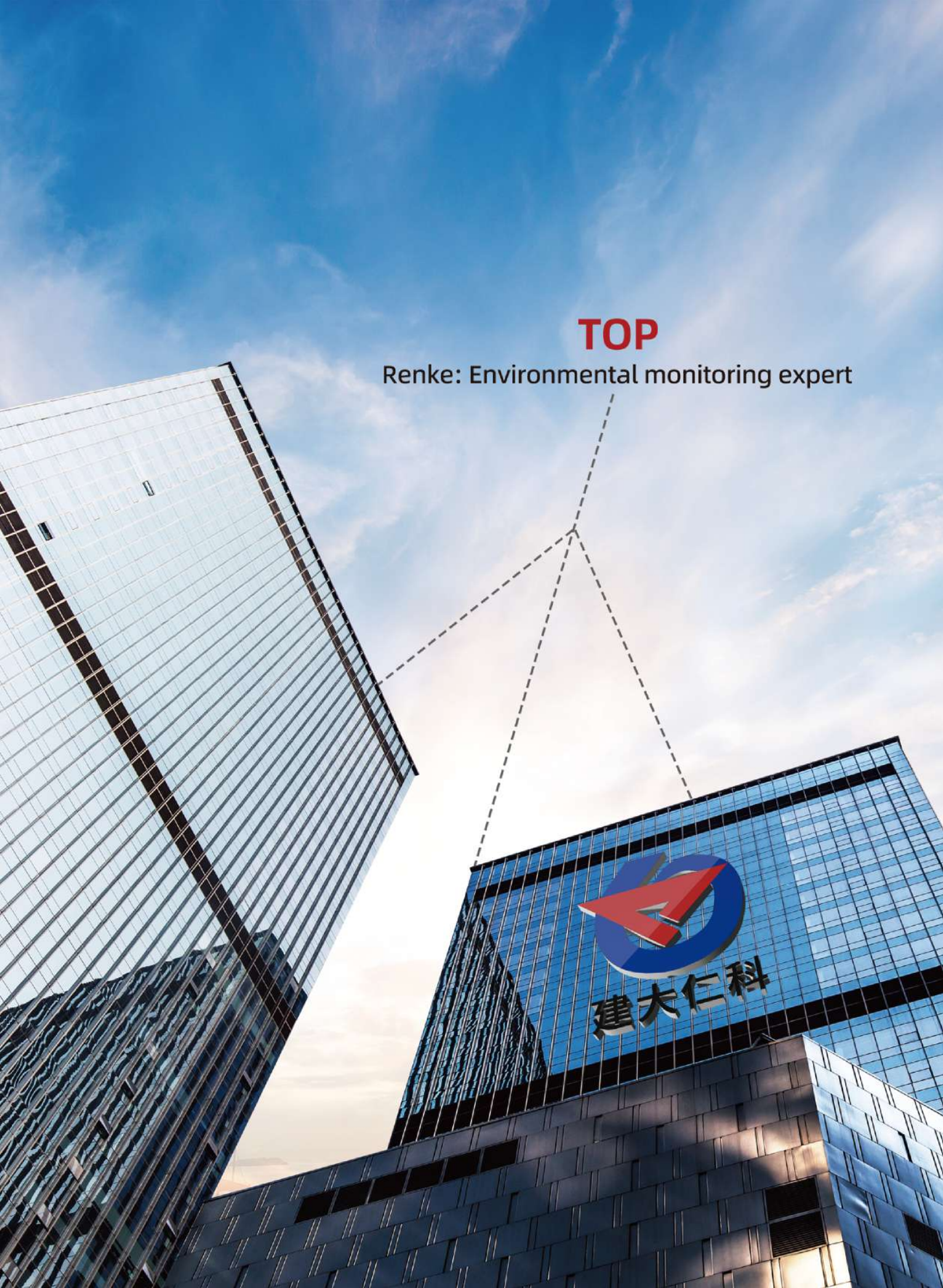
建大仁科

环境监测终端制造商

建大仁科产品手册

PRODUCT
INTRODUCTION MANUAL

山东仁科测控技术有限公司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Renke: Environmental monitoring expert
建大仁科

ABOUT

Shangdong Renke Control Technology Co.,Ltd.

Company Introduction

Shandong Renke Control Technology Co., Ltd. is located in the beautiful "Spring City" Jinan. A comprehensive company integrating R&D, production and sales of various environmental monitoring intelligent terminals and measurement and control systems such as temp&humidity sensors, temp&humidity data loggers, water quality sensors, gas sensors, soil sensors and weather station system and so on. The company has successively won honorary titles such as National High-tech Enterprise, National Excellent Enterprise in Electronic Information Industry, Shandong Famous Brand, Shandong Gazelle Enterprise, and Shandong Specialized Special New Enterprise.

At present, the company's core R&D team has established long-term cooperative relationships with experts and professors from scientific research institutes such as Beijing University, Shandong University, Shandong Jianzhu University, and Shandong Academy of Sciences, and has participated in the research and development of many national science and technology appraisal projects and major national special projects. ,Strong technical force. The Shandong Renke Industrial Sensor Research Institute under the company has successfully developed a variety of electrochemical sensors and optical sensors and successfully introduced them to the market, striving to practice the localization of imported sensors and contributing to the development of the industry.

The "Jianda Renke" brand series products produced by the company have been highly recognized by the majority of clients. In the international market, the company's products have been exported to countries and regions such as the United States, the United Kingdom, Germany, the Netherlands, Spain, Australia, South Africa, India, Russia, Southeast Asia, South America and the Middle East and so on.

The company adheres to the corporate philosophy of "serving customers, trusting in agility" and "providing value for customers", and constantly improves the ability to create value for clients.

100%
Independent intellectual property rights

100+
Technical R&D personnels

n00,000,000+
Billion-level revenue

70%
Employees with bachelor degree or above

20000+m²
Own production base

300+
Product supply areas

ENTERPRISE HONOR

Enterprise Honor

COMPANY'S MAIN CERTIFICATE

High tech enterprise certificate

Shandong Gazelle Enterprises Certificate

Shandong "Specialized and New" Enterprise Certificate

China environmental protection product certificate

Award of Enterprise innovation achievement in Shandong

Certificate of intellectual property management system

Certificate of New Products in Chinese Brands Day 2021

Quality management system certificate

EU CE certificate

Approval certificate of measuring instruments type

Alicloud IOT partner certificate

Invention patent certificate

FCC certification

Believe in dexterity and action

Only when we are honest and honest can we do what We say and keep our promises.

Serve Our customers

Providing value to customers is the only reason for the existence of Jianda Renke. Customer demand is the driving force behind the development of Jianda Renke.

Hard work

We do not have any scarce resources to rely on, only hard work can win the respect and trust of customers. improving process efficiency.

Teamwork

If we win,we will toast to celebrate;If we defeat,we will be desperate to save each other. This is not only a cross-cultural team spirit,but also an effective guarantee for breaking departmental walls and improving process efficiency.

company Culture

RS485/ANALOG TYPE

NETWORK TYPE

WIFI TYPE

LORA TYPE

USB TYPE

TEMP & HUM

Temperature and Humidity Transmitter

PRODUCT TYPE

RS485 TYPE
ANALOG TYPE

RS-WS-N01-6*-*-EX

RS485 Temperature and Humidity Recorder

Power supply: 10~30V DC (P≤0.4W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH (60%RH,25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(Modbus-RTU)
Typical features: It can record 65,000 data, with sound and light
Product dimensions: 122mm*102mm*36mm

RS-WS-N01-2C*-*-EX

LCD Temperature Humidity Sensor

Power supply: 10~30V DC (P≤0.4W)
Accuracy: Temperature: ± 0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+80℃ Humidy: 0%RH-100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s (1m/s wind speed)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBUS-RTU)
Typical features: The bult-in type probe and extension type probe are optional, the probe cable can be up to 30 meters
Product dimensions: 110mm*85mm*44mm

RS-WS-*-5-EX

Temperature and Humidity Sensor EE10

Power supply: 10~30V DC (P≤0.036W)
Accuracy: Temperature: ± 0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH-100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4-20mA/0-5V/0-10V/RS485(Modbus-RTU)
Typical features: Wall-mounted installation, suitable for HVAC measurement and control
Product dimensions: 100mm*85mm*26mm

RS-WS-*-9TH-EX

Duct Temperature Sensor for HVAC

Power supply: RS485type/Analog type: 10~30V DC
Voltage analog type: AC24V ± 20% or DC18~35V(P≤1.3W)
Accuracy: Temperature: ±0.5℃(25℃) or ± 0.3℃(25℃)
Humidity: ±3%RH(60%RH,25℃)
Range: Temperature: -40℃ ~ +80℃
Humidity: 0%RH ~100%RH
Output signal: RS485/4~20mA/0~5V/0~10V
Typical features: Flange mounting, suitable for measuring temperature and humidity inside pipelines
Product dimensions: 80mm* 80mm* 225mm
Probe: ϕ14mm
Flange: ϕ57mm

PRODUCT TYPE

RS485 TYPE
ANALOG TYPE

RS-WS-*-2-*-EX

Wall-mounted Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4-20mA/0-5V/0-10V/RS485(ModBuS-RTU)
Typical features: IP65 protection, suitable for long-term use in outdoor rain and snow environments
Product dimensions: 110mm*85mm*44mm

RS-WS-*-SMG-*-EX

Digital Temp&Humidity Transmitter with LED Display

Power supply: DC10~30V(0-10V output type can only supply 24V)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~ +120℃ default -40℃ ~+80℃
Humidity: 0%RH ~ 100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃~+60 ℃, 0%RH~ 95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: IP65 protection grade with digital display, suitable for long-term use in outdoor rain and snow environments
Product dimensions: 110mm*85mm*44mm

RS-WS-N01-2-*-OLED-EX

Wall-mounted OLED Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ± 0.4℃(25℃) Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Humidity: ≤8s(1m/s wind speed)
Temperature: ≤25s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)
Typical features: OLED display, allowing for intuitive observation of temperature and humidity data
Product dimensions: 110mm*85mm*44mm Probe length can be customized

RS-WS-*-1A-*-EX

Small Temperature Humidity Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Humidity: ± 2%RH(60%RH,25℃)
Temperature: ± 0.4℃(25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Humidity: ≤8s(1m/s wind speed)
Temperature: ≤25s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: Standard 86 shell mounting holes, with LCD display
Product dimensions: 86mm*86mm*26mm

RS-DEW-N01-2-*-EX

Wall-mounted Dew Point Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤ 0.4W)
Accuracy: Temperature: ±0.4℃(25℃)
Dew point temperature: ±0.8℃(25℃)
Relative humidity: ± 2%RH(60%RH,25℃)
Range: Temperature: -20℃~+60℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)
Typical features: It adopts a wall-mounted high-protection-grade enclosure with a protection grade of IP65
Product dimensions: 110mm*85mm*44mm

RS-DEW-N01-S-EX

Dew Point Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Dew point temperature: ±0.8℃(25℃)
Temperature: ±0.4 ℃(25℃)
Probe working: Temperature: -40℃~+100℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Dew point temperature range: -30℃~100℃
Output signal: RS485(ModBuS-RTU)
Installation method: G1/2 threaded installation
Typical special case: Waterproof rating IP65, suitable for various industrial environments

RS-WS-N01-8-EX

Modbus Temperature Humidity Sensor

Power supply: 10~30V DC(P≤0.1W)
Accuracy: Temperature: ±0.4℃ (25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+60℃
Humidity: 0%RH~95%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0~95%RH(non-condensation)
Output signal: RS485(ModBus-RTU)
Typical features: Standard 35mm rail mounting, suitable for electrical cabinets
Temperature and humidity refresh time: 1s
Product dimensions: 65mm*46mm*28.5mm

RS-WS-*-F-EX

Concrete Curing Dedicated Temperature and Humidity Sensor

Power supply: DC10~30V(P≤1.5W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Long-term stability: Temperature: ≤0.1℃/y,
Humidity: ≤1%RH/y
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~100%RH
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Protection grade: IP65
Product dimensions: 90mm*82mm*48.8mm

PRODUCT TYPE

RS485 TYPE
ANALOG TYPE

RS-WS-*-ATH/BTH-EX

Metal Duct Temperature and Humidity Sensor

Power supply: DC7~30V
Accuracy: Temperature: ±0.5℃(25℃) Humidity: ±3%RH(60%RH, 25℃)
Range: Temperature: -40℃~+120 ℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)/4-20mA/0~5V/0~10V
Typical features: The product is installed with a four-inch pipe thread, which is convenient for installation and has a protection grade of IP65
Product dimensions: Top-opening type: 336.7mm*122.5mm
Slanted opening type: 332.3mm*99.47mm

RS-WS-N01-8CW-EX

Cabinet-type Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.3W)
Accuracy: Temperature: ±0.3℃(25℃) Humidity: ± 3%RH(60%RH,25℃)
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements:
Without display: -40℃~+75℃, 0%RH~95%RH(non-condensation)
OLED display: -30℃~+75℃, 0%RH~95%RH(non-condensation)
Typical features: Standard 35mm rail mounting, suitable for electrical cabinets
Output signal: RS485(ModBuS-RTU)
Product dimensions: 106mm*40mm*22mm

RS-WS-N01-*-EX

Probe-type Temperature and Humidity Sensor

- Power supply: 5~28V DC(P≤0.05W)
- Accuracy: Temperature: ±0.5℃(25℃)
  Humidity: ±4%RH(60%RH,25℃)
- Response time: Temperature: ≤15s (1m/s wind speed)
  Humidity: ≤4s (1m/s wind speed)
- Output signal: RS485(ModBuS-RTU)
- Humidity refresh time: 2s
- Display resolution: Temperature: 0.1℃
  Humidity: 0.1%RH
- Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH-95%RH(non-condensation)

RS-FPC-WS-*-*-EX

Explosion-proof Temp & Humidity Sensor

Power supply: 10~30V DC(P≤0.35W)
Accuracy: Temperature: ±0.5℃(25℃) Humidity: ±3%RH(60%RH, 25℃)
Range: Temperature: -20℃~+60℃ Humidity: 0%RH~100%RH
Long-term stability: Temperature: ≤0.1℃/y Humidity: ≤1%RH/y
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~100%RH
Output signal: RS485(ModBuS-RTU)/4-20mA/0-5V/0-10V
Typical features: It adopts remote infrared control technology, allowing parameters to be modified without disassembly
Product dimensions: 197mm*154mm*94mm

RS-FPC-*-WS-*-*-EX

Explosion-proof Duct Temp & Humidity Sensor

Power supply: 10~30V DC(P≤0.35W)
Accuracy: Temperature: ±0.5℃(25℃) Humidity: ±3%RH(60%RH, 25℃)
Temperature and humidity measurement range:
With display: -20℃~+60℃, 0%RH~100%RH
Without display: -40℃~+120℃ default -40℃~+80℃
Temp&Hum resistance of transmitter elements:
With display: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Without display: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)/4-20mA/0-5V/0-10V
Product dimensions: 197mm*154mm*94mm

RS-WS-*-2D-EX

Industrial Wall-mounted Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Temperature: ±0.4(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+ 120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Supports both wall-mounted and rail-mounted installation methods, which is very convenient
Product dimensions: 147mm*88mm*41mm

RS-WS-*-2D-LCD-EX

Industrial Wall-mounted LCD Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: Supports both wall-mounted and rail-mounted installation methods, which is very convenient
Product dimensions: 147mm*88mm* 41mm

RS-WS-*-9A-EX

Industrial Duct Type Temperature and Humidity Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤0.1W)
Accuracy: Temperature: ±0.2℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~99.9%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: Flange installation, using high-molecular material high-elasticity sealing rings to ensure the sealing of the measurement holes
Product dimensions: 88mm*90mm*262mm. The probe rod can be extended up to 2 meters at most

RS-WS-*-9A-LCD-EX

Industrial Duct Type LCD Temperature and Humidity Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤0.1W)
Accuracy: Temperature: ±0.2℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -40℃~+80C, 0%RH~99.9%RH(non-condensation)
Output signal: 4~20mA/0-5V/0-10V/RS485(ModBuS-RTU)
Typical features: Flange installation, using high-molecular material high-elasticity sealing rings to ensure the sealing of the measurement holes
Product dimensions: 88mm*90mm*262mm. The probe rod can be extended up to 2 meters at most

PRODUCT TYPE

RS485 TYPE
ANALOG TYPE

RS-WS-*-K1-*-EX

Temperature Humidity Display Panel

Power supply: 10~30V DC(P≤0.64W)
Accuracy: Temperature: ±0.4℃(25° C)
Humidity: ±2%RH(60%RH,25 ℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃~+70℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/WIFI/RS485(ModBuS-RTU)
Typical features: It adopts large-sized high-brightness digital tubes, which can still display clearly under strong light
Product dimensions: 275mm*273mm

RS-KB-*-N01-EX

Temperature and Humidity Display Board (Second Generation)

Power supply: 10~30V DC(P≤0.8W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Humidity: ≤8s(1m/s wind speed)
Temperature: ≤25s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃~+70℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)
Typical features: 21.7-inch panel, red high-brightness digital tube, clear display during the day, night and even in strong light
Product dimensions: 490mm*290mm*40mm

RS-WS-*-SMG-*-EX

LCD Duct Temperature Humidity Sensor

Power supply: 10-30V DC(P≤0.4W)
Accuracy: Temperature: ± 0.4℃(25℃)
Humidity: ± 2%RH(60%RH,25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity range: 0%RH ~ 100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: It adopts a granular sintered probe sheath, with the probe directly connected to the housing, presenting a beautiful and elegant appearance
Product dimensions: 110mm*85mm*44mm. Probe length can be customized

RS-WS-N01-9L-EX

Long Pipeline Temperature and Humidity Sensor

Power supply: 10-30V DC(P≤0.048W)
Accuracy: Temperature: ±0.4 ℃ (25℃)
Humidity: ±2%RH(60%RH,25℃)
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Display resolution: Temperature: 0.1℃ Humidity: 0.1%RH
Temp&Hum resistance of transmitter elements: -40℃~+60 ℃, 0%RH~95%RH(non-condensation)
Output signal: RS485(ModBuS-RTU)
Typical features: It adopts EMC anti-interference devices, industrial-grade processing chips, and has a wide range of applications
Product dimensions: Length: 238.5mm Diameter: 14mm
Flange: ϕ57.5mm

RS-WD-*-9A-EX

Industrial Duct Type Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤0.1W)
Accuracy: ±0.2℃(25℃)
Temperature range: -40℃~+80℃
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~99.9%RH(non-condensation)
Long-term stability: ≤0.03℃/y
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Flange installation, using high-molecular material high-elasticity sealing rings to ensure the sealing of the measurement holes
Product dimensions: 88mm*90mm*262mm. The probe rod can be extended up to 2 meters at most

RS-WD-*-9A-LCD-EX

Industrial Duct Type LCD Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤0.1W)
Accuracy: ±0.2℃(25℃)
Temperature range: -40℃~+80℃
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~99.9%RH(non-condensation)
Long-term stability: ≤0.03℃/y
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: Flange installation, using high-molecular material high-elasticity sealing rings to ensure the sealing of the measurement holes
Product dimensions: 88mm*90mm*262mm. The probe rod can be extended up to 2 meters at most

RS-WD-*-9C-EX

Industrial Duct Type Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤0.1W)
Accuracy: ±0.2℃(25℃)
Temperature range: -40℃~120℃ default -40℃~+80℃
Probe working: Temperature: -40℃~120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~99.9%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Product dimensions: 276mm*90mm*88mm

RS-WD-*-9C-LCD-EX

Industrial Duct Type LCD Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤1.2W)
Accuracy: ±0.2℃(25℃)
Temperature range: -40℃~120℃ default -40℃~+80℃
Probe working: Temperature: -40℃~120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~99.9%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Product dimensions: 276mm*90mm*88mm

PRODUCT TYPE

RS485 TYPE

RS-WD-*-9D-EX

Industrial Probe Type Single Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)
Accuracy: ±0.2℃(25℃)
Temperature range: -40℃~120℃
Response time: ≤25s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: Sliding flange or sleeve installation, adjustable installation height
Product dimensions: 137.3mm*90mm*88mm

RS-WD-HW-*-EX

Non Contact Infrared Temperature Sensor

Power supply: 10V~30V DC(P≤0.12W)
Measurement accuracy: ±1% of the measured value or ±1℃, take the larger value (@300℃)
Temp&Hum resistance of transmitter elements:
Temperature: -20~60℃
Relative humidity: 10%RH~95%RH(no condensation)
Measurement temperature range: 0-100℃/150℃/200℃/300℃/400℃/500℃/600℃
Spectral range: 8-14μm Optical resolution: 20:1
Response time: 300ms(95%) Load capacity: ≤600Ω
Output signal: 4~20mA/RS485
Product dimensions: 111.8mm*ϕ18mm(length*diameter)

Single temperature probe

					
Flat probe Large contact area, suitable for measuring the surface temperature of objects	**Stainless steel probe** The probe is completely sealed, suitable for easuring liquid temperature	**Magnetic probe** The probe is magnetic, suitable for measuring the temperature of magnetic materials	**Ultra high temperature probe** Measuring range: 0~+300℃	**Ultra low temperature probe** Measuring range: -100℃~+200℃	Quarter pipe thread probe **Standard quarter pipe thread, suitable for measuring the internal temperature of the pipe**

Temperature and humidity probe

					
Hardcover probe Suitable for a variety of occasions,sensitive, waterproof and not dustproof	**Waterproof probe** Suitable for high dust occasions, the probe is waterproof	**Highly sensitive probe** Suitable for a variety of occasions,sensitive, waterproof and not dustproof	**High temperature probe** Suitable for occasions where the measurement temperature is higher than 80℃	**Metal probe** Suitable for occasions with high dust requirements and high sensitivity	**Quarter pipe thread probe** With quarter pipe thread

485 Networked Temperature and Humidity Monitoring System

PRODUCT TYPE
RS485 TYPE

The 485 temperature and humidity monitoring system is mainly composed of 485 temperature and humidity transmitter, environmental monitoring host and environmental monitoring cloud platform. As an environmental monitoring terminal, the 485 temperature and humidity transmitter in the system can continuously collect the temperature and humidity changes of the air for 24 hours. The environmental monitoring host will actively receive the data uploaded by all 485 temperature and humidity devices and upload the data to the environmental monitoring cloud platform. It has the functions of temperature and humidity real-time monitoring, data storage, data analysis, over-limit alarm, etc.

Simple construction deployment

Multiple alarm modes

Use standard protocols

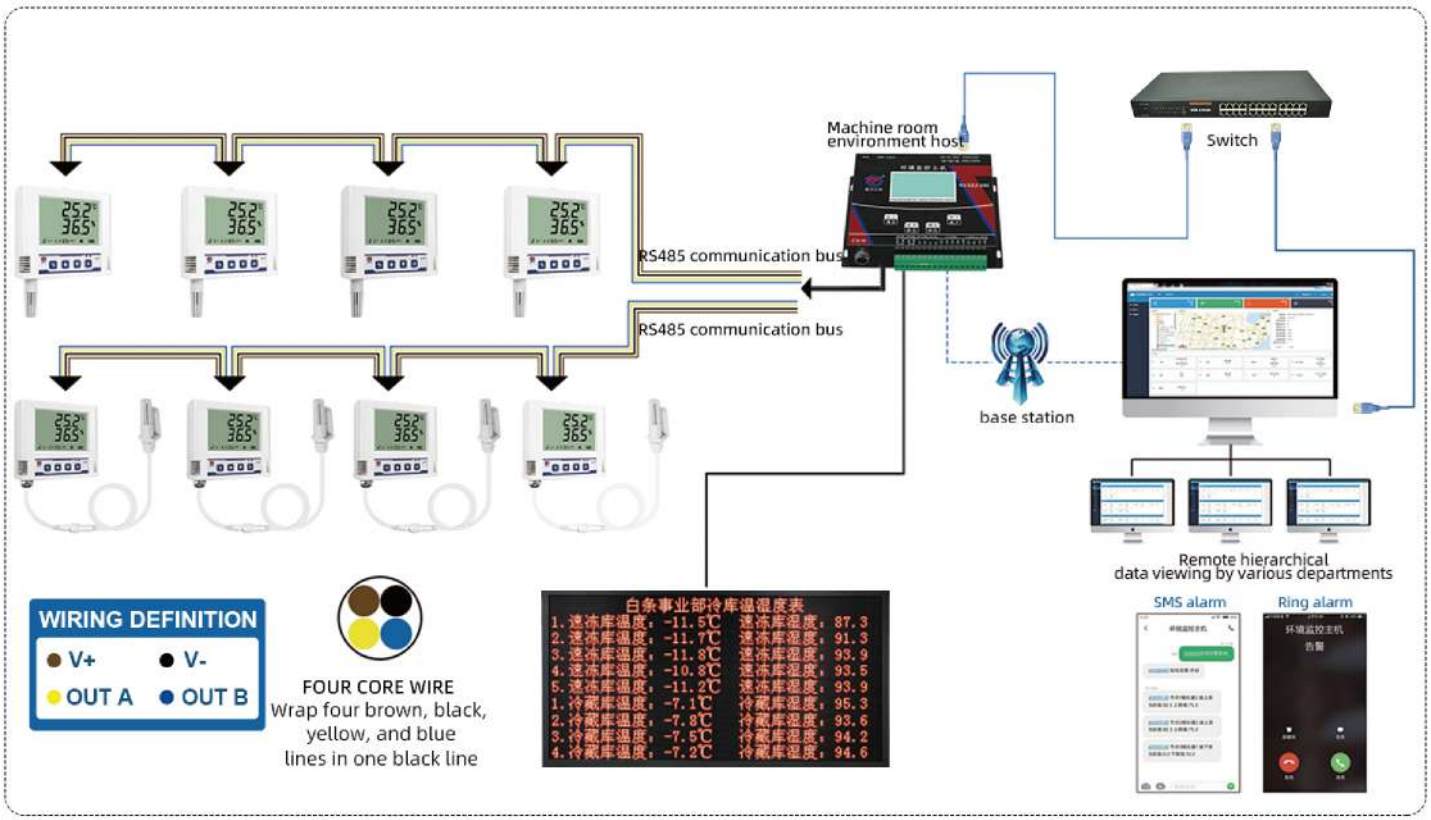
Data breakpoint retransmission

Platform remote management

High product integration

The overall goal of the RS485 temperature and humidity monitoring system solution is to fully utilize the RS485 bus wiring method to achieve multi-point and long-distance data collection and transmission within a small space area. It is suitable for occasions where monitoring points are relatively concentrated in different areas and the project budget is low.

It is widely applied in agricultural fields, greenhouses, computer rooms, buildings, hotels, industrial factories, libraries, hospitals, pharmacies, laboratories, offices, residential buildings, archives storage rooms, warehouses, grain silos, computer rooms and other places that require temperature and humidity monitoring.



PRODUCT TYPE
NETWORK TYPE

RS-WS-ETH-6-*-EX

Ethernet Type Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+80 ℃ (default,customizable)
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: Ethernet
Typical features: Built-in alarm function, allowing for the setting of upper and lower limit values and hysteresis values for alarms
Product dimensions: 122mm*102mm*36mm

RS-WS-ETH-Y-EX

Ethernet Multi-probe Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: Ethernet
Typical features: Free cloud platform, real-time viewing on multiple terminals
Product dimensions: 122mm*102mm*36mm

RS-WD-ETH-6-*-EX

Ethernet Type Ultra-high/Low Temperature Sensor

Power supply: 10~30V DC
Accuracy: ± 0.3℃(@25℃60%RH)
Probe working: Temperature: -100℃~+300℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: Ethernet
Typical features: The temperature collection frequency is 2s per cycle, and the data upload frequency can be set 1s-1000s per cycle
Product dimensions: 122mm*102mm*36mm

RS-WS-ETH(POE)-2-*-EX

Ethernet Wall-mounted Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+80℃(default,customizable)
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~95%RH(non-condensation)
Output signal: Ethernet
Typical features: The product can be optionally powered by POE, which supplies power to the device simultaneously while transmitting data
Product dimensions: 110mm*85mm*44mm

RS-WS-ETH-6*-*-ModBusTCP-EX

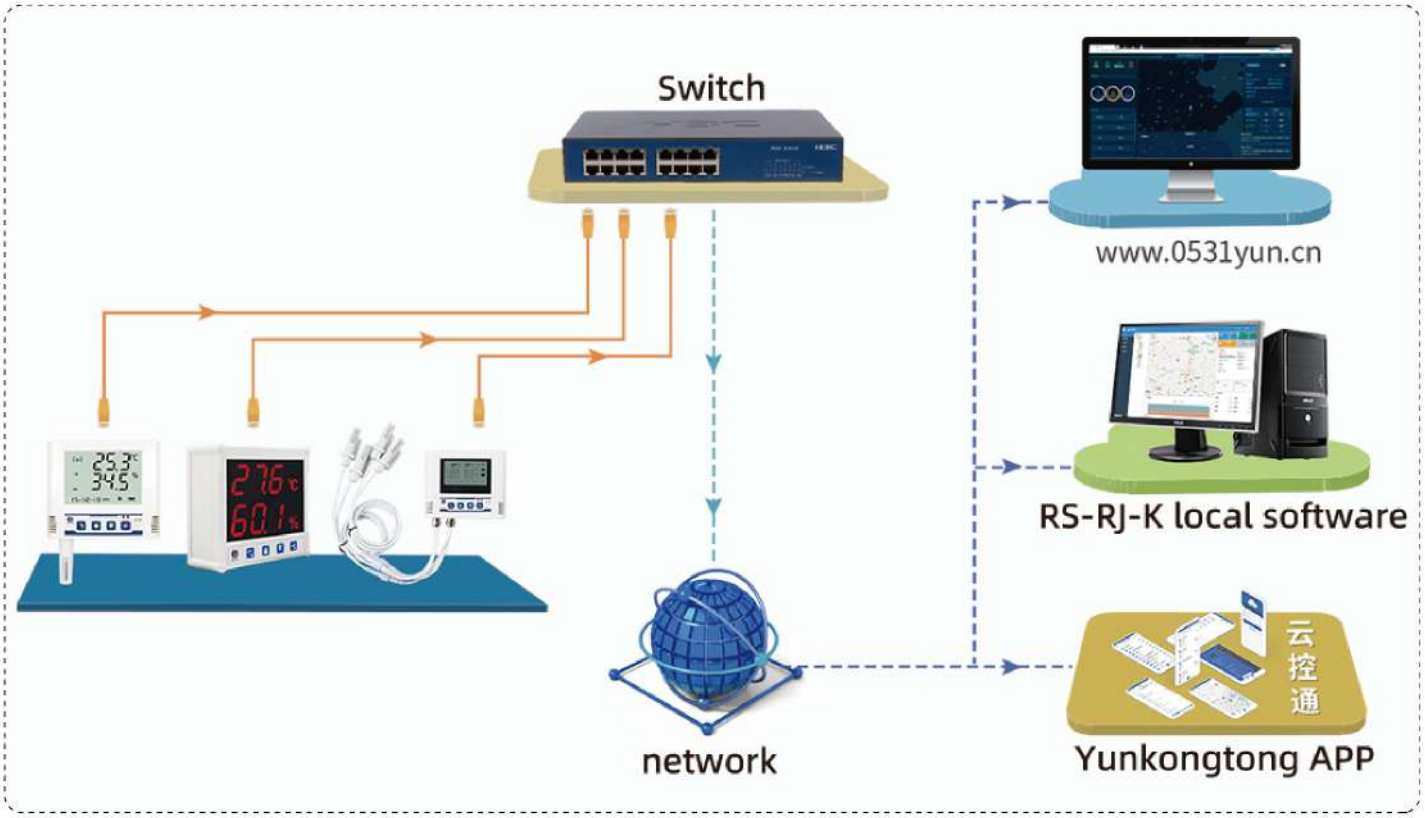
ModBusTCP Type Temperature and Humidity Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+80℃(default, other ranges can be customized)
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+70℃, 0%RH~95%RH(non-condensation)
Output signal: Ethernet
Typical features: Built-in alarm function, allowing for the setting of upper and lower limit values and hysteresis values for alarms
Product dimensions: 122mm*102mm*36mm

Ethernet Communication Network Type Temperature and Humidity Monitoring System

The Ethernet-based temperature and humidity monitoring system mainly consists of Ethernet-based temperature and humidity transmitters (Ethernet single-probe temperature and humidity transmitters or Ethernet multi-probe temperature and humidity transmitters) and a comprehensive environmental monitoring cloud platform. The data collected by its sensors is uploaded to the environmental monitoring cloud platform via Ethernet, enabling 24-hour uninterrupted online monitoring. It also supports functions such as remote data viewing, historical data curve viewing, and abnormal data alarm.

System topology diagramsystem:



PRODUCT TYPE
WIFI TYPE

RS-WS-WIFI-6*-*-EX

WIFI Temperature and Humidity Data Logger

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4 °C (25°C)
Humidity: ±2%RH(60%RH,25°C)
Probe working: Temperature: -40°C~+120 °C default -40°C~+80°C
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20°C~+60 °C, 0%RH~95%RH(non-condensation)
Output signal: WIFI
Typical features: Built-in alarm function, allowing for the setting of upper and lower limit values and hysteresis values for alarms
Product dimensions: 122mm*102mm*36mm

RS-WD-WIFI-6*-EX

WIFI-type Ultra-high/low Temperature Sensor

Power supply: 10~30V DC
Accuracy: ±0.5°C(25°C)
Probe working: Temperature: -100 °C~+300°C
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20°C~+60 °C, 0%RH~95%RH(non-condensation)
Output signal: WIFI
Typical features: recording cycle 1minute-24hours can be set, recording capacity: 65000 groups
Product dimensions: 122mm*102mm*36mm

RS-WS-WIFI-Y*-EX

Multi Channel Temperature and Humidity Data Logger

Power supply: 10~30V DC
Accuracy: Temperature: ±0.4°C(25°C)
Humidity: ±2%RH(60%RH,25°C)
Probe working: Temperature: -40°C~+120°C default -40°C~+80°C
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20°C~+60°C, 0%RH~95%RH(non-condensation)
Output signal: WIFI
Typical features: Built-in alarm function, allowing for the setting of upper and lower limit values and hysteresis values for alarms
Product dimensions: 122mm*102mm*36mm

RS-WS-WIFI-C3-EX

Low-power WIFI Temperature and Humidity Sensor

Power supply: Powered by DC5V or built-in battery
Temperature accuracy: Default accuracy: ±0.3°C(25°C)
Normal accuracy: ±0.2°C(25°C)
High precision: ±0.1°C(25°C)
Humidity accuracy: Default accuracy: ±3%RH(60%RH,25°C)
Normal accuracy: ±2%RH(60%RH,25°C)
High accuracy: ±1.5%RH(60%RH,25°C)
Working duration: Once fully charged, the equipment can operate continuously for 4 months. With an external power supply, it can work continuously for a long time
Typical features: Equipped with AirKiss WIFI networking technology, it enables easy one-click network connection
Product dimensions: 20mm*113mm*33mm

RS-WS-WIFI-C4-EX

Small WIFI Temperature Data Logger

Power supply: DC 5V power supply or built-in battery power supply
Communication interface: Standard WIFI wireless (2.4GHz)
Accuracy: Temperature: ±0.5℃(25℃)
Humidity: ±3%RH(60%RH,25℃)
Range: Temperature: Probe internal type: -20℃~+60℃
Probe external type: -40℃~+80C
Humidity: 0-100%RH
Working duration: Once fully charged, the equipment can operate continuously for 14 days. With an external power supply, it can work continuously for a long time
Typical features: It adopts AirKiss WIFI networking technology, enabling one-click network configuration and easy Internet connection
Product dimensions: 87mm*53mm*27mm

RS-WS-WIFI5-C3-Y*-EX

WIFI Low-power Multi-probe Temperature and Humidity Recorder

Power supply: DC 5V power supply or built-in battery power supply
Accuracy: Temperature: Normal accuracy: ±0.5℃(25℃)
High accuracy: ±0.2℃(25℃)
Humidity: Normal accuracy: ±3%RH(60%RH,25℃)
High precision: ±2%RH(60%6RH,25℃)
Probe working: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH non-condensation
Number of probes: 2~4 (default 4)
Product dimensions: 113mm*120mm*33mm

PRODUCT TYPE
WIFI TYPE

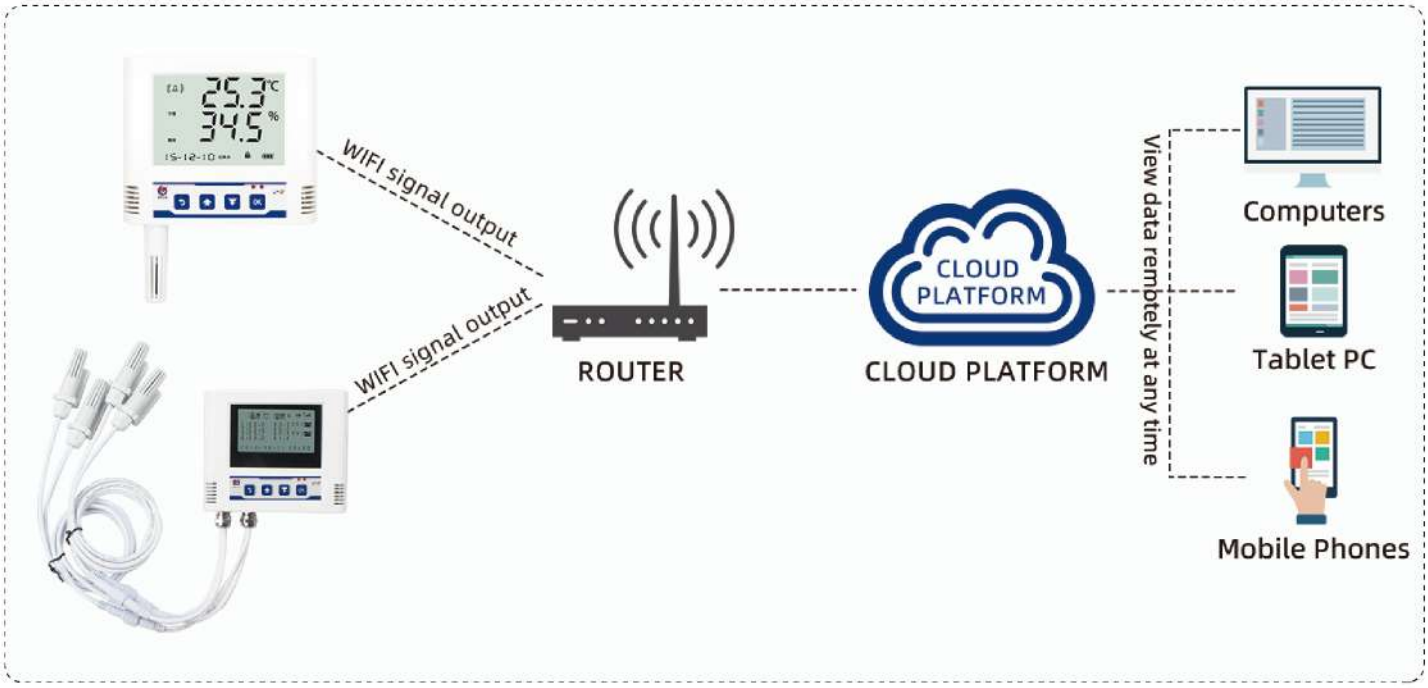
WIFI Communication Network Type Temperature and Humidity Monitoring System

The WIFI temperature and humidity monitoring system is a complete solution that uses temperature and humidity sensors as monitoring terminals and WIFI as the signal transmission medium to upload the collected temperature and humidity data to the cloud platform, and then allows real-time viewing of the data through mobile phones and computers.

This system consists of WIFI-type temperature and humidity transmitters (WIFI-type single-probe temperature and humidity transmitters or WIFI-type multi-probe temperature and humidity transmitters) and an integrated environmental monitoring cloud platform. It can achieve 24-hour uninterrupted online monitoring and support functions such as remote data viewing, historical data curve viewing, and abnormal data alarm.

- WIFI transmission
- No wiring required
- Remote monitoring
- Over-limit alarm
- Free platform

System topology diagramsystem:



RS-WS-LORA-*-6C-*-EX

LORA Temperature and Humidity Recorder

Power supply: 5V external power supply or built-in battery
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+80℃
Humidity: 0~100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~80%RH
Output signal: LORA spread spectrum communication
Configuration: NFC configuration, providing neutral NFC configuration software
Typical features: The transmission distance can pass through 3~4 concrete walls indoors, and the outdoor viewing distance is greater than 3000 meters
Product dimensions: 120mm*113mm*33mm

RS-WS-LORA-2-*-EX

LORA Temperature and Humidity Collector

Power supply: Built-in battery (DC3.6V lithium-ion battery)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+120℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~80%RH
Output signal: LORA spread spectrum communication
Typical features: The housing adopts an IP65 protection grade, which can meet the requirements for outdoor use
Product dimensions: 110mm*85mm*44mm

RS-WS-LORA-DC-C4-EX

LORA Temperature and Humidity Data Logger

Power supply: Powered by DC5V or built-in battery
Accuracy: Temperature: ±0.3℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: Probe built-in type: -20℃~+60 ℃
Probe extension type: -40℃~+80℃
Humidity: 0%RH~100%RH
Output signal: LORA spread spectrum communication
Recording interval: 1 minute ~18 hours can be set, the minimum unit is minutes
Measurement update time: Device wake-up time is 2s, low power mode is 5s
Typical features: LORA spread spectrum communication is used, the communication distance is up to 3000 meters, and 3-4 walls can be penetrated indoors
Product dimensions: 73mm*53mm*26.7mm

RS-WD-LORA-2-EX

LORA Temperature Collector

Power supply: Built-in battery (DC3.6V lithium-ion battery)
Temperature accuracy: ±0.4℃(25℃)
Probe working: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~80%RH
Output signal: LORA spread spectrum communication
Temperature display resolution: 0.1℃
Temperature refresh time: 1s
Typical features: The housing adopts an IP65 protection grade, which can meet the requirements for outdoor use
Product dimensions: 110mm*85mm*44mm

PRODUCT TYPE
LORA TYPE

RS-WD-LORA-*-6C-*-EX

LORA Single Temperature Sensor Recorder

Power supply: 5V external power supply or built-in battery
Accuracy: ±0.5℃(5%RH~95%RH,25℃)
Temperature measurement range:
Ultra-low temperature probe (5L): -100~+50℃
Ultra high temperature probe (5H): 0~300℃
Ultra-wide cryogenic probe (5WL): -200~+200℃
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~80%RH
Output signal: LORA spread spectrum communication
Alarm function: Built-in buzzer
Product dimensions: 120mm*113mm*33mm

RS-WD-LORA-*-C4-EX

LORA Ultra-high/Low Temperature Recorder

Power supply: Powered by DC5V or built-in battery
Configuration method: NFC configuration
Temperature measurement range:
Ultra-low temperature probe: -100~+200℃
Ultra-high temperature probe: 0~300℃
Ultra wide low temperature probe: -200~+200℃
Measurement accuracy: ±0.5℃(@25℃60%RH)
Probe wire length: 3m(up to 50m)
Product dimensions: 73mm*53mm*26.7mm

RS-WS-LORA-DC-1D-EX

LORA Large-screen Temperature and Humidity Collector

Power supply: Powered by lithium-ion battery
Accuracy: Temperature: ±0.4 ℃ (25℃)
Humidity: ±2%RH(60%RH,25℃)
Probe working: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60 ℃, 0%RH~95%RH(non-condensation)
Output signal: LORA spread spectrum communication
Antenna: Built-in antenna
Installation method: Wall-mounted
Battery life: 4 years
Product dimensions: 151.5mm*138.4mm*56.6mm

LORA Wireless Network Temperature and Humidity Monitoring System

The LORA wireless temperature and humidity monitoring system consists of a LORA temperature and humidity transmitter recorder, a wireless environmental monitoring host, and a comprehensive environmental monitoring cloud platform. The temperature and humidity data collected by the sensors are transmitted to the wireless environmental monitoring host through LORA wireless communication technology. The monitoring host then uplools the data to the environmental monitoring cloud platform via Ethernet, achieving real-time monitoring of environmental temperature and humidity changes. Timely measures are taken for abnormal environmental conditions to ensure the safety and stability of the environment.

In response to the characteristics of LORA wireless communication, Jianda Renke has launched a LORA wireless temperature and humidity monitoring system solution. This system employs ultra-long-distance, low-power LORA wireless transmission technology based on spread spectrum communication, intelligent sensor network technology, anti-interference technology, and automatic control technology. Upgrade and transform the traditional temperature and humidity monitoring, and build a fully intelligent and efficient monitoring and control management system. Relying on various temperature and humidity sensor nodes and wireless communication networks deployed on-site, achieve intelligent perception, intelligent alarm, and intelligent analysis of the on-site environment, providing precise monitoring, visual management, and intelligent decision-making.

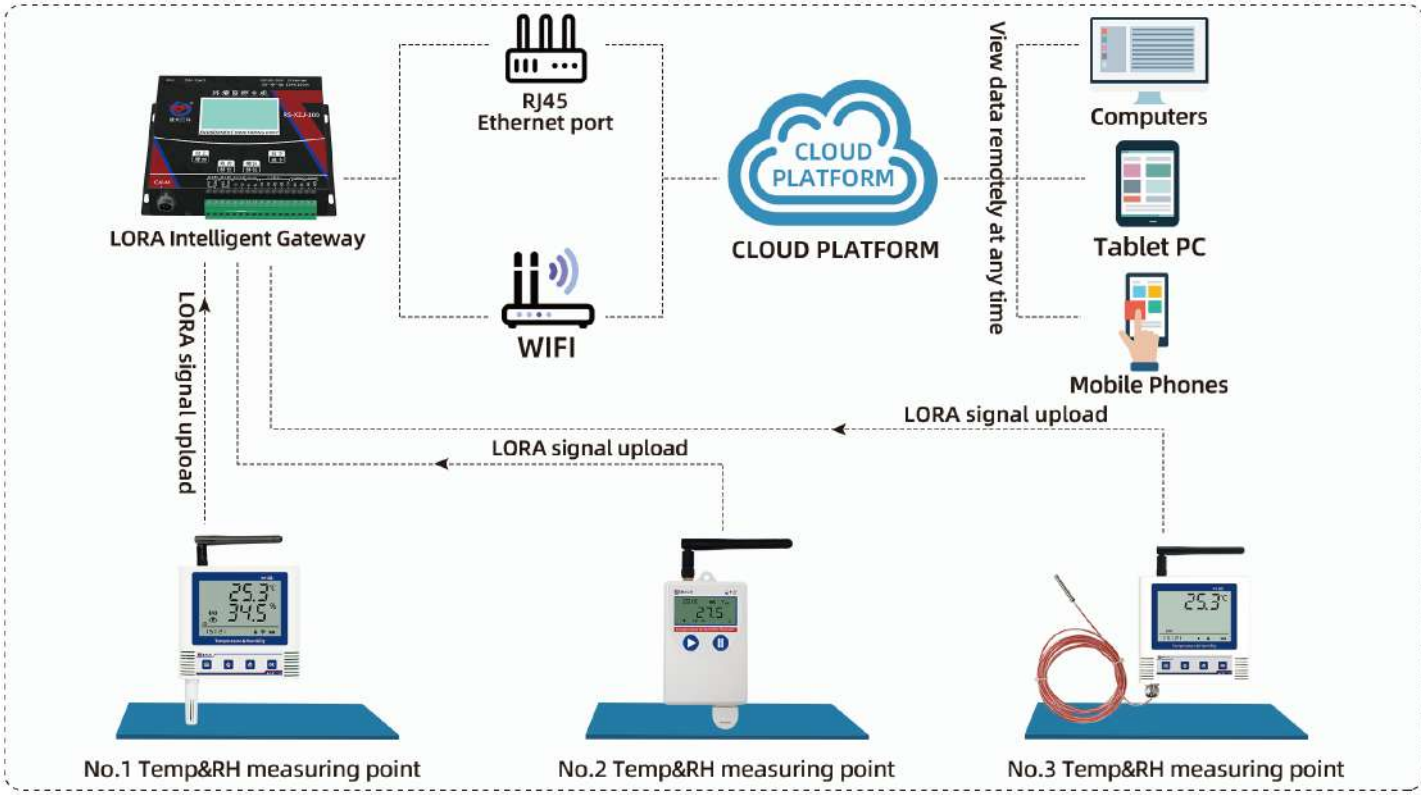
LORA wireless transmission

Remote viewing control

3km transmission

Free cloud platform

System topology diagramsystem:



PRODUCT TYPE
THE SOLUTION

Solution for Online Temperature and Humidity Monitoring System in Cable Trenches

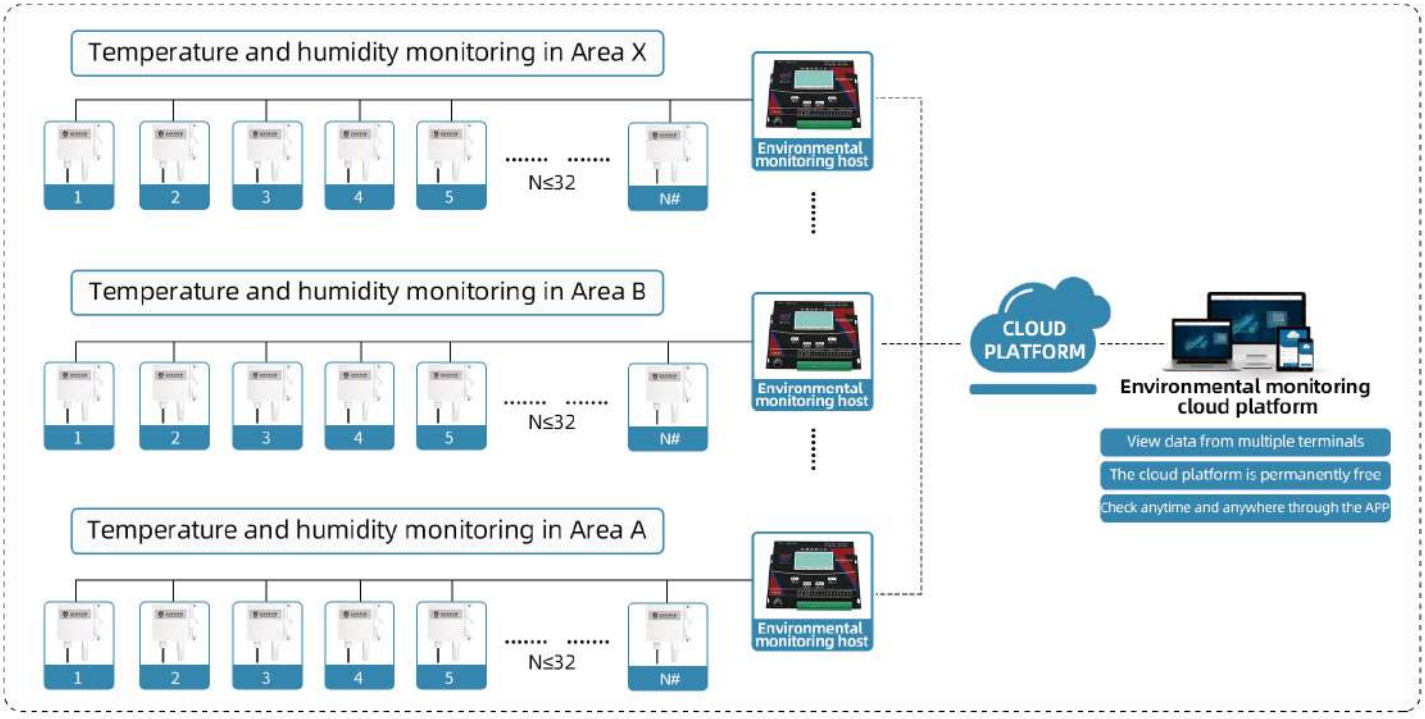
Temperature and humidity, as crucial factors affecting the operation of underground cables, can lead to power outages at best and major fire accidents at worst. Therefore, in the process of underground cable construction, the installation of temperature and humidity monitoring equipment is indispensable.

For this reason, our company has summarized the experience of previous developments, combined with the latest automatic control and software and hardware technologies, and built a modern management system based on informatization that is seamless, precise and visualized, in order to achieve the goal of centralized and distributed monitoring and intelligent management of temperature and humidity in cable trenches, and ensure the high stability, high reliability and high security of the system. Therefore, we specially launch the online monitoring system for temperature and humidity in cable trenches.

Simple deployment | **Remote monitoring** | **Intelligent alarm** | **Free platform**

This system consists of wall-mounted temperature and humidity transmitters, an environmental monitoring host, and an environmental monitoring cloud platform. By configuring corresponding sensors in the cable trench and connecting them to the environmental monitoring host in RS485 wiring, the collected environmental data is uploaded to the environmental monitoring cloud platform via Ethernet. Due to the fact that the temperature and humidity of the underground environment are affected by multiple factors, in order to ensure the accuracy of data measurement, it is recommended to install a temperature and humidity transmitter every 10 meters for multi-segment measurement to promptly detect and solve problems. Realize the collection and analysis of environmental data such as cable temperature, ambient temperature and humidity in underground cable trenches, meeting users' demands for remote and real-time understanding of the on-site environmental temperature and humidity information in cable trenches.

System topology diagramsystem:



Medicine/Cold Chain/Warehouse Monitoring

USB TEMPERATURE AND HUMIDITY RECORDER

It is mainly used to monitor and record the temperature and humidity data of food, medicine, chemical supplies and other products during storage and transportation. The built-in high-precision temperature and humidity sensor can carry out accurate temperature and humidty measurement, which is widely used in storage and logistics cold chains. Links, such as refigerated containers, refrigerated trucks, refrigerated packages, cold storage, laboratories, etc

COS-03 Temperature and Humidity Recorder

- Built-in storage, up to 2.08 million records can be stored, recording once every ten minutes can last for a year.
- The recording interval of 5s~18h can be set
- It is equipped with a large-capacity rechargeable lithium battery
- Single temperature probe three options:
  Ultra low temperature probe: -100~+200℃
  Ultra high temperature probe: 0~300℃
  Ultra wide low temperature probe: -200~+200℃
- USB data export, capable of saving files in PDF/Excel/TXT formats
- Product dimensions: 120mm*113mm*33mm

Swiss imported chips
More accurate monitoring
Stable and durable

Large-capacity lithium battery
Long battery life
Fast charging

Free accompanying software
More complete functions
Customizable settings

COS-04 Temperature and Humidity Recorder

Portable and compact design
Plug and play
USB driverless

- Built-in storage, up to 2.08 million data can be stored, recording once every ten minutes can last for a year.
- The recording interval of 5s~18h can be set
- It is equipped with a large-capacity rechargeable lithium battery
- Single temperature probe three options:
  Ultra-low temperature probe: -100~+200℃
  Ultra-high temperature probe: 0~300℃
  Ultra-wide low temperature probe: -200~+200℃
- USB data export, capable of saving files in PDF/Excel/TXT formats
- Dimensions: 73mm*53mm*26.7mm

SMART AGRICULTURE MONITORING SYSTEM

AGRICULTURAL WEATHER STATION

GREENHOUSE MONITORING SYSTEM

SOIL MOISTURE MONITORING

LORA WIRELESS DATA ACQUISITION

IRRIGATION SYSTEM

AGRICULTURE

Agricultural Monitoring Equipment

Smart Agriculture Monitoring System

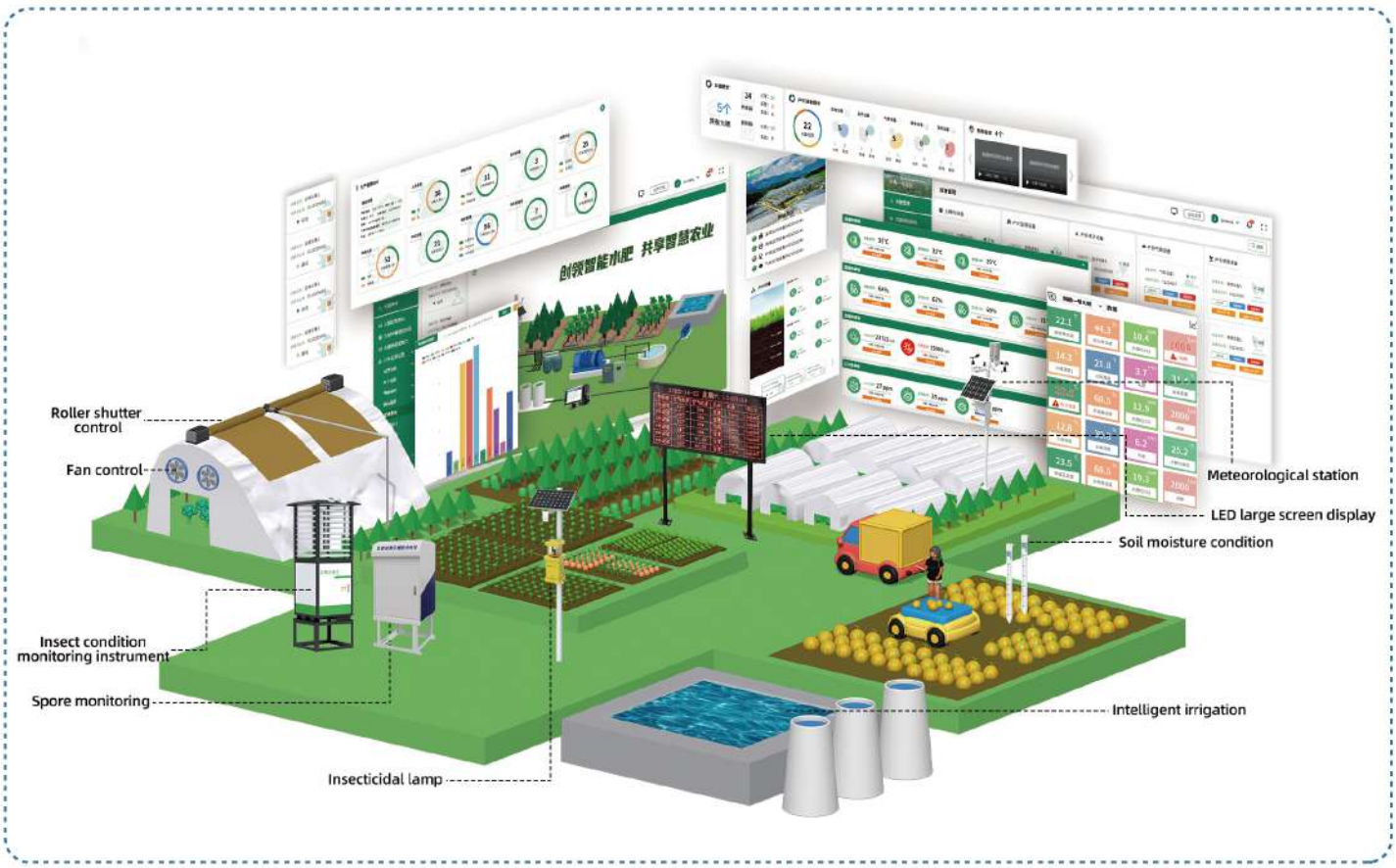
The Jianda Renke Smart Agriculture Monitoring System (soil moisture, climate and smart irrigation) is composed of terminal devices (pipe-type soil moisture monitoring instrument and weather station). This system can systematically monitor and manage the soil moisture conditions (soil temperature, soil moisture) and climate conditions (air temperature, humidity, rainfall, illuminance, carbon dioxide, wind speed and direction, and other environmental parameters) of agricultural fields. The data is uploaded to the platform through the network port, allowing managers to remotely view the data in real time, saving manpower, and making corresponding adjustments based on the data feedback. To ensure the good growth of crops and support agricultural production.

Meteorological monitoring

Soil moisture monitoring

Intelligent irrigation

Smart agriculture monitoring system:



PRODUCT TYPE
AGRICULTURAL WEATHER STATION

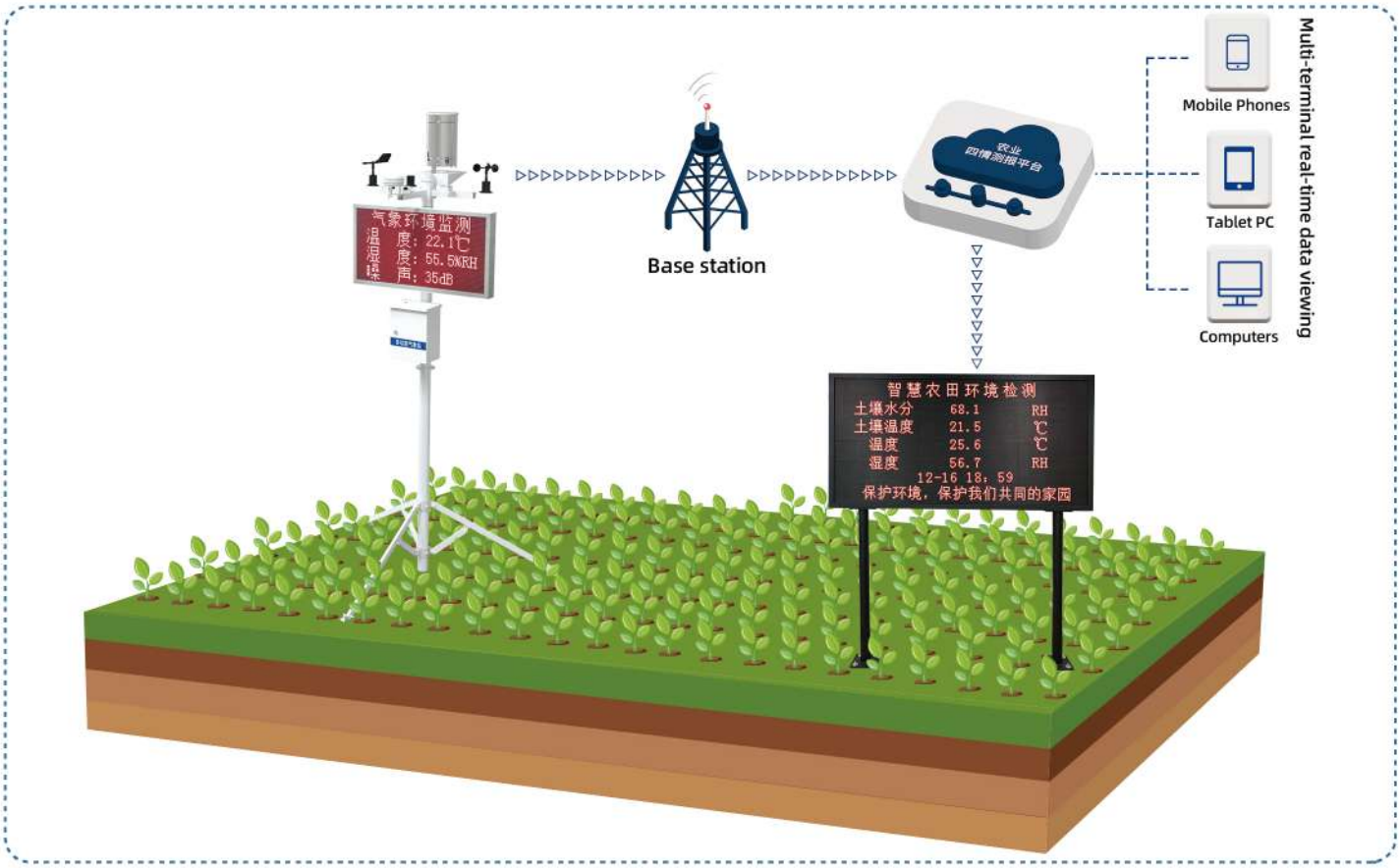
Agricultural Weather Station

The agricultural weather station is a comprehensive agricultural meteorological parameter monitoring device that can conduct real-time online monitoring of elements such as temperature and humidity, light, carbon dioxide, atmospheric pressure, rainfall, sunshine duration, photosynthetically active radiation, soil temperature and humidity, wind speed and wind direction within small agricultural areas. Through the monitoring of these agricultural meteorological environmental elements, the level of agricultural meteorological disaster monitoring and the service level of meteorological modernization for agriculture can be further improved, providing a strong meteorological guarantee for achieving agricultural modernization first.

RS-QXZ*-M*-*-EX

- Wind speed/wind direction
- Carbon dioxide
- Noise
- PM2.5/PM10
- Rainfall
- Negative oxygen ion
- Total radiation
- Ultraviolet rays
- Illuminance
- Snowfall detection
- Atmospheric pressure
- Air temperature and humidity
- Soil temperature and humidity
- Soil EC
- Soil PH
- TVOC
- Oxygen
- Nitrogen dioxide
- Sulfur dioxide
- Hydrogen sulfide
- Carbon monoxide
- Ammonia gas
- Ozone
- ..... More

Topological diagram of the agricultural field monitoring system:



GREENHOUSE MONITORING SYSTEM

Greenhouse Monitoring System

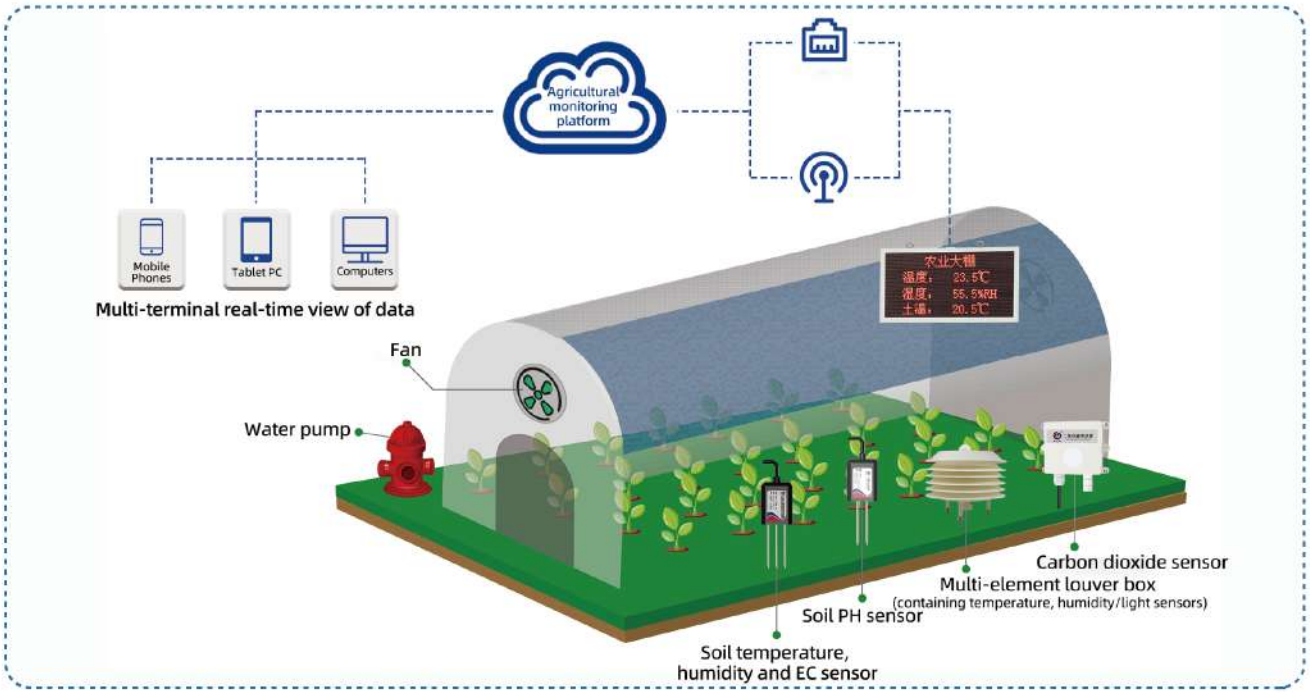
The Jianda Renke greenhouse environment monitoring System upgrades and transforms traditional greenhouses through intelligent hardware, Internet of Things, big data and other technologies, and builds a fully intelligent and efficient monitoring and control management system. Relying on various sensor nodes deployed at agricultural production sites (such as environmental temperature and humidity, light intensity, soil temperature and moisture, soil PH, soil electrical conductivity, carbon dioxide concentration, etc.), the collected data is uploaded to the agricultural four-situation monitoring platform through wireless communication networks, achieving intelligent perception, intelligent alarm and intelligent analysis of the agricultural production environment. And based on the feedback of the above information, automatic control of the agricultural park is carried out, including automatic irrigation, automatic heating/cooling, automatic ventilation, and automatic supplementary lighting.

RS-FQXZ-M-*-EX

Agricultural Greenhouse Weather Station

- With 1 ModBuS-RTU master station interface can be connected to our 485 sensor: Soil temperature and moisture, soil EC, PH, light, CO_2 and other sensors
- Optional 2-channel relay output is available for remote manual control
- The unique 8-bit address of the device is easy to manage and identify, and can be matched with a variety of free software platforms provided by our company
- It can be connected to 1 outdoor LED monochrome display, dot matrix 96*48, without LED display, it can be equipped with solar panels and batteries for field measurement to solve power supply problems

Topology diagram of the greenhouse monitoring system:



PRODUCT TYPE
GREENHOUSE MONITORING SYSTEM

Solar Radiation Shield

The integrated louver box can be widely used in environmental detection, set noise acquisition, CO_2, temperature and humidity, atmospheric pressure, light in one, installed in the louver box, the equipment uses the standard ModBuS-RTU communication protocol, RS485 signal output, communication distance up to 2000 meters (measured).The sensor is widely used in the need to measure environmental temperature and humidity, noise, air quality, atmospheric pressure, light and other occasions, safe and reliable, beautiful appearance, easy to install, durable.

This product is small in size, light in weight, using high quality anti ultraviolet material, long service life, using high sensitivity probe, stable signal, high precision.The key components adopt imported devices, which are stable and reliable, with wide measurement range, good linearity, good waterproof performance, easy to use, easy to install, and long transmission distance.

RS-BYH-M-EX

- Noise acquisition, accurate measurement, range up to 30dB~130dB
- CO_2 measurement range: 0-5000ppm, resolution 1ppm
- Measuring the temperature and humidity of the environment, the measurement unit is imported from Switzerland, the measurement is accurate, the range is -40~120℃
- It has a wide range of 0-120 kpa air pressure measurement and can be applied at various altitudes
- The light acquisition module uses a highly sensitive photosensitive probe, and the light intensity range is 0~ 200 000 Lux
- Using a dedicated 485 circuit, stable communication, 10~30V wide voltage range power supply

RS-WS-*-YM-1-EX

Leaf Wetness Sensor

Power supply: 5~30V DC
Working temperature: -40℃~+60℃
Output signal: RS485(ModBus Protocol)
Protection grade: IP67
Temperature parameters: Range: -40~80℃
Resolution: 0.1℃
Accuracy: ±0.5℃(@25℃)
Humidity parameters: Range: 0-100%RH
Resolution: 0.1%RH
Accuracy: ±3%(@0-50%, 25℃)
Product dimensions: 138.5mm*65mm*15mm

Light&CO2 Temperature and Humidity Sensor

To meet the requirements of detecting CO_2 concentration, illuminance and temperature and humidity in agricultural greenhouses, flower cultivation and other occasions, our company has independently developed this light, CO_2, temperature and humidity transmitter. This transmitter uses imported NDIR sensors for CO_2 concentration measurement, which responds rapidly and sensitively, avoiding the lifespan and long-term drift issues of traditional electrochemical sensors. High-precision photosensitive transmitters are used to measure illuminance, and the output numerical measurement unit is Lux. The temperature and humidity are measured by the original imported temperature and humidity measurement unit from Switzerland, featuring high measurement accuracy and strong anti-interference ability.

- High-precision illumination detection measurement range 0-65535Lux, 0-200000 Lux optional
- The CO_2 concentration is measured by using imported NDIR sensors, which feature high accuracy, low drift and long service life
- The temperature and humidity measurement unit imported from Switzerland is used to measure the temperature and humidity, which has high measurement accuracy and strong anti-interference ability
- Wide measurement range, default 0-5000ppm(default), built-in temperature compensation, less affected by temperature
- Output signal: RS485
- Free local monitoring software platform and environmental monitoring cloud platform available (www.0531yun.com)
- The product adopts a wall-mounted waterproof case, which is easy to install and has a high protection level
- Power supply: 10~30V DC
- Product dimensions: 110mm*85mm*44mm

RS-GZCO2WS-*-2-*-EX

RS-CO2*-*-2-EX

CO2 Sensor

Power supply: 10~30V DC
CO_2 range: 0~5000ppm(default) Optional: 0~2000ppm, 0-10000ppm
Work environment: -10~+50℃, 0-95%RH(no condensation)
The preheating time: 2 min (available), 10 min (maximum accuracy)
Response time: Generally less than 90s when there is a 90% step change
Output signal: 4-20mA/0-5V/0-10V/RS485(ModBuS-RTU)/LORA
Typical features: High protection level, suitable for indoor and outdoor carbon dioxide concentration measurement
Product dimensions: 110mm*85mm*44mm

RS-CO2*-N01-2D-EX

Industrial Wall-mounted Carbon Dioxide Sensor

Power supply: 10~30V DC
Range: 0-5000ppm(default)0-10000ppm(optional)
Stability: <5%F·S or<10% of the reading per year
Work environment: -10~+50℃ 0-95%RH(non-condensation)
The preheating time: 2 min (available) , 10 min (maximum precision)
Output signal: RS485/0-5V/0-10V/4-20mA
Typical case: The adoption of a new infrared verification technology for CO_2 concentration measurement is rapid and sensitive in response
Product dimensions: 147mm*88mm*41mm

PRODUCT TYPE
SOIL MOISTURE MONITORING EQUIPMENT

Multi-depth Soil Moisture Sensor

The soil moisture monitoring instrument is a sensor based on the principle of dielectric constant.This detector can detect the minimum of 3 layers of soil temperature and humidity state, the maximum of 5 layers of soil temperature and humidity state, with inclination Angle equipment can monitor the inclination Angle of the soil to determine the state of soil and equipment, can quickly and comprehensively understand the soil moisture information, scientific development of drought resistance scheduling scheme.To provide decision support for the correct command of drought relief, to minimize disaster losses.

Universal | Optional conductivity type

- Power supply: Battery/power supply/solar power supply
- Range: Soil temperature: 15℃~35℃, ±0.5℃ (25℃)
  Soil humidity: 0~100%, ±5% (@ 50%, 25℃)
  Soil EC: ±3%FS in the range of 0-20000μS/cm and 0-10000μS/cm;
  ±5%FS in the range of 10000-20000μS/cm.
  Inclination: -90°~90°, X and Y axes: static accuracy ±0.1°, dynamic accuracy ±0.5°,
  Z axis: static accuracy ±0.5°, dynamic integration error exists
- Output signal: RS485(ModBus Protocol)
  Protection grade: IP68 for the part below ground level
- Typical features: Not affected by salt ions in the soil, chemical fertilizers, pesticides, irrigation, etc
- Product dimensions: Height: 850mm
  Diameter: ϕ59mm

TDR was used for measurement
More accurate monitoring
Stable and durable

High protection level
Small zero drift
Good sealing performance

Multi-layer soil testing
Average measurement
Fast response speed

RS-*W*S-N01-TR-6-EX

RS-SHF-N01-TR-1-EX

Soil Heat Flux Plate

Power supply (default): DC5~30V
Maximum power consumption: 0.3W(powered by 24V DC)
Working temperature: -40℃~+60℃
Accuracy: +5%(@±200W/m²)
Range: -2000~2000W/m²
Protection grade: IP68
Sealing material: Black flame-retardant epoxy resin
Default cable length: 2m. Cable length can be customized as required
Output signal: RS485(ModBus Protocol)

RS-PH-*-TR-1-EX

Soil PH Sensor

Power supply (default): DC 5-30V
Measuring range: 3-9 pH
Working temperature: -20℃~60℃
Response time: ≤10s
Resolution: 0.1 Ω
Long-term stability: ≤5%/year
Settling time: ≤5min
Protection grade: IP68
Output signal: 4~20mA/0~5V/0~10V/RS485
Probe material: Corrosion-resistant special electrode
Sealing material: Black flame-retardant epoxy resin
Product dimensions: 45*15*123mm

RS-ECTH-*-TR-1-EX

Soil Temperature/Moisture/Conductivity Sensor

Power supply: 4.5~30V DC
Working temperature: -40℃~+60℃
Measurement range accuracy:
Moisture content: 0-100%, 2% within 0-50%, 3% within 50-100%
Temperature: -40~80℃ ±0.5℃(25℃)
Conductivity: ±3% in the range of 0-20000μS/cm and 0-10000μS/cm;
±5% in the range of 10000-20000μS/cm.
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus Protocol)
Product dimensions: 123mm*45mm*15mm

RS-ECTHPH-N01-TR-1-EX

4 in 1 Soil Nutrient Sensor

Power supply: 4.5~30V DC
Working temperature: -20℃~+60℃
Measurement range accuracy:
Moisture content: 0-100%, 2% within 0-50%, 3% within 50-100%
Temperature: -40~80℃ ±0.5℃(25℃)
PH: Range: 3~9PH
Conductivity: 0- 20,000 μS/cm, 0- 10,000 μS/cm: ±3%;
10,000-20,000 μS/cm: ±5%(Brown soil, 60%RH,25℃)
Output signal: RS485(ModBus Protocol)
Product dimensions: 123mm*45mm*15mm

RS-TRZL-*-1-*-EX

Soil Tensiometer

Power supply: 10~24V wide DC power supply
Power consumption: 0.8W(DC24V power supply)
Transmitter element temperature: 0~+80℃
Measurement range: -100kPa-0
Measurement accuracy: ±0.5 kpa (at 25℃)
Resolution: 0.1kPa
Shell material: Transparent PVC plastic pipe
Protection grade: IP67
Output signal: RS485(ModBus Protocol)
Response time: 200ms

RS-SWP-N01-TR-1-EX

Soil Water Potential Sensor

Power supply (default): 5-30V
Maximum power consumption: 0.25W (DC12V)
Working temperature: -40℃~+60℃
Measuring range: -5~-100kPa
Resolution: 0.1kPa
Accuracy: ±(10% of current reading +2kPa)
Protection grade: IP68
Default cable length: 2m, cable length can be customized upon request
Output signal: RS485 (ModBus protocol)
Product dimensions: 45*15*96mm

PRODUCT TYPE
SOIL MOISTURE MONITORING EQUIPMENT

Multi Layer Soil Sensor

RS-*-N01-TR-5-EX

Multi layer soil sensor is a sensor developed by our company that can measure multi layer soil parameters.This detector can dynamically observe the electrical conductivity, moisture content and temperature conditions of soil at different levels. It can detect the electrical conductivity, temperature and humidity conditions of soil at a minimum of 3 layers and at a maximum of 5 layers, enabling a quick and comprehensive understanding of soil parameter information. The product adopts the standard ModBuS-RTU485 communication, with a maximum communication distance of 2000 meters and supports secondary development.
Product shell is made of stainless steel, black flame retardant epoxy resin completely sealed, acid and alkali corrosion resistance, can be buried in the soil for long-term dynamic detection.
The product is suitable for soil moisture monitoring, scientific experiment, water-saving irrigation, greenhouse, flowers and vegetables, grassland and pasture, soil rapid measurement, plant culture, sewage treatment, precision agriculture and other occasions.

- Power supply: DC 5~30V Output signal: RS485(ModBus protocol)
- Temperature range: -40~80°C Temperature accuracy: ±0.5°C(25°C)
- Conductivity range & accuracy: 0-20,000 μS/cm 0-10,000 μS/cm: ± 3%
  10,000-20,000 μS/cm: ± 5%
- Moisture range & accuracy: 0-100% 0-50% within 2%,
  50-100% within 3%(brown soil, 60%,25°C)
- Product dimensions: Main body dimensions: 502mm*44.5mm*16mm
  Probe distance: 100mm
- It can conduct dynamic observations of soil electrical conductivity, moisture content and temperature conditions at different levels
- Completely sealed, resistant to acid and alkali corrosion, it can be buried in the soil or directly immersed in water for long-term dynamic detection
- The electrodes are made of specially treated alloy materials, which can withstand strong external impacts and are not easily damaged
- High precision, fast response, good interchangeability, and the probe insertion design ensure accurate measurement and reliable performance

Soil Analyzer

RS-TRREC-N01-1-EX

The soil analyzer features a large-sized full-color LCD screen that can display readings in real time. It is equipped with a detection circuit designed with digital chips from international leading manufacturers, offering high sensitivity and excellent repeatability. Moreover, it integrates storage, recording, and analysis functions. It can be flexibly connected to our company's soil conductivity and soil temperature and humidity devices, as well as our company's soil nitrogen, phosphorus, and potassium storage devices. Realize the display and storage of multiple soil parameters.
This recorder is widely used in dryland water-saving irrigation, precision agriculture, forestry, geological exploration, plant cultivation, water conservancy, environmental protection and other fields.

- The 2.8-inch LCD screen can directly display the measurement results, which is simple and convenient, low-cost and has a fast data update speed
- It can store 1 million data.One-click data export, convenient and fast
- Power supply: battery power supply (5000mAh lithium battery) Charging time: ≤8h
- Working environment: Temperature: -20°C~60°C Humidity: <95%RH no condensation
- Connected devices: 1-4 ModBuS devices combination
  Product dimensions: 174*88.5*35mm Weight: 284g

USB Soil Parameter Detector

RS-WS-USB-TR-1-EX

This product features a USB interface output and can be directly connected to a mobile phone. The mobile phone supplies power to the soil equipment. When paired with the corresponding mobile phone APP, real-time data of various soil elements can be viewed. Soil elements can be adaptively displayed on the APP. The operation is simple and the use is convenient. Supports data export, allowing you to export and save the current real-time data to your local phone.
This sensor is suitable for water-saving irrigation, greenhouse sheds, flower and vegetable cultivation, grassland pastures, soil rapid testing, plant cultivation, sewage treatment, precision agriculture and other occasions.

- Can choose the existing three-and five-pin soil equipment use, flexible elements
- The electrode is made of special alloy material, which can withstand strong external force impact and is not easy to damage
- Completely sealed, resistant to acid and alkali corrosion, can be buried in soil or directly into the water for long-term dynamic detection
- The measurement threshold is low, the steps are few, the measurement is fast, no reagent is needed, and the number of detection is unlimited

Soil Moisture Meter

RS-*-SC-2-EX

The soil moisture meter is a device developed by our company for the rapid detection of soil temperature, moisture content, EC conductivity, PH and other parameters. The rapid testing instrument adopts a hand-held design, which is convenient for users to carry. The probe is a needle-shaped probe made of stainless steel, which has good corrosion resistance and toughness.
This rapid testing instrument is widely used in fields such as farmland production, soil research, greenhouse planting, orchards and nurseries, horticultural planting, tree planting, and potted plant planting.

- It adopts a hand-held design, with a small size and light weight, making it convenient for users to carry
- Real-time monitoring of soil composition can detect various organic components in the soil
- Low threshold, few steps, fast measurement, no need for reagents, and no limit on the number of tests
- It is battery-powered and features a liquid crystal digital display. The interface parameters and functions are clearly shown, and the battery is replaceable
- The probe insertion design ensures accurate measurement and reliable performance

WIRELESS IRRIGATION MONITORING SYSTEM

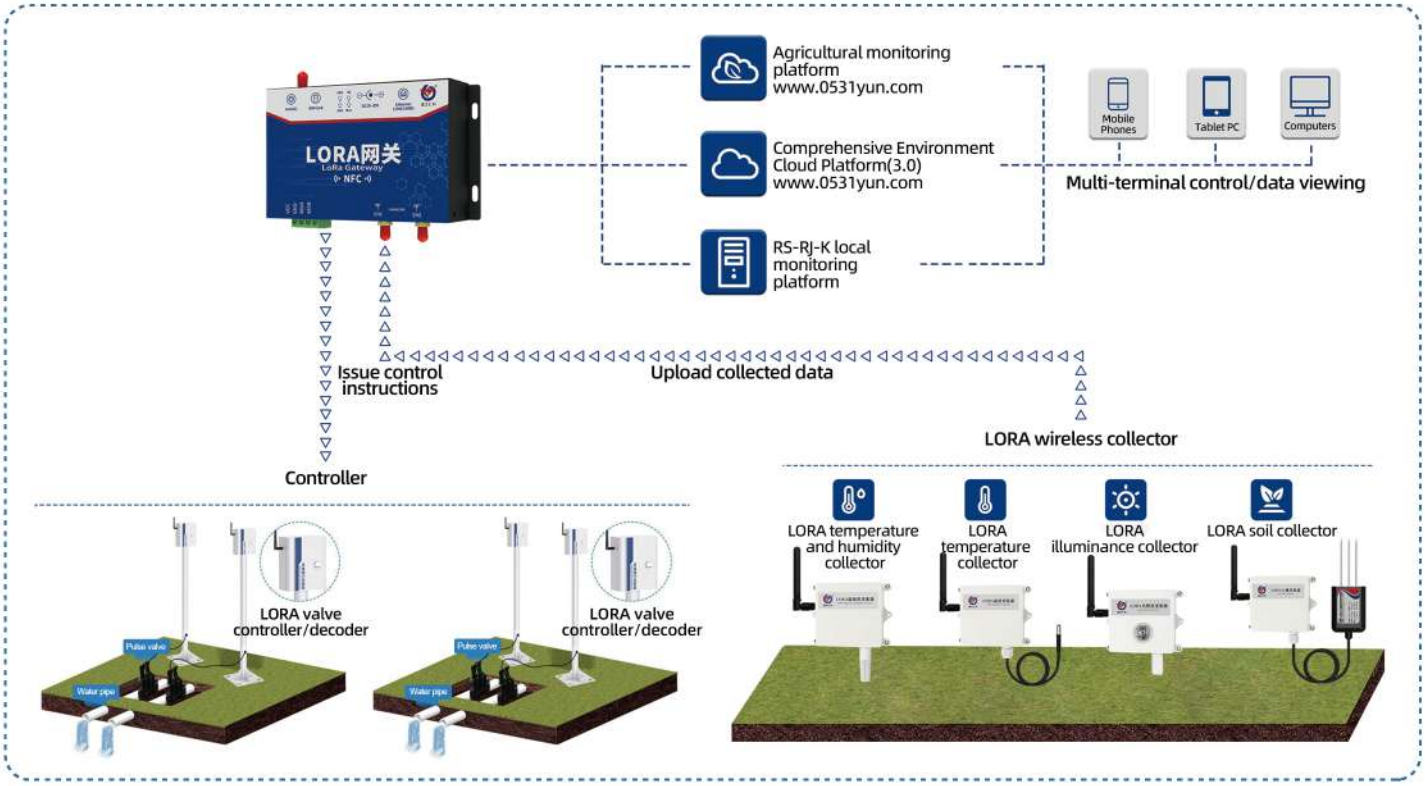
LORA Wireless Data Acquisition and Irrigation System

In light of the characteristics of LORA wireless communication, the data acquisition and wireless irrigation control system solution for LORA networking communication employs ultra-long-distance, low-power LORA wireless transmission technology based on spread spectrum communication, intelligent sensor network technology, anti-interference technology, and automatic control technology. Upgrade and transform traditional environmental data collection equipment to build a fully intelligent and efficient monitoring and control management system. Relying on various LORA sensor nodes and wireless communication networks deployed on-site, achieve intelligent perception, intelligent alarm, and intelligent analysis of the on-site environment, providing precise monitoring, visual management, and intelligent decision-making.

The LORA wireless data acquisition and irrigation system consists of LORA wireless collectors, LORA wireless controllers, LORA gateways, and environment cloud platform. The parameters such as environmental temperature, humidity, light intensity and soil moisture collected by the LORA collector are transmitted to the LORA gateway through LORA wireless communication technology. The gateway then uploays the data to the cloud platform via Ethernet for analysis and processing of various environmental data information. By taking the attainment of the set threshold or human intervention operation as the control condition for the operation of irrigation equipment, intelligent irrigation is achieved, which has changed the previous contradiction between the transmission distance and power consumption of the farmland management system.

- **Real-time monitoring**
- **Data analysis**
- **Scientific irrigation**
- **Remote control**
- **Use water rationally**
- **Safe energy saving**

LORA wireless data acquisition and irrigation system topology diagram:



LORA Gateway

RS-LG-100/200/300/400-*-EX

The LORA gateway is a product launched by our company to address the usage environment characterized by high power supply difficulty, vast area, high wiring cost and high maintenance cost. The communication between the LORA gateway and the measurement point adopts the long-distance wireless transmission technology (LORA) based on spread spectrum technology. Its most prominent feature is that under the same power consumption conditions, it can travel a longer distance and has a stronger penetration ability than other wireless methods, achieving the unification of low power consumption and long distance. Real-time data can be uploaded to the platform provided by our company (farm.0531yun.cn or www.0531yun.com) or the user's own server.

- Power supply: 10~30V DC(P≤1W)
- Communication interface: RJ45 network port/LORA/RS-485 interface
- Device configuration: The neutral mobile APP "Touch NFC configuration" can be used to configure gateway parameters
- Metal sheet metal shell, with shielding, strong anti-interference ability, more stable field operation
- With communication, operation indicator lights, on-site can easily determine equipment problems
- LORA spread spectrum communication technology, multi-channel communication, enhance link communication stability, increase penetration and transmission capacity
- With our LORA valve controller, it can realize the control response of the switch valve within 2s
- It can be connected to our 32-way acquisition and 32-way control at the same time, and the enhanced version can be connected to our 64-way acquisition and 64-way control at the same time
- The communication process adopts a unique encryption technology to ensure it is not monitored, guarantee reliable control and eliminate false actions
- With remote upgrade function, the function can be customized remote upgrade
- Product dimensions: 142mm*82.8mm*31.6mm

(Regular version)

(Enhanced version)

RS-WVC-VDT-*-EX

Wireless Valve Controller

Power supply: Built-in rechargeable lithium battery, with a built-in solar panel for charging
Communication method: LORA
LORA communication distance: Line-of-sight 3000 meters
Pulse output: ±12V(Duration: Default 80ms)
LORA spread spectrum communication battery life: 5 months
Control response time: <2s
Temperature and humidity of equipment components: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Device configuration: Bluetooth configuration, with neutral configuration software provided
Protection grade: IP65, normal installation

PRODUCT TYPE
SMART AGRICULTURE WIRELESS IRRIGATION

RS-*PL-LORA-2-EX

LORA Valve Controller

Power supply: Relay output type: 10~30V DC(P≤0.9W)
Pulse type: Built-in battery (3.6V lithium-ion battery)
Working environment: -20℃~+60℃
Waterproof grade: IP65
Data transmission: LORA wireless signal
Output signal: Passive relay output/pulse signal output
Control response time: <2s
Transmission distance: Indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)

RS-IVCH-EVA1-*-DC-1-EX

Intelligent Valve Control Host

Power supply: Equipped with a built-in rechargeable lithium battery, it comes with a solar panel for charging and supports external 24V power supply
Communication method: LORA
Output: 12V(battery-powered) or 24V(24V power supply)
LORA communication distance: Line-of-sight 3000 meters
Control response time: The minimum execution time for an action is 2 seconds, and the duration of the execution action depends on the performance of the valve on site
Temperature and humidity of equipment components: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Device configuration: Bluetooth configuration, with neutral configuration software provided
Protection grade: IP65, normal installation

RS-WD-LORA-2-*-EX

LORA Temperature Collector

Power supply: Built-in battery (3.6V lithium battery)
Battery life: 19000mAh lithium-ion battery. Data can be uploaded once every 5 minutes and used continuously for 3 years
Probe working: Temperature: -40℃~+80℃
Humidity: 0~100%RH
Transmitter circuit working temperature: -40℃~+60℃, 0%RH~80%RH
Long-term stability: ≤0.1℃/y
Transmission distance: indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)
Product dimensions: 110mm*85mm*44mm

RS-WS-LORA-2-*-EX

LORA Temperature Sensor

Power supply: Built-in battery (DC3.6V lithium-ion battery)
Battery life: With the battery provided by our company, data can be uploaded once every 5 minutes and used continuously for 3 years
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Transmitter circuit working temperature: -40℃~+60℃, 0%RH~80%RH
Output signal: LORA wireless signal
Transmission distance: Indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)
Product dimensions: 110mm*85mm*44mm

RS-485-LORA-2-EX

LORA 485 Data Collector

Power supply: 10~30V DC(P≤0.06W)
Data upload interval: 1s~60000s (default 30s)
Working environment: -20℃~+60℃
Waterproof grade: IP65
Communication with the gateway: LORA wireless signal master-slave RS485 interface
Communication distance: 2000 meters
Device configuration: NFC(" Tap NFC configuration "on your mobile phone)
Transmission distance: Indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)
Product dimensions: 110mm*85mm*44mm

RS-TR-LORAH-2-*-EX

LORA Soil Moisture Sensor

Power supply: Built-in battery (3.6V lithium-ion battery)
Battery life: With the battery provided by our company, data can be uploaded once every 5 minutes and used continuously for 3 years
Collector circuit working temperature: -20℃~+60℃
Sensor protection grade: IP68
Sensor probe material: Anti-corrosion specially made electrode
Sensor sealing material: Black flame-retardant epoxy resin
Sensor default cable length: 2m. Cable length can be customized as required
Transmission distance: Indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)
Product dimensions: 123mm*45mm*15mm

RS-GZ*-LORA-2-200000-EX

LORA Illuminance Collector

Power supply: Built-in battery (3.6V lithium-ion battery)
Battery life: With the battery provided by our company, data can be uploaded once every 5 minutes and used continuously for 3 years
Accuracy: ±7%(25℃)
Light intensity measurement range: 0-200,000 Lux
Long-term stability: ≤5%/y
Response time: 0.1s
Output signal: LORA wireless spread spectrum signal
Transmission distance: Indoor urban areas can pass through 3~4 concrete walls, outdoor 3000 meters (visual distance)
Product dimensions: 110mm*85mm*44mm

WEATHER STATION

RAIN AND SNOW SENSOR

RAINFALL GAUGE

WIND SENSOR

ILLUMINATION SENSOR

RADIATION SENSOR

METEOROLOGICAL

Weather Monitoring Equipment

METEOROLOGICAL MONITORING EQUIPMENT

Multi-functional Weather Station

The multi-functional weather station is composed of meteorological sensors, a micro-computer meteorological data acquisition instrument, a power supply system (optional solar power supply), a lightweight louvered box, a field protection box and a stainless steel bracket, etc. Wind speed and direction sensors are specialized meteorological sensors, featuring high precision and reliability. They are widely used in meteorology, environmental protection, airports, agriculture and forestry, hydrology, military, warehousing, scientific research and other fields.

- Meteorological data collection: Wind speed, wind direction, soil temperature and moisture, soil electrical conductivity, soil PH, air temperature and humidity, noise, air quality, atmospheric pressure, light, rain and snow, ultraviolet rays, total radiation, O_2, CO_2, evaporation, negative oxygen ions, etc
- Soil data collection: Soil temperature collection, soil moisture collection
- Multiple power supply methods, dual power supply from solar energy and mains electricity
- When powered by solar energy, the battery life is about 7 days
- When powered by 220VAC, an LED display can be optionally equipped
- Perfect protection measures against lightning strikes, interference and other factors
- A variety of measurement elements can be freely combined according to requirements

RS-QXZN-M1-*-EX

Fixed expansion screw installation
Height: 2.8m

According to the different needs of various customers, our company can customize a variety of appearances and parameters of weather stations:

RS-QXZN-M2-*-EX

Fixed tripod installation
Height: 2.8m

RS-QXZN-M3-*-EX

Portable weather station
Height: 1.3m-2m adjustable

RS-QXZN-M4-*-EX

U-shaped pole expansion bolt installation
Height: 2.8m

RS-QXZN-M5-*-EX

U-shaped pole tripod installation
Height: 2.8m

RS-QXZN-M6-*-EX

Fixed expansion screw installation
Height:1.3m

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

Photovoltaic Weather Station

RS-GFQXZ-EX photovoltaic weather station is a special monitoring station.The equipment can collect solar tilt radiation, sunshine hours, total solar radiation, direct solar radiation, solar scattered radiation, wind speed, wind direction, louver box temperature, humidity, atmospheric pressure, latitude and longitude, component temperature and other factors, among which the solar radiation adopts automatic solar tracking system to automatically track the sun, solving the shortcomings of personnel to the site maintenance. And using sensor tracking and GPS sun tracking to ensure high precision tracking.
Power supply using solar power system, built-in wide temperature colloid maintenance free battery.The device can upload the data directly to our company's free environmental monitoring cloud platform, and customers can view the data and manage the device through the Web or APP at any time and anywhere.

RS-GFQXZ-M9-*-EX

- Monitoring elements are flexible and can be adjusted according to user needs
- Solar power supply system, built-in wide temperature colloid maintenation-free battery, used in the field without mains
- Data is automatically uploaded, and a free environmental monitoring cloud platform and APP are provided
- Double pole design, the distance between the equipment is precisely calculated, reducing the influence between the equipment to zero
- Adopt high strength vertical rod mounting frame, resist wind, rain, snow and other bad weather for a long time to work outdoors

Portable Weather Station

Portable weather station integrate multiple meteorological monitoring functions. With their compact size, portability and ease of operation, they have been widely applied in fields such as meteorological monitoring, agricultural research, environmental monitoring and campus education.
Our company's portable weather station can integrate meteorological elements such as wind speed, wind direction, air temperature, air humidity, noise, PM2.5, PM10, carbon dioxide, atmospheric pressure, light, optical rainfall, total solar radiation, and altitude for real-time monitoring. You can choose according to your needs.

(Mechanical)
RS-PTQXZ-M-1-*-EX

- High integration, portable installation, easy to move monitoring
- Large color display screen, beautiful interface
- It can watch the monitoring data in real time, with clear display, comprehensive content and fast measurement speed
- Available offline data storage and data acquisition cycle can be set according to the observation
- Built-in large capacity lithium battery, support power charging or real-time power supply using portable solar panel
- Data export with one key, convenient and quick; Over-limit alarm, multiple prompts.
- The device configuration parameters through the mobile APP, the operation is simple and convenient.

Handheld Weather Station

The handheld weather station is light, rugged and durable, with no moving parts, no maintenance and on-site calibration. It can simultaneously output real-time data such as wind speed, wind direction, temperature, humidity, air pressure, PM2.5, PM10, noise, CO_2, light, optical rainfall, total sunshine radiation, and altitude.The device can be freely matched with test elements, and has its own touch screen, which can display test data in real time.The device comes with a specially designed handle, which is convenient for users to hold in one hand.The built-in Bluetooth module can be used to configure the device parameters on the mobile phone using the special APP mobile software provided by our company, which is especially suitable for field inspection and on-site debugging.

- Can watch the monitoring data in real time, display clear, comprehensive content
- Free matching measurement requirements, convenient on-site testing needs
- Optional mounting bracket, can be fixed for a long time detection, simple and convenient operation
- Large-capacity data storage, supporting data export
- Compact in structure, it is convenient to carry
- Support poster height display

RS-HSQXZ-USB-1-*-EX

RS-HSQXZ-USB-*-EX

RS-BYH-M-EX

Solar Radiation Shield

Power supply: 10~30V DC(P≤0.8W)
Output signal: RS485(Standard ModBus communication protocol)
Range: Temperature range: -40℃~+120℃
Humidity: 0%RH~99%RH
Atmospheric pressure: 0-120kPa
Noise: 30dB-130dB
CO_2: 0-5000ppm
PM2.5 and PM10 measurement: 0-1000μg/m³
Light intensity: 0- 200,000 LUX
Typical features: Rain and snow resistant appearance design, suitable for various environmental monitoring
Product dimensions: 138mm*145mm

RS-FSXJT-N01-1-EX

Integrated Weather Station

- Power supply: 10~30V DC(P≤0.8W)
- Output signal: RS485
- Product dimensions: 280mm*800mm
- It is small in size, light in weight, made of high-quality UV-resistant material and has a long service life
- Multi-acquisition device integrated design, set wind speed, wind direction, temperature and humidity, noise, PM2.5/PM10(or CO_2), atmospheric pressure in one
- The key components adopt imported devices, which are stable and reliable, with wide measurement range, good linearity, good waterproof performance, easy to use, easy to install, and long transmission distance

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

RS-NEGO-N01-2*-*-EX

Negative Ion Detector

Power supply: DC 10~30V
Maximum power consumption: 2W(powered by 12VDC)
Default range: 0-5 million /cm³
Minimum resolution: 10 pieces/cm³
Typical accuracy: ±15%
Data update frequency: 1HZ
Ion mobility: 0.4cm²/(V*S)
Ion mobility error: ±5%
Temp&Hum resistance of transmitter elements: -40℃~+70℃, 0%RH~95%RH(non-condensation)
Product dimensions: 225.5mm*166mm*63.2mm

RS-LSD-*-1-EX

Snow Depth Sensor

Power supply: 10~30V DC
Maximum power consumption: 0.8W(3.5W when heating)
Working temperature: -40℃~+50℃, 0%RH~95%RH(non-condensation)
Resolution: 1mm
Accuracy: ±1mm
Range: 0.05~1.5m
Output signal: RS485(ModBus Protocol)
Laser type: 635nm, <1mw
Laser grade: Class II
Single measurement time: 0.05~1s
Spot size: Point spot5mm@10m
Line spot: 3mm*150mm@10m

RS-YUX-*-H-EX

Rain and Snow Sensor

Power supply: 10~30V DC
Maximum power consumption: Normal power consumption: 0.4W
Heating power consumption: 3.4W
Storage environment: -40℃~80℃
Parameter settings: Software settings
Heating startup ambient temperature: <15℃(default)
Maximum heating temperature: 40℃(default)
Output signal: RS485
Typical features: Optional automatic heating function to prevent false alarms of freezing
Product dimensions: 89mm*60mm*38mm

RS-LMK-N01-1-EX

Road Condition Sensor

Power supply: 11~28V DC
Power consumption: 1.5W(Heating power: 13W)
Measurement distance and diameter: 2-10m, 25cm
Angle range between sensor and vertical column: 0~60°
Road surface conditions: Dry, damp, wet, waterlogged, icy, snowy
Water accumulation thickness: 0.00-2.00mm;
Ice formation thickness: 0.00-2.00mm
Snow thickness (optional): 50mm~2500mm
Road temperature: -30℃~60℃
Slippery degree: 10.00-1.00(Dangerous - dry)
Working temperature: -40~60℃
Working relative humidity: ≤ 95%(30℃)
Output signal: RS485

RS-QY-*-2-*-4-EX

Atmospheric Pressure Sensor

Power supply: 10~30V DC
Accuracy: Temperature: ±0.5C(25℃)
Humidity: ±3%RH(60%RH,25℃)
Air pressure: ±0.15kPa@25℃101kPa
Working temperature and humidity: -40℃-+60℃, 0%RH~95%RH(non-condensation)
Measurement range: Temperature: -40℃ - 80℃
Air pressure: 0-120kPa;
Measured medium: Air
Output signal: RS485/4~20mA/0-5V/0-10V
Typical features: Simultaneous measurement of atmospheric pressure and temperature, applicable to various altitudes
Product dimensions: 110mm*85mm*44mm

RS-QY-*-2D-LCD-EX

Industrial Wall-mounted Atmospheric Pressure Sensor

Power supply: 10~30V DC Power consumption: ≤0.5W
Accuracy: ±0.15kPa@25℃101kPa
Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%6RH(non-condensation)
Measured medium: Air
Air pressure range: 0~120kPa
Long-term stability: Air pressure: -0.1kPa/year
Response time: ≤2s
Output signal: RS485/4~20mA/0~5V/0~10V
Product dimensions: 147mm*88mm*41mm

RS-EVA-*-2-EX

Evaporation Sensor

Power supply: 10~30V DC Power consumption: 0.17W
Measurement range: 0-200mm Measurement accuracy: ±1%FS
Response time: <1s
Output signal: RS485
Protection grade: IP66
Inner cylinder diameter: 18.4cm
Inner cylinder height: 20cm
Working temperature: -40~85℃
Working humidity: 0~100%RH
Storage temperature: -40~125℃
Storage humidity: <80%(no condensation)
Product dimensions: 342.7mm*312mm

RS-FYL*-*-1-EX

Small Tipping Bucket Rainfall Sensor

Power supply: 9~30V DC
Power consumption: ≤0.24W
Rain-sensing diameter: 6cm
Resolution: Rainfall: Standard 0.1mm
Light: 1LuX
Typical accuracy: Rainfall: ±4%1
Light: ±7%(25℃)
Maximum instantaneous rainfall: 24mm/min
Light intensity measurement range: 0- 200,000 LuX
Output signal: RS485 output, dry contact pulse output
Transmitter element temperature and humidity: -40~80℃ 0~95% (relative humidity), no condensation

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

RS-CYL-*-1-*-EX

Weighing Rain Gauge

Power supply: 12V DC
Power consumption: 0.15W(DC 12V)
Heating power: 30W(Optional, power supply DC 12V)
Range: 0-1000mm
Resolution: 0.1mm
Inner diameter of the rain socket: $\phi 200_{0}^{+06}$mm
Error: ±0.2mm, ≤10mm; ±2%, >10mm
Temp&Hum resistance of transmitter elements: -35℃~+65℃, 0%RH~95%RH non-condensating
The equipment is equipped with a heating function, which can measure the amount of snowfall and prevent freezing problems in winter

RS-YL*-*-6*-*-EX

Double Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.5mm/0.2mm/0.1mm optional
Sharp edge angle: 40°~45°
Working temperature: 0℃~55℃
Working humidity: <95%(40℃)
Output signal: Pulse/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 215mm*430mm

RS-YL*-*-4-*-EX

Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.5mm/0.2mm optional
Sharp edge angle: 40°-45°
Working temperature: 0℃~55℃
Working humidity: <95%(40℃)
Output signal: Pulse/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement error: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 215mm*430mm

(Old appearance)

(New appearance)

RS-FSXCS-N01-1/1H-EX

Ultrasonic Integrated Weather Station

- Power supply: 10~30V DC
- Output signal: RS485
- Maximum power consumption: 1.2W
- Product dimensions: Height: 418mm Diameter: 141.44mm
- It has a wide range of 0-120 kpa air pressure measurement and can be applied at various altitudes
- It integrates wind speed, wind direction, temperature and humidity, noise collection, PM2.5/PM10(or CO_2), and atmospheric pressure
- The key components adopt imported devices, which are stable and reliable, with wide measurement range, good linearity, good waterproof performance, easy to use, easy to install, and long transmission distance

(Old appearance)

(New appearance)

RS-FSXCS-N01-3H/3HP-EX

Smart Ultrasonic Weather Station

- Power supply: 10~30V DC
- Output signal: RS485
- Maximum power consumption: 0.7W
- Product dimensions: Height: 210.4mm Diameter: 1.08mm
- It adopts an integrated design of multiple acquisition devices, featuring a compact size and light weight
- Made of high-quality UV-resistant material, it has a long service life
- It integrates wind speed, wind direction, temperature and humidity, noise collection, PM2.5 and PM10, atmospheric pressure, light, rainfall and CO_2
- The device with an internal electronic compass has no directional requirements during installation and can be installed horizontally

RS-CFSFX-N01-3D-EX

3D Ultrasound Anemometer

- Power supply (default): 10V~30V DC
- Maximum power consumption: 1.2W
- Accuracy: Wind speed: ±0.2m/s (0~5m/s), ±2%FS; ±0.2m/s (>5m/s)
  Wind direction: ±2°
  Sound speed: ±0.5% Sound temperature: ±0.5℃
- Measuring range:
  Wind speed: 0~60m/s Wind direction: 0~359°
  Sound speed: 300~370m/s Sound temperature: -40~70℃
- Resolution:
  Wind speed: 0.01m/s Wind direction: 0.1°
  Sound speed: 0.01m/s Sound temperature: 0.01℃
- Working environment: -40~60℃, 0 ~ 100%RH
- Wind resistance: 75m/s
- Response time: 1s
- Protection level: IP66
- Output signal: RS485

RS-CFSFX-*-2H-EX

Ultrasonic Wind Sensor

Power supply: 10~30V DC
Measurement accuracy:
Wind speed: ±(0.2m/s±0.02*V)(v is the actual wind speed)
Wind direction: ±3°
Working environment: -40~60℃, 0~95%RH(non-condensation)
Wind speed range: 0-60m/s(customizable)
Wind direction range: 0-359°
Output signal: 4~20mA/0~5V/0~10V/RS485
Response time: 1s
Typical features: No start-up wind speed limit, zero wind speed operation, no Angle limit, 360-degree all-round
Product dimensions: Height: 115mm Diameter: 141mm

RS-CFSFX-*-3H-EX

Ultrasonic Anemometer

Power supply: 10~30V DC(0-10V output uses 24V power supply)
Measurement accuracy: Wind speed: ±0.5+2%FS;
Wind direction: ±3°
Working environment: -40~-80℃, 0~95%RH(non-condensation)
Wind speed range: 0-40m/s(customizable),
starting wind speed of 0.5m/s
Wind direction range: 0-360°
Response time: 1s
Output signal: 4~20mA/0~5V/0~10V/RS485
Typical features: No Angle limit, capable of simultaneously measuring wind speed and direction data, 360° all-round
Product dimensions: Height: 195.4mm Diameter: 108.4mm

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

RS-FSA-*-EX

Aluminum Wind Speed Sensor

Power supply: 10~30V DC(P≤0.2W)
Range: 0~60m/s
Accuracy: ±(0.2+0.03V)m/s V represents the wind speed
Working temperature and humidity: -40°C~+60 °C, 0%RH~80%RH
Resolution: 0.1m/s
Output signal: RS485/4~20mA/0~5V/0~10V/NPNR/PNR
Typical features: Moisture-proof and corrosion-resistant aluminum shell
Product dimensions: Overall height: 178.8mm
Chassis: ϕ79.8mm

RS-FXA-*-*-EX

Aluminum Wind Direction Sensor

Power supply: 10~30V DC(P≤0.2W)
Range: 8 indicated directions/16 indicated directions/0-359.9°
Working temperature and humidity: -40~+60°C, 0%RH~80%RH
Output signal: RS485/4~20mA/0~5V/0~10V
Dynamic response speed: ≤0.5s
Parameter Settings: Configure via the 485 interface using the provided configuration software
Typical features: Equipped with high-performance imported bearings, it has low rotational resistance and precise measurement
Product dimensions: Overall height: 201.5mm Chassis: ϕ79.8mm

RS-FSJT-*-EX

Polycarbon Wind Speed Sensor

Power supply: 10~30V DC
Range: 0~70m/s
Accuracy: ±(0.2+0.03V)m/s, @(0~30m/s, 25°C) V represents wind speed
Working temperature and humidity: -40°C~+60°C, 0%RH~80%RH
Resolution: 0.1m/s
Dynamic response time: ≤1s
Output signal: RS485/4~20mA/0~5V/0~10V/Pulse
Typical features: Made of polycarbonate shell, it has high hardness, is corrosion-resistant and can be used outdoors for a long time
Product dimensions: Overall height: 160mm
Installation diameter: ϕ182mm

RS-FXJT-*-*-EX

Polycarbon Wind Direction Sensor

Power supply: 10~30V DC(P≤0.15W)
Dynamic response time: ≤0.5s
Range: 8 indicated directions/16 indicated directions/0-359.9°
Working temperature and humidity: -40°C~+60°C, 0%RH~80%RH
Output signal: RS485/4~20mA/0~5V/0~10V
Load capacity: Voltage output: Output resistance ≤250Ω
Current output: ≤600Ω
Typical features: The structure and weight of the equipment have been carefully designed and allocated, with a small moment of inertia
Product dimensions: Overall height: 190mm
Installation diameter: ϕ232mm

RS-GZ-*-AL-*-EX

Aluminum Light Intensity Sensor

- Power supply (default): 7~30V DC
- Response time: <1s
- Maximum power consumption: 0.4W
- Accuracy: ±7%(25℃)
  High precision: ±4%(25℃)
- Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
- Light intensity measurement range: 0-65,535 lux; 0-200,000 Lux
- The aluminum casing has a high protection level and can be used outdoors or in harsh environments
- Long-term stability: ≤5%/y

RS-GZ-N01-XD-*-EX

Ceiling-mounted Light Sensor

Power supply (default): 10-30V DC
Maximum power consumption: 0.4W
Accuracy:Temperature: ±0.7℃ (25℃)
Humidity: ±3%RH (60%RH, 25℃)
Light intensity: ±7%(25℃)
Measuring range: Temperature & Humidity: -40℃~+60℃, 0%RH~80%RH
Light intensity:0-65535Lux; 0-200,000Lux
Long-Term stability: Temperature: ≤0.1℃/y
Humidity: ≤1%/y
Light intensity: ≤5%/y
Output signal: RS485 (ModBus Protocol)

RS-UV-*-AL-EX

Aluminum Shell UV Sensor

Power supply: 10~30V DC
(0~10V products can only DC24V power supply)
Maximum power consumption: 485: 0.06W
4~20mA/0~5V/0~10V: 0.6W
Accuracy: ±10%FS(@365nm.60%RH, 25℃)
UV intensity range: 0~15mW/cm²
Measurement wavelength range: Wavelength 290-390nm
Reaction time: UV intensity: 0.2s UV index: 0.2s
Output signal: RS485/4~20mA/0~5V/0~10V

RS-TBQ-*-AL-EX

Pyranometer Sensor

Power supply: 10V~30V DC
Output signal: RS485/4~20mA/0~5V/0~10V
Power consumption: 485 output: 0.2W
4~20mA Current output: 0.7W
0~5V/0~10V voltage output: 0.22W
Working temperature and humidity: -40℃~60℃,
0%RH~95%RH(non-condensation)
Spectral range: 0.3-3μm Measurement range: 0-2000W/m²
Resolution: 1W/m² Accuracy: ±3%
Response time (95%): ≤30s

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

RS-GZ*-*-2-*-EX

Illuminance Sensor

Power supply: 10~30V DC
Accuracy: ±7%(25℃)
Range: Temperature: -40℃~+60℃
Humidity: 0%RH~80%RH
Illuminance range: 0~65535Lux;0~200,000 LuX
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBuS-RTU)
Typical features: IP65 protection grade, suitable for indoor and outdoor illuminance measurement
Product dimensions: 110mm*85mm*44mm

RS-GZCO2WS-*-2/2Y-*-EX

Light&CO2 Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.8W(24V DC))
Measurement accuracy:Temperature: ±0.5℃(25℃)
Humidity: ±3%RH(60%RH,25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Light intensity: 0~65535Lux;0~200,000 LuX
CO_2: 0~5000ppm
Light intensity: ±7%(25℃)
CO_2: ±(50ppm+3%FS)(25℃, 400-5000ppm)
Output signal: RS485 Product dimensions: 110mm*85mm*44mm

RS-UV/UVWS -*-2-EX

Ultraviolet Temperature and Humidity Sensor

Power supply: 10~30V DC
(0~10V products can only DC24V power supply)
Output signal: RS485/0~5V/0~10V/4~20mA
Accuracy: Ultraviolet intensity: ±10%FS(@365nm,60%RH,25℃)
Temperature and humidity: ±0.5℃(25℃);
±3%RH(60%RH,25℃)
UV intensity range: 0~15mW/cm², 0~450μW/cm²
Typical features: The transparent window is made of high-quality light-transmitting materials, with an ultraviolet light transmission rate exceeding 98%
Product dimensions: 110mm*85mm*44mm

RS-RA-*-AL-EX

Solar Radiation Sensor

Power supply: 7V~30V DC
(0~10V output power supply voltage can only DC24V)
Output signal: RS485/4~20mA/0~5V/0~10V
Power consumption: 485: 0.06W
4~20mA/0~5V/0~10V: 0.6W
Working temperature: -25℃~60℃
Measured object: Sunlight
Measuring range: 0~1800W/m²
Resolution: 1W/m²
Response time: ≤10S
Nonlinearity: <±3%

RS-GH-*-AL-EX

PAR Sensor

Power supply: RS485/4~20mA/0~5V: 7V~30V DC,
0~10V: 24V DC power supply
Output signal: RS485/4~20mA/0-5V/0-10V
Power consumption: 485: 0.06W
4~20mA/0~5V/0~10V: 0.7W
Working temperature: -25℃~60 ℃
Response spectrum: 400nm~700nm
Measurement range: 0-2500μmol/m²·s
Resolution: 1μmol/m²·s
Accuracy: ±5%(1000μmol/m²·s,@550nm,60%RH,25℃)
Reaction time: 0.1s

RS-JTBQ-N01-AL-EX

Scattered Radiation Sensor

Power supply: 10~30V DC
Output signal: 485(Standard ModBuS-RTU protocol)
Power consumption: 0.2W
Temp&Hum resistance of transmitter elements: -40℃~+80 ℃,
0%RH~95%RH(non-condensation)
Sensitivity: 7-14μV·W^{-1}·m²
Internal resistance: 200-400Ω
Response time (95%): ≤30s
Spectral range: 0.3-3μm
Measurement range: 0-2000W/m²
Typical features: It adopts thermoelectric induction elements, ensuring high measurement accuracy

RS-STBQ-N01-1-EX

Inclined Radiation Sensor

Power supply: 10V~30V DC
Output signal: RS485(Standard ModBuS-RTU protocol)
Power consumption: 0.2W
Working temperature: -40℃~+60℃
Working humidity: 0%RH~95%RH non-condensation
Sensitivity: 7~14 μV·W^{-1}·m²
Spectral range: 0.3~3μm
Measurement range: 0~2000W/m²
Resolution: 1W/m² Accuracy: ±3%
Annual stability: ≤±3% Zero drift: ≤6W/m²
Cosine response error: ≤±5%
Tilt response error: ≤2%

RS-TBD*-N01-1-EX

Fully Automatic Solar Radiation Tracking Sensor

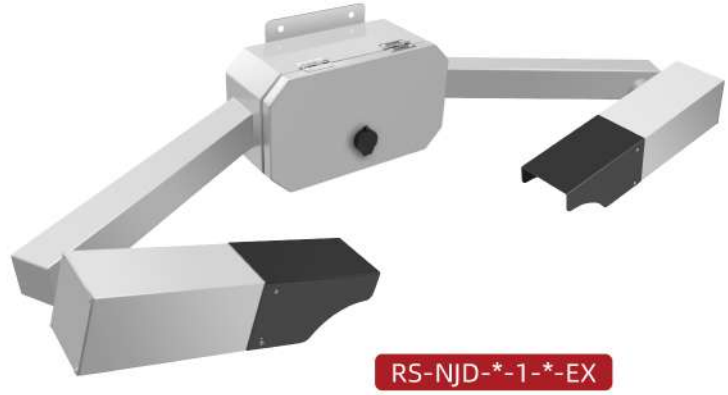
Power supply: 12V DC Power consumption: 8.5W
Output signal: RS485(Standard ModBuS-RTU protocol)
Power consumption: 485: 0.06W
4~20mA/0~5V/0~10V: 0.6W
Working temperature and humidity: -30℃~+60℃, 0%RH~95%RH non-condensation
Spectral range: 0.3~3μm
Measurement range: 0-2000W/m²
Resolution: 1W/m² Accuracy: ±3
Cosine response error: ≤ ± 5%
Tilt response error: ≤2
Sensitivity: 7~14μV·W^{-1}·m² Internal resistance: 200-400Ω

PRODUCT TYPE
WEATHER MONITORING EQUIPMENT

Atmospheric Visibility Sensor

The atmospheric visibility sensor developed by our company can adapt to various adverse weather conditions, and the integrated design makes the layout of internal cables more reasonable.The lens is facing down with a protective cover to effectively prevent precipitation, droplets or dust from entering the lens and reduce the contamination of the probe surface.This design provides accurate measurements and reduces the need for maintenance.The overvoltage and electromagnetic protection devices of the visibility meter can ensure the long-term safe operation of the sensor. It is widely applied in road meteorological information systems, fog detection networks, airport meteorological systems, smoke detection in cooling towers, meteorological monitoring, and port safety.

- The 35° forward scattering principle ensures more accurate measurement
- Simple structure, good stability, high reliability, low energy consumption, easy maintenance
- Infrared LED light source, with added filter design and anti-light source interference
- The surface of the equipment is treated for anti-corrosion to resist rainwater corrosion
- Low power consumption and internal circuit anti-interference design
- It can continuously measure and output atmospheric visibility
- The DC power supply circuit of the instrument has dual design of anti-reverse connection and self-recovery insurance



RS-NJD-*-1-*-EX

WATER QUALITY SENSOR

PORTABLE WATER QUALITY ANALYZER

SENSOR SELF-CLEANING BRACKET

WATER QUALITY

Water Quality Monitoring System

RS-PH-N01-3-*-EX

Integrated PH Sensor

Power supply: DC 7~30V(P≤0.3W)
PH measurement range: 0-14.00PH; Resolution: 0.01PH
PH measurement error: ±0.15PH
Repeatability error: ±0.02PH
Temperature measurement range: 0-60℃; Resolution: 0.1℃
Temperature measurement error: ±0.5℃
Transmitter element temperature resistance: 0~+80℃
Waterproof grade: IP68
Pressure resistance: 0.6MPa
Electrode wire length: Default 5m, customizable

RS-PH-*-2-*-EX

Industrial Water PH Sensor

Power supply: DC 10~30V
Power consumption: 485: 0.6W 4~20mA/0~5V/0~10V: 1.2W
Output signal: RS485(ModBus-RTU protocol); 4-20mA / 0-5V / 0-10V
PH measurement range: 0~14.00PH
Resolution: 0.01PH
PH measurement accuracy: ±0.15PH
Temperature measurement range: 0-80℃
Resolution: 0.1℃
Temperature measurement accuracy: ±0.5℃
Temp&Hum resistance of transmitter elements: -20℃~+80℃, 0%RH~95%RH(non-condensation)
Electrode working temperature: 0-80℃
Electrode wire length: Default 5m

RS-EC-N01-3/4-EX

Integrated EC Sensor

Power supply: DC 10~30V(P≤0.4W)
Conductivity measurement range:
K=1:1~2000μS/cm; Resolution: 0.1μS/cm
K=10:10 ~ 20000μS/cm; Resolution: 1μS/cm
Conductivity measurement error: ±1%FS
Temperature measurement range: -20~60℃; Resolution: 0.1℃
Temperature measurement error: ±0.5℃
Temperature compensation range: -20~60℃(default compensation temperature 25℃)
Salinity measurement range: K=1:0~1000ppm; K=10:0~11476ppm
TDS measurement range: K=1:0~1100ppm; K=10:0~13400ppm

RS-EC-*-2-*-EX

Water Conductivity Sensor

Power supply: DC 10~30V
Output signal: RS485/0-5V/0-10V/4-20mA
Measurement range:
Conductivity: K=0.01: 0.01~20μS/cm;Resolution: 0.001μS/cm
K=0.1: 0.1~200μS/cm; Resolution: 0.01μS/cm
K=1: 1~2000μS/cm; Resolution: 0.1μS/cm
K=10: 10~20000μS/cm; Resolution: 1μS/cm
Temperature: -20~100℃; Resolution: 0.1℃
Measurement error: Conductivity: ±1%FS
Temperature: ±0.5℃
Temp&Hum resistance of transmitter elements: -20℃~+80℃, 0%RH~95%RH (Non-condensation)
Electrode wire length: Default 5m (10m, 15m, 20m can be customized)

PRODUCT TYPE

WATER QUALITY MONITORING

RS-ZD-N01-*-EX

Turbidity Sensor

Power supply: DC 10~30V(P≤0.2W)
Output signal: RS485 (ModBus-RTU protocol)
Measurement principle: 90° light scattering method
Measurement range: 0.00-50.00NTU; 0.0 ~ 200.0NTU;
0.0-1000.0 NTU; 0-4000NTU
Measurement error: ±5%FS(at 25℃) ; ±0.5℃
Waterproof grade: IP68
Electrode wire length: Default 5m
Shell material: Corrosion-resistant plastic

RS-LDO*-*-EX

Fluorescence Dissolved Oxygen Sensor

Power supply: DC 10~30V(P≤0.2W)
Measurement principle: Fluorescence method
Measurement range: 0-20mg/L(0-200% saturation)
Measurement error: ±3%FS; ±0.5℃ (25℃)
Resolution: 0.01mg/L; 0.1%; 0.1℃
Transmitter element temperature resistance: 0-40℃
Waterproof grade: IP68
Electrode wire length: Default 5m
Shell material: Corrosion-resistant plastic, stainless steel

RS-CL-N01-3-*-EX

Integrated Chlorine Residual Sensor

Power supply: DC 7~30V
Response time: <30s
Power consumption: 0.19W
Output signal: RS485
Repeatability error: ±0.05mg/L
Residual chlorine concentration measurement range: 0-2mg/L,
0-10mg/L, 0-20mg/L
Resolution: 0.01mg/L
Residual chlorine measurement error: ±5%FS
Transmitter element temperature resistance: 0-50℃
PH: 4-9 Flow rate: 30~60L/h
Electrode wire length: Default 5m(10m, 15m, 20m can be customized)

RS-CL-*-2-20-EX

Residual Chlorine Meter

Power supply: DC 10~30V
Output signal: RS485/0~5V/0~10V/4~20mA
Residual chlorine concentration measurement range: 0-2mg/L,
0-10mg/L, and 0-20mg/L optional; Resolution: 0.01mg/L
Residual chlorine measurement error: 5% or 0.05mg/L
Repeatability error: ±0.05mg/L Response time: <30s
Temp&Hum resistance of transmitter elements: -20℃~+80℃,
0%RH~95%RH (non-condensation)
Electrode working temperature: 0~50℃
Electrode pressure resistance: 0.6MPa
Electrode wire length: Default 5m (10m, 15m, 20m can be customized)

RS-COD-*-2-EX

COD Sensor

Power supply: DC 12~30V
Power consumption: 0.6W(normal); 4.5W(When the self-cleaning system is working)
Output signal: RS485
Measurement principle: Dual-wavelength ultraviolet absorption method
Measurement range: COD: 0~500mg/L equiv.KHP Turbidity: 0~200NTU
Measurement error: COD: ±5%FS equiv.KHP(25℃)
Turbidity: ±5%FS(25℃)
Measurement resolution: COD: 0.1mg/L Turbidity: 0.1NTU
Electrode wire length: Default 5m, customizable
Shell material: Corrosion-resistant plastic, stainless steel

RS-SS-*-2/3-*-EX

Suspended Solids (sludge concentration) Sensor

Power supply: DC 12~30V
Power consumption: 1.2W(normal); 4.5W(When the self-cleaning system is working)
Output signal: RS485
Measurement principle: Light absorption method
Measuring range: 0~20000mg/L; 0~5000mg/L; 0~1000mg/L; 0~200mg/L
Measurement error: ±5%FS(depending on the homogeneity of sludge)
Temperature resistance of transmitter components: 0~40℃
Waterproof grade: IP68
Electrode wire length: Default 5m, customizable

RS-CH-N01-2-EX

Chlorophyll Sensor

Power supply: DC 7~30V
Power consumption: 0.4W
Output signal: RS485
Measurement range: 0-400μg/L; 0~100RFU
Measurement error: ±5%FS(25℃) ; ± 0.5℃
Resolution: 0.1μg/L;0.1 RFU
Temperature: 0.1℃
Response time: ≤30s
Transmitter element temperature resistance: 0~40℃
Electrode wire length: Default 5m, customizable
Shell material: Corrosion-resistant plastic

RS-BA-N01-2-EX

Blue-green Algae Sensor

Power supply: DC 7~30V
Power consumption: 0.4W
Output signal: RS485
Measurement principle: Fluorescence method
Measurement range: 0~300000cells/mL
Temperature error: ±0.5℃ Resolution: 1cells/mL
Temperature: 0.1℃ Linearity: R^2>0.999
Transmitter element temperature resistance: 0~40℃
Shell material: Corrosion-resistant plastic
Waterproof grade: IP68
Electrode wire length: Default 5m, customizable

PRODUCT TYPE

WATER QUALITY MONITORING

RS-ORP-N01-3-EX

ORP Sensor

Power supply: DC 7~30V Power consumption: 0.3W
Output signal: RS485(ModBus-RTU protocol)
ORP measurement range: -1999~1999mV
Resolution: 1mV
ORP measurement error: ≤±5mV (25℃, 222mV standard solution)
Temperature measurement range: 0~60℃ Resolution: 0.1℃
Temperature measurement error: ±0.5℃
Equipment working conditions: 0~60℃
Waterproof grade: IP68
Pressure resistance: 0.6MPa
Electrode wire length: Default 5m, customizable

RS-ORP -*-2-EX

Industrial ORP Sensor

Power supply: DC 10~30V
Output signal: RS485/0-5V/0-10V/4-20mA
ORP measurement range: -1999~1999mV
Resolution: 1mV
ORP measurement error: ±10mV
Temp&Hum resistance of transmitter elements: -20℃~+80℃,
0%RH~95%RH(non-condensation)
Electrode applicable temperature: 0~80℃
Electrode pressure resistance: 0.6MPa
Electrode wire length: Default 5m(10m, 15m, 20m can be customized)

RS-OIL-N01-2-EX

Oil in Water Sensor

Power supply: DC 7~30V
Output signal: RS485
Measurement range: 0~50ppm; 0~100RFU
Measurement error: ±5%FS (25℃); ±0.5℃
Resolution: 0.01ppm; 0.1RFU
Temperature: 0.1℃
Equipment working conditions: 0~40℃
Measurement principle: Fluorescence Method
Waterproof grade: IP68
Electrode wire lengthh: Default 5m
Shell materiall: Corrosion-resistant material

RS-WSD-N01-1-EX

Water Color Sensor

Power supply: DC 9~30V Output signal: RS485
Measurement range: Colorimetric: 0~500 Hazen
Turbidity: 0~200 NTU
Measurement error: Colorimetric: ±5%FS (25℃)
Turbidity: ±5%FS (25℃) Temperature: ±0.5℃
Measurement resolution: Colorimetric: 0.1 Hazen
Turbidity: 0.1 NTU Temperature: 0.1℃
Measurement principle: Absorption Method
Equipment working conditions: 0~40℃ Waterproof rating: IP68
Electrode wire length: Default 5m, customizable
Shell material: Corrosion-resistant plastic, stainless steel

Portable Water Quality Analyzer

The portable water quality analyzer developed by our company adopts the latest digital integrated circuit technology and international testing technology to design a new intelligent handheld detector.The recorder adopts a large-sized full-color LCD screen, which can display readings in real time. Meanwhile, it uses a detection circuit designed with digital chips from international leading manufacturers, achieving extremely high sensitivity and excellent repeatability. Moreover, this recorder integrates measurement, storage, recording and analysis, and is widely used in water treatment, aquaculture, environmental monitoring and other industries.According to the different selection, the pH, conductivity, turbidity, dissolved oxygen, COD and other elements of water can be measured.

RS-xx-N01-HHT-EX

RS485 water quality equipment available:

Water temperature, water PH, water conductivity (EC), water dissolved oxygen, water turbidity, water chemical oxygen demand, water residual chlorine

Cleaning Bracket

RS-ZQX-1-EX is a cleaning stand launched by our company. The product is reliable and easy to use. Up to four digital sensors can be installed simultaneously, and parameters such as dissolved oxygen, PH, ORP, conductivity, and turbidity can be selected.

The online self-cleaning stand is equipped with an automatic cleaning device, which consists of an internal motor drive circuit, position detection circuit, DC motor and cleaning brush. The automatic cleaning device can effectively remove dirt from the surface of the sensor, prevent the adhesion of microorganisms, and greatly reduce maintenance costs. The sensor can be conveniently installed around the cleaning bracket. The upper end of the cleaning bracket is designed with 3/4NPT threads, which can be conveniently fixed and installed.

- Power supply: 12~24V DC Working temperature: -5~50℃
- Optional installation of dissolved oxygen, conductivity, turbidity, PH, ORP and other sensors is available, making it suitable for long-term online monitoring
- The upper end of the cleaning bracket is designed with 3/4NPT threads, which can be conveniently fixed and installed
- Customers can attach external application jet pipelines, spray pipelines, ultrasonic cleaning heads, sodium hypochlorite generators (for seawater anti-fouling), etc. according to their actual needs
- Four digital sensors can be installed simultaneously to measure five parameters
- Equipped with an automatic cleaning device, it can effectively remove dirt from the sensor surface, prevent the adhesion of microorganisms, and is more worry-free and requires less maintenance
- Product dimensions: 85mm*85mm*20mm

RS-ZQX-1-EX

GAS ALARM CONTROLLER

GAS SENSOR

MULTI-FUNCTIONAL GAS MONITOR

PORTABLE GAS DETECTOR

SINGLE GAS MONITOR

GAS DETECTION

Gas Alarm Controller

RS-GAS-100-EX is a gas alarm controller developed by our company. Through the RS485 interface, our company's gas transmitters can be connected to the gas alarm control host, and the data can be uploaded in real time. The device is equipped with a large built-in LCD screen, featuring a friendly and easy-to-operate interface. When the device exceeds the limit, the alarm channel and real-time alarm data will be displayed on the screen in rotation. It is embedded with a microprocessor and, combined with rich software functions, can complete functions such as detector signal sampling, measurement point status detection, alarm recording, self-checking, and relay control.

- It has 1 ModBus-RTU master interface and can connect up to 32 of our company's 485-type gas transmitters
- It is equipped with 4 passive relays, which can be connected to external devices such as fans. When gas leakage occurs, it can control the operation of external devices. Normally open and normally closed are available. Relay capacity: 10A/250V
- The main unit is equipped with a high-decibel sound and light alarm. The sound level can reach 70-115dB at a distance of one meter from the device. It can distinguish six states: normal, high alarm, low alarm, fault, shielding and delay
- It has 1 ModBus-RTU slave interface, which can be externally connected to the user's own monitoring host, PLC, configuration screen or configuration software

RS-GAS-100-*-EX

RS-GAS-200-*-EX

ENVIRONMENTAL MONITORING

PRODUCT TYPE

MULTIFUNCTIONAL GAS DETECTION

Multi-gas Detection zone

Wall-mounted gas sensor

Wall-mounted gas sensor with OLED display

Duct gas sensor

Duct gas sensor with OLED display

Explosion-proof gas sensor

Explosion-proof gas sensor with sound and light alarm

Portable gas detector

Industrial wall-mounted gas sensor

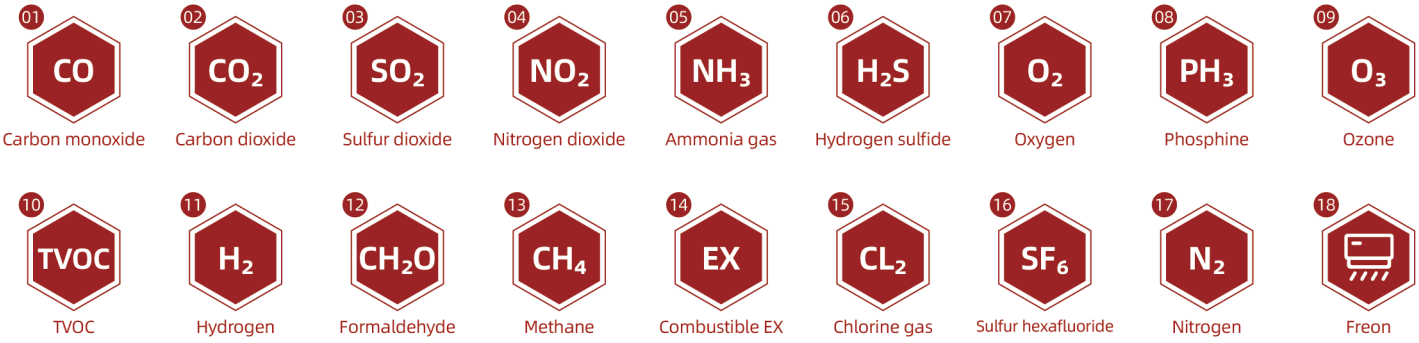
Air Quality Monitor

Single Gas Monitor

Multi-functional Air Quality Sensor

C3 digital gas sensor

The types of gases that can be monitored at present



A variety of gas parameters zone

Gas name	Optional range	Resolution	Output signal
Carbon monoxide(CO)	0~1000/2000ppm	1ppm	RS485/4~20mA/0~5V/0~10V
Carbon dioxide(CO_2)	0~5000/10000ppm	1ppm	RS485/4~20mA/0~5V/0~10V
Sulfur dioxide(SO_2)	0~20/2000ppm	20ppm:0.1ppm 2000ppm:1ppm	RS485/4~20mA/0~5V/0~10V
Nitrogen dioxide(NO_2)	0~20/2000ppm	20ppm:0.1ppm 2000ppm:1ppm	RS485/4~20mA/0~5V/0~10V
Ammonia(NH_3)	0~50/100/500ppm	0-50ppm:0.1ppm 0-100/0-500ppm:1ppm	RS485/4~20mA/0~5V/0~10V
Hydrogen sulfide(H_2S)	0~100ppm	1ppm	RS485/4~20mA/0~5V/0~10V
Oxygen(O_2)	0~25%VOL	0.1%VOL	RS485/4~20mA/0~5V/0~10V
Phosphine(PH_3)	0~20ppm	0.1ppm	RS485/4~20mA/0~5V/0~10V
Ozone(O_3)	0~10/100ppm	0~10ppm:0.01ppm 0~100ppm:0.1ppm	RS485/4~20mA/0~5V/0~10V
TVOC	0~60000ppb	1ppb	RS485/4~20mA/0~5V/0~10V
Hydrogen(H_2)	0~1000/40000ppm	1ppm	RS485/4~20mA/0~5V/0~10V
Formaldehyde(CH_2O)	0~5ppm	0.01ppm	RS485/4~20mA/0~5V/0~10V
Methane(CH_4)	0~100%LEL	1%LEL	RS485/4~20mA/0~5V/0~10V
Combustible EX	0~100%LEL	1%LEL	RS485/4~20mA/0~5V/0~10V
Chlorine gas(CL_2)	0~100/1000ppm	0.1ppm	RS485/4~20mA/0~5V/0~10V
Sulfur hexafluoride(SF_6)	0~1000ppm	1ppm	RS485/4~20mA/0~5V/0~10V

PRODUCT TYPE

MULTIFUNCTIONAL GAS DETECTION

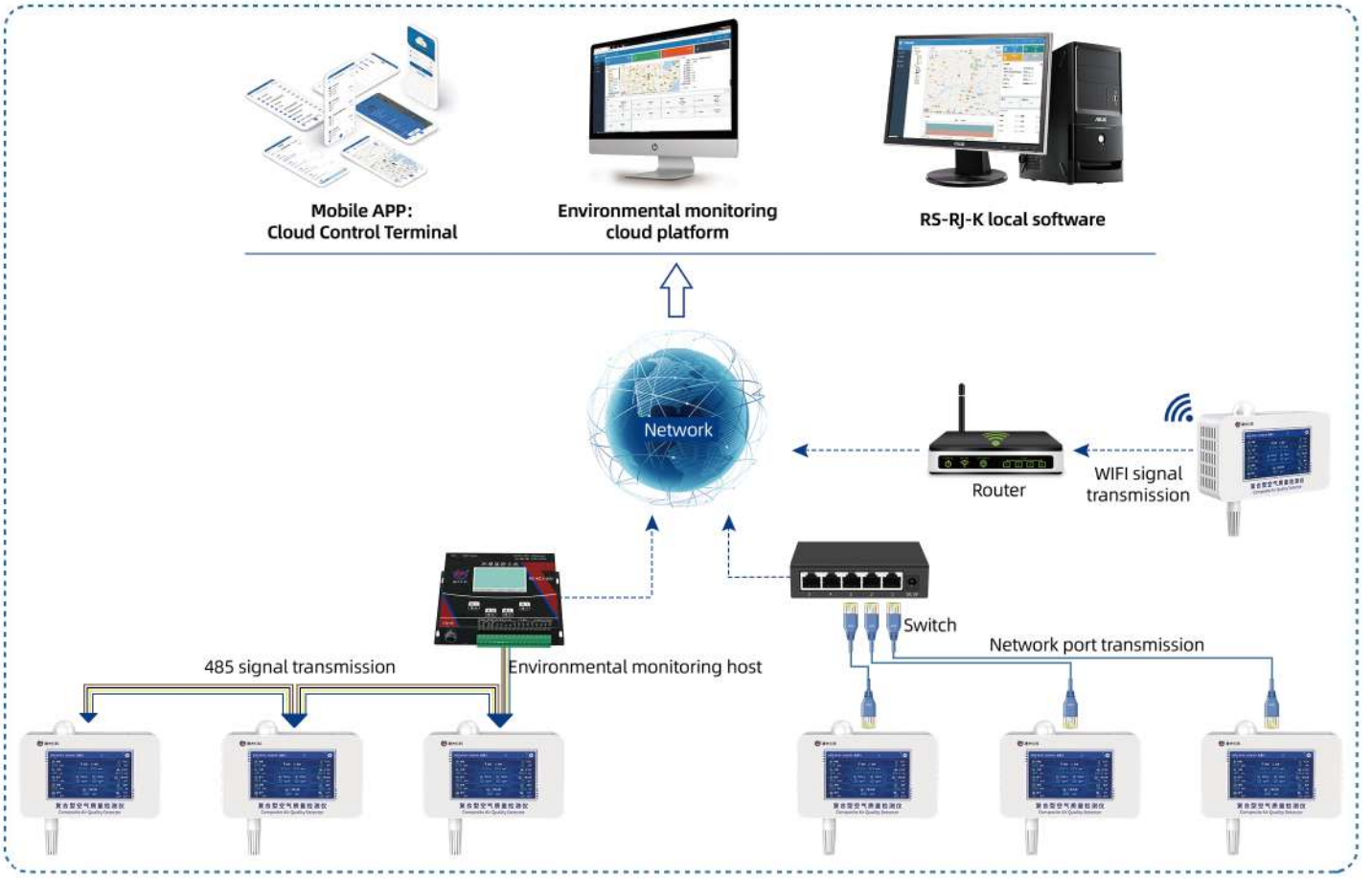
Air Quality Monitor

RS-MS111-N01-1-EX is an air quality monitor independently developed by our company. The device is equipped with a large-screen LCD display, which has a user-friendly interface and is easy to operate. It is used to detect various elements in the air environment, including temperature, humidity, PM2.5, PM10, TSP, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2, H_2, H_2S, NH_3, etc., basically covering all the indicators reflecting air quality.

RS-MS111/MS211-*-1-EX

- Integrates multiple measurement elements, up to 15 measurement elements can be integrated simultaneously
- 4.3-inch large screen LCD display, with a simple and friendly interface; touch screen control is simple and intuitive
- Measures temperature, humidity, PM2.5, PM10, TSP, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2, H_2, H_2S, NH_3, etc.
- Wall-mounted installation, easy to install
- Power supply: 10~30V wide voltage
- Working environment: Temperature: -10℃~55℃; Humidity: 0~95%RH without condensation
- Output signal: 485 type, ETH type, WIFI type
- Product material: ABS Installation method: Wall-mounted

Application topology diagram:



Odor Sensor

RS-SG-N01-*-EX

The odor sensor designed by our company adopts imported electrochemical and semiconductor odor sensors, which are used to measure the odors and unpleasant smells of food spoilage, animal manure, etc. in the environment. It features rapid and sensitive response, strong anti-interference ability. With our company's unique compensation algorithm and multi-stage standard gas calibration, it also has the characteristics of long service life, high precision, high repeatability and high stability. It is suitable for places such as garbage treatment plants and public toilets where odor concentration needs to be detected.

- Adopt imported electrochemical, semiconductor sensor, stable and durable
- Range 0-5ppm(electrochemical type), 0.03~3ppm(semiconductor type) optional, other range can also be customized
- It can be optionally equipped with a high-quality OLED display, allowing direct viewing of the values on site and clear display even at night
- Field power supply adopts 10~30V DC wide voltage power supply, which can adapt to a variety of field DC power supply
- The product adopts wall-mounted waterproof shell, easy installation, high protection level can be applied to harsh field environment
- Output signal: RS485/4~20mA/0~5V/0~10V
- Odor resolution: 0.001ppm
- Odor accuracy: High-precision type: Typical accuracy: ±5%FS(@H_2S, 500ppb)
  Electrochemical type: Typical accuracy: ±10%FS(@H_2S, 5ppm)
  Semiconductor type: ±13%FS(@C_2H_6O,5ppm, 20℃ 65%RH)

(Probe extension type)

(External probe type)

PRODUCT TYPE

MULTIFUNCTIONAL GAS DETECTION

Multi-functional Air Quality Sensor for Public Toilets

RS-GC111-*-1-EX

- It integrates multiple measurement elements and can simultaneously integrate up to 11 measurement elements
- Specifically designed for public toilet environment detection, NH_3 and H_2S sensors specifically designed for public toilet environments are selected, featuring high sensitivity
- It can measure multiple elements such as NH_3, H_2S, temperature, humidity, PM2.5, PM10, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2 and H_2
- It adopts a circular arc-shaped shell, it can be ceiling-mounted or wall-mounted with our provided base
- Output signal: RS485 output (standard ModBus-RTU protocol) and WIFI wireless transmission are optional
- Product dimensions: ϕ168mm

Imported high-precision chip
Industrial grade sensor
Good stability

Designed for public toilets
Dual frequency data acquisition
Automatic calibration technology

RS-SF6O2WS-N01-MP-EX

Sulfur Hexafluoride Oxygen Temperature and Humidity Monitor

Power supply: 10~30V DC
Measurement range: SF_6: 0-1000ppm
O_2: 0-30%Vol
Temperature: -40℃~+80℃
Humidity: 0~99%RH
Pressure range: 90~110kPa
Working temperature: -10~60℃
Working humidity: 0-95%RH, non-condensation
Measurement principle: NDIR
The structure is reasonable to prevent SF_6 from accumulating inside the shell for a long time
Product dimensions: 192mm*105mm*55.8mm

RS-SF6*-*-2-*-EX

Wall-mounted SF6 Sensor

Power supply: 10~30V DC (0~10V output type can only supply 24V)
Accuracy: SF6: 0~1000ppm: ±10% (@500ppm, 60%RH, 25℃)
0~2000ppm: ±10% (@2000ppm, 60%RH, 25℃)
Temperature: ±0.5℃ (25℃)
Humidity: ±3%RH (60%RH, 25℃)
Measuring range: SF6: 0~1000ppm
Temperature: -40℃~+80℃
Humidity: 0~100%RH
Output signal: 4~20mA/0~5V/0~10V/RS485
Zero drift: ±3ppm
Working environment: -20~50℃; 15~95%RH (non-condensing)

RS-FPC-SF6-1000P-*-EX

Explosion-proof SF6 Detector

Power supply: 10~30V DC (0~10V output type can only supply 24V)
Output signal: 4~20mA/0~5V/0~10V/RS485
Repeatability: ≤3%
Stability: ≤2% signal value/month
Zero drift: ±3ppm
SF6 maximum permissible error:
0~1000ppm: ±10% (@500ppm, 60%RH, 25℃)
0~2000ppm, 0~3000ppm: ±10% (@2000ppm, 60%RH, 25℃)
SF6 resolution: 1ppm
SF6 measuring range: 0~1000ppm, 0~2000ppm, 0~3000ppm (optional)
Working environment: -20~50℃; 15~90%RH (non-condensing)

RS-*-*-N01-C-EX

Single Gas Monitor

Power supply: 10~30 V DC
Average power consumption: 0.6W(24V DC)
Output signal: RS485
Repeatability: $NH_3/H_2/CO$(1000ppm)$/H_2S/CH_4/NO_2/SO_2/O_3/PH_3$: ≤2%
CO(2000ppm): ≤3%
O_2: ≤1%
Working temperature:
$H_2/CO/H_2S/CH_4/NO_2/SO_2/O_2/NH_3/PH_3/O_3$: -10~50℃
Working humidity:
$NH_3/H_2/CO/H_2S/NO_2/SO_2/O_3/PH_3$: 15~90%RH no condensation
O2: 5-95%RH no condensation
CH4: 0-95%RH no condensation
Preheat time: $NH_3/CH_4/H_2/CO/H_2S/NO_2/SO_2/O_3/O_2/PH_3$: ≥5 minutes

PRODUCT TYPE

MULTIFUNCTIONAL GAS DETECTION

AQI Sensor

RS-MG111-*-1-EX is a multi-element air quality sensor independently developed by our company. It is used to detect various elements in the air environment such as temperature, humidity, PM2.5, PM10, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_2, CO, CH_4, SO_2, NO_2, H_2S, NH_3, etc., basically covering all the indicators reflecting air quality.

- The temperature and humidity measurement unit is imported from Switzerland, and the measurement is accurate
- The pressure range is a wide range of 0-120kPa and can be applied to various altitudes
- PM2.5 and PM10 collected at the same time, The range: 0-1000μg/m³, Resolution: 1μg/m³
- It features unique dual-frequency data acquisition and automatic calibration technology, with a consistency of ±10%
- The gas unit adopts electrochemical and catalytic combustion sensors, which have excellent sensitivity and repeatability
- Product dimensions: ϕ168mm

RS-MG111-*-1-EX

- High precision sensor
- More accurate monitoring
- Stable and durable

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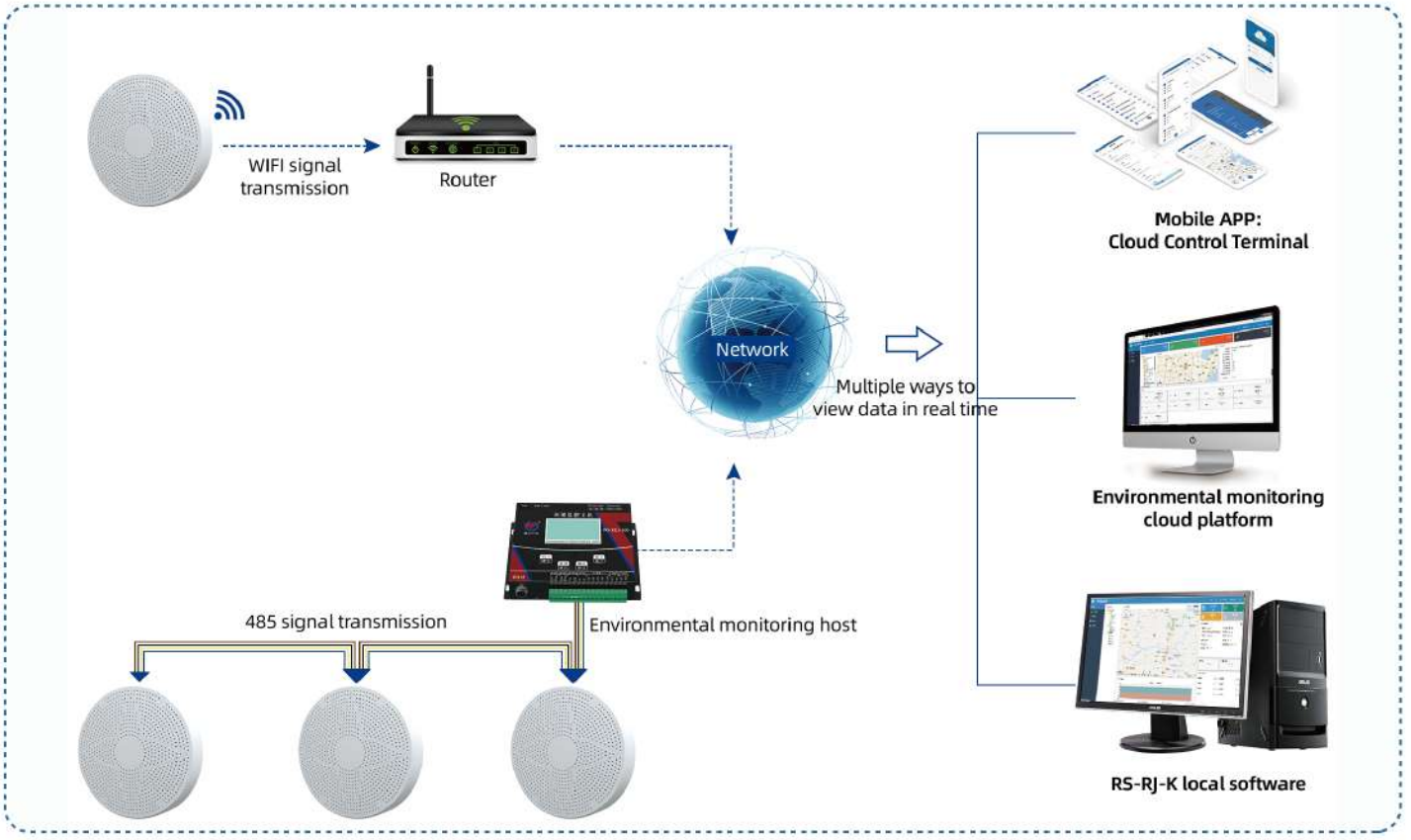
- 11 elements detection
- Multifunctional all-in-one machine
- Mature technology

- Dual frequency acquisition
- Automatic calibration
- High sensitivity and repeatability

Application topology diagram:



Handheld Single Gas Detector RS-MG41-*-EX

This device is a handheld single gas detector developed by our company for environments containing toxic and explosive gases. It can detect any one of the following gases: NH_3, H_2, CO, H_2S, CH_4, NO_2, SO_2, O_3, PH_3 and O_2.

- The product adopts electrochemical sensors, which have excellent sensitivity and repeatability
- The high-definition color screen design makes it convenient to view the gas status
- The product shell has high strength
- The product features full-function self-testing and adopts a three-level alarm system of sound, light and vibration
- It can store up to 100,000 pieces of data and view historical data at any time in conjunction with the software
- With a large-capacity battery, the device can be used continuously for 8 hours in constant light mode
- Product dimensions: 135mm*66mm*32mm

Portable 4 in 1 Gas Detector RS-MG41-1-EX

This device is an protable 4 in 1 gas detector developed by our company for environments containing explosive or toxic gases. It has passed the CPA metrology certification and can simultaneously detect four gases: oxygen, flammable gas, carbon monoxide, and hydrogen sulfide.

- The shell has high strength
- The high-definition color screen design makes it convenient to view the gas status and allows for the setting of high and low limit alarm values
- It can detect four gases: oxygen, combustible gas, carbon monoxide and hydrogen sulfide
- The product features full-function self-testing and adopts a three-level alarm system of sound, light and vibration
- The product adopts electrochemical and combustion sensors, featuring excellent sensitivity and repeatability
- Product dimensions: 135mm*66mm*32mm

INCLINOMETER
VIBRATING WIRE SENSOR
RAIN GAUGE
LEVEL SENSOR
FLOW METER

GEOLOGICAL DISASTER

Geological/Hydrological Hazard Monitoring Equipment

Fixed Inclinometer

The fixed inclinometer uses a gravity acceleration sensor as the sensitive element, featuring high measurement accuracy. It is widely used to observe the horizontal displacement changes inside the soil and pile bodies in earth-rock DAMS, embankments, building foundations, mines, foundation pit excavation, rock and soil slopes, etc. It can achieve the automation of inclination measurement. By installing multiple fixed inclinometers in one borehole, the inclination changes can be monitored more accurately It is a precision measuring instrument essential for engineering construction monitoring.
The output signal type is RS485, and the communication protocol is ModBus-RTU. It can communicate up to 2000 meters and supports secondary development.

RS-SLA-N01-1-EX

- The product built-in reliable, high resolution, high precision gravity acceleration chip
- The built-in high precision temperature chip provides full range temperature compensation to effectively combat environmental interference
- 485 communication enables long-term automated measurement
- It can upload data such as X-axis angle, Y-axis angle and ambient temperature in real time

Tilt Sensor & Inclinometer

The tilt sensor determines the tilt status of the equipment by detecting the tilt angle in the usage environment and can be used outdoors for a long time. It is widely applied in industries such as industrial inclination measurement, dangerous building monitoring, ancient building protection monitoring, bridge and tower inclination measurement, tunnel monitoring, dam monitoring, inclination compensation for weighing systems, and drilling inclination control. It is safe and reliable, has an attractive appearance, and is easy to install.

- The product built-in reliable, high resolution, high precision acceleration chip
- The built-in high precision temperature chip provides full range temperature compensation to effectively combat environmental interference
- It has a wide angle measurement range, and the output signal linearity is good, which can be used in most environments
- It can upload X-axis angle, Y-axis angle, ambient temperature, electricity, signal and other data in real time

Tilt Sensor & Inclinometer
(485 type/analog type)

RS-DIP-*-1-EX

High precision tilt sensor(485 type)

RS-DIP-N01-1H-EX

High precision tilt sensor(LORA type)

RS-DIP-LORA-1H-EX

PRODUCT TYPE
GEOLOGICAL HAZARD MONITORING

Vibrating Wire Sensor/Collector

Vibrating wire collector

The vibrating wire collector is used in conjunction with the vibrating wire sensor to collect the signal from the vibrating wire sensor. It processes and analyzes the stability of the signal internally, calculates the frequency value, and then directly converts it into the corresponding physical quantity.

- It is embedded with high-resolution frequency measurement elements, has a wide range of applications, and supports the collection of most vibrating wire sensors on the market
- It supports internal direct conversion of frequency into corresponding physical quantities to reduce later data processing
- Provide a variety of data monitoring software for users to view real-time data and historical change curve in the background
- Supports multiple signal outputs such as RS485, LORA
- Built-in excitation voltage protection measures to prevent excessive excitation voltage damage to the sensor

LCD waterproof case type

RS-ZXCJ-*-FCS-EX

Explosion-proof housing type with display

RS-ZXCJ-*-FPCH-EX

Handheld

RS-ZXCJ-HHT-*-EX

Small waterproof shell type

RS-ZXCJ-DY-N01-3-EX

Multi-channel vibrating wire sensor collector

RS-ZXCJ-TD8-*-A-1-EX

Vibrating wire type anchor cable gauge collector

RS-ZXMSCJ-DY-N01-1-EX

Wireless vibrating wire sensor collector

RS-ZXCJ-GDT-EX

Vibrating Wire Surface Strain Gauge

The vibrating wire surface strain gauge is suitable for long-term installation in hydraulic structures or other concrete structures to measure the strain inside the structures. By adding the matching accessories, multi-directional strain gauge groups, stress-free gauges and rock strain gauges can be formed. If a temperature sensor is installed, the temperature at the installation point can be measured synchronously, which is suitable for scenarios such as Bridges, tunnels, rail transit, water conservancy and buildings.

RS-ZX/ZXT-BMYB-1-EX

- Temperature measurement: Temperature sensor can be added,-20~+60℃
  Sensitivity: 0.1Hz Default line length: 2m
- Measuring distance and range: 100mm(Stretch: 800με, Compression: 800με), other measuring distance and range support customization
- It is designed by vibrating string theory and made of stainless steel structure
- Sensitive to concentrated load, reliable measurement value and good stability
- With our company's vibrating string sensor collector can realize real-time monitoring of the background terminal

Vibrating Wire Osmometer

The vibrating wire osmometer is a sensor used to measure seepage water or static pressure. The variation of pore water pressure during the construction process serves as the basis for construction control. In regional stability analysis, the distribution state of pore water pressure can be used as the basis for stability calculation. It is applicable to the measurement of seepage (infiltration line) and water pressure such as reservoir water level in projects like DAMS, tunnels, roadbeds and slopes.

RS-ZX/ZXT-SYJ-1-EX

- It is designed by vibrating string theory and made of stainless steel structure
- It has the advantages of high sensitivity and accuracy, good linearity and stability
- It is sensitive to concentrated loads, has reliable measured values and good stability
- Support the addition of temperature detection function
- With our company's vibrating string sensor collector can realize real-time monitoring of the background terminal

Vibrating Wire Rebar Gauge

The vibrating wire rebar meter (Also known as: rebar stress meter, anchor bolt stress meter, concrete support axial force meter) is a device used to monitor the stress of rebars in reinforced concrete structures, including the stress of rebars and environmental temperature in all concrete structures such as DAMS, bridges, prefabricated and cast-in-place concrete pile foundations, anti-seepage walls, and large and medium-sized buildings. Rebar gauges are also used to measure the stress of anchor rods. If a temperature sensor is installed, the temperature at the installation point can be measured synchronously.

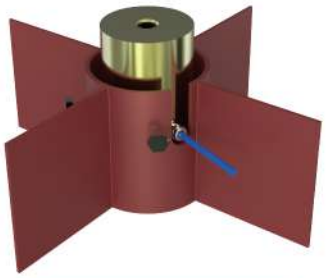
RS-ZX/ZXT-GJJ-1-EX

- The sensor has high resolution and strong anti-jamming performance
- Sensitive to concentrated load, reliable measurement value and good stability
- Support to add temperature detection function
- With our company's vibrating string sensor collector can realize real-time monitoring of the background terminal

PRODUCT TYPE
GEOLOGICAL HAZARD MONITORING

Vibrating Wire Type Axial Force Gauge

The vibrating wire type axial force gauge (Also known as the reaction force gauge or load gauge) is a sensor used to measure the internal stress of structures. Its working principle is to reflect the changes in stress based on the variations in vibration frequency. The vibrating wire axial force gauge mainly consists of vibrating wires, sensing elements, signal amplifiers and data processing systems, etc. It is mainly used in bridge monitoring, tunnel monitoring, building monitoring, dam monitoring and foundation pit support monitoring. It can measure the reaction force of the foundation to the superstructure, the axial force of steel support and the load of static pile experiment for a long time. If the temperature sensor is installed, the temperature of the installation point can be measured synchronously.



RS-ZX/ZXT-ZLJ-1-EX

- The sensor has high resolution and strong anti-interference performance
- It is sensitive to concentrated loads, has reliable measured values and good stability
- Support the addition of temperature detection function
- With our company's vibrating string sensor collector can realize real-time monitoring of the background terminal

Vibrating Wire Anchor Cable Gauge

Vibrating wire anchor cable gauge (Also known as pressure load boxes, axial force meters, etc.) are used for monitoring anchor cables, anchor rods and other heavy loads, including real-time online monitoring of loads such as concrete DAMS, underground chambers, slopes, foundation pit supports, Bridges and reaction beams. If a temperature sensor is installed, the temperature at the installation point can be measured synchronously.

RS-ZX/ZXT-MSJ-10-EX

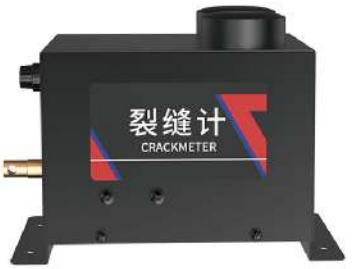
- It is designed by vibrating string theory and made of stainless steel structure
- It has the advantages of high sensitivity and accuracy, good linearity and stability
- It is sensitive to concentrated loads, has reliable measured values and good stability
- Support the addition of temperature detection function
- With our company's vibrating string sensor collector can realize real-time monitoring of the background terminal

Vibrating Wire Earth Pressure Gauge

Vibrating wire earth pressure gauge (Alias: pressure load box, axial force meter, etc.) is used for monitoring anchor cables, anchor bolts and other heavy load, including: concrete dam, underground chamber, slope, foundation pit support, bridge and reaction beam load real-time online monitoring.If a temperature sensor is installed, the temperature of the installation point can be measured simultaneously.
With the vibrating string sensor collector of our company, real-time data of field sensors can be collected and converted into corresponding physical quantities, and uploaded through 485, LORA and other data transmission methods.

RS-ZX/ZXT-TYLJ-1-EX

- The sensor has high resolution and strong anti-interference performance
- It is sensitive to concentrated loads, has reliable measured values and good stability
- Support the addition of temperature detection function
- With our company's vibrating wire sensor collector can realize real-time monitoring of the background terminal



RS-LSLF-DC-LORAH-EX

Wire-type Crack Gauge

Power supply: Built-in battery powered
Power consumption: 7.4mW (default wake-up interval)
Range: Crack 0~1000mm
Tilt angle: X-axis-180°~180°, Y-axis -90°~90°
Accuracy: Crack 0.2%
Tilt angle: Static accuracy 0.1°, dynamic accuracy ±0.5°
Resolution: Crack 0.1mm
Tilt angle 0.01°
Upload interval: Default 60 minutes, minimum upload interval can be set to 1 minute
Working temperature: -35~60℃
Working humidity: ≤95%

RS-LGLF-DC-LORAH-100-1-EX

Rod-type Crack Gauge

Power supply: Built-in battery powered
Power consumption: 7.6mW (default interval)
Range: Crack 0~100mm
Tilt angle: X-axis -180°~180°, Y-axis -90°~90°
Accuracy: Crack 0.05%
Tilt angle: Static accuracy 0.1°, dynamic accuracy ±0.5°
Resolution: Crack 0.1mm
Tilt angle 0.01°
Upload Interval: Default 60 minutes, minimum upload interval can be set to 1 minute
Working temperature: -35~60℃
Working humidity: ≤95%

Water Level Sensor

RS-PM200-EX

The front protective cap of the PM200 series submersible level transmitter not only protects the sensor diaphragm but also enables the liquid to come into smooth contact with the diaphragm. The waterproof wire is sealed and connected to the housing, and the vent pipe is connected to the outside inside the cable. The internal structure is designed to prevent condensation. It is equipped with a built-in miniature signal processing circuit for remote transmission. It features excellent stability and reliability, and is suitable for various industries where precise measurement of fluid pressure is required.
It can be widely applied to liquid level measurement and control in water plants, sewage treatment plants, urban water supply, high-rise water tanks, Wells, geothermal Wells, mines, industrial water tanks, oil tanks, hydrogeology, reservoirs, rivers, oceans and other fields.

- Reverse polarity protection and instant over-current and over-voltage protection, in line with EMI protection requirements
- Use high quality air conduction cable, can soak in water all year round; Made of anti-corrosion stainless steel, it is suitable for various occasions
- Strong ability of overload and anti-interference, economic and practical stability
- The core automatic correction algorithm can effectively prevent numerical fluctuations caused by water surface fluctuations
- Slope type drainage hole, can effectively prevent silt impurities into, can also prevent impact
- Probe input measuring method, easy to install
- 10~30V wide power supply voltage input, RS485 signal output, the longest communication distance up to 2000 meters

PRODUCT TYPE
HDROLOGICAL HAZARD MONITORING

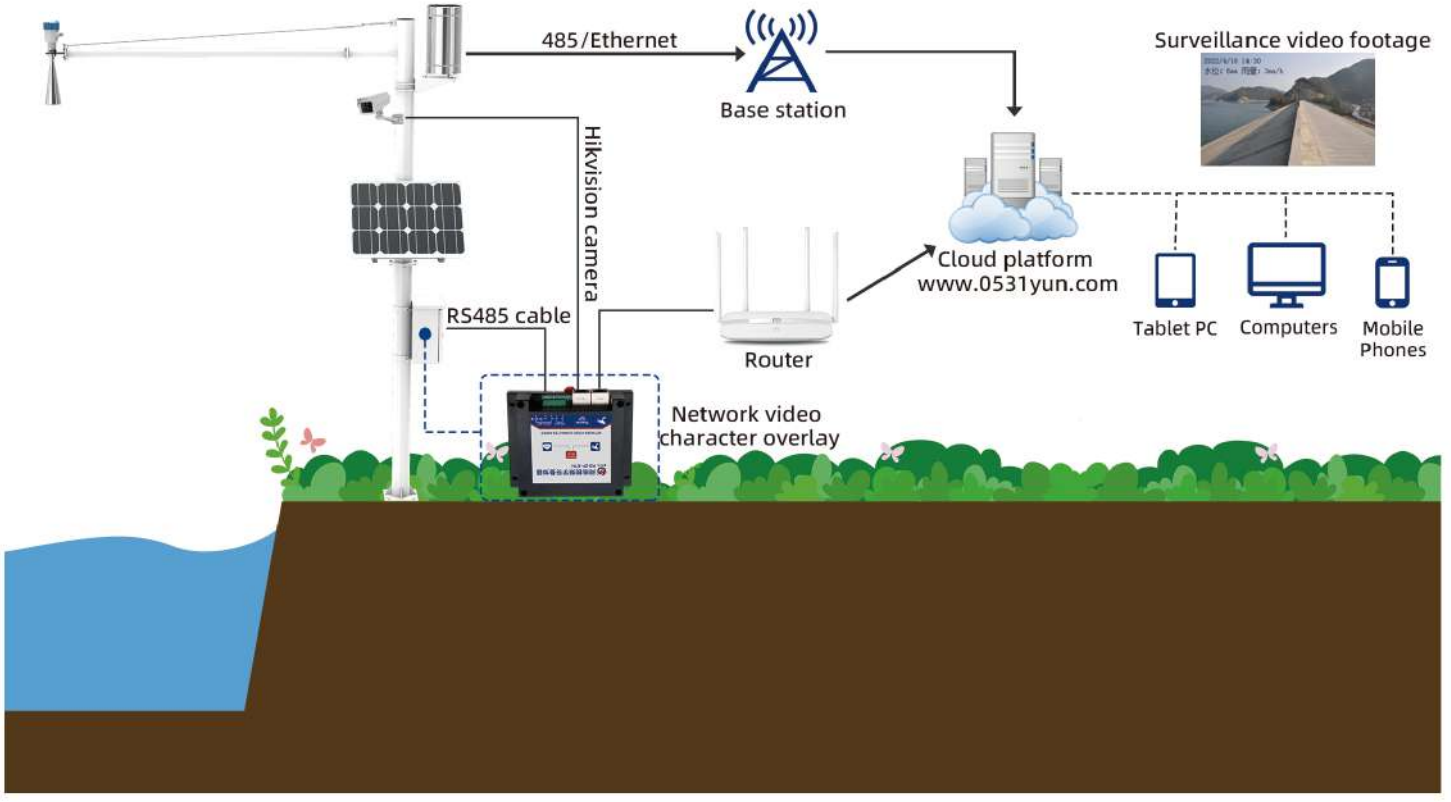
Water and Rainfall Monitoring Station

The water and rainfall monitoring station is a standard meteorological station configured by our company. This device is equipped with 1 ModBus-RTU master interface, 1 rainfall collection channel and 1 relay output channel. Either a radar water level gauge or an ultrasonic water level gauge can be selected. Meanwhile, this weather station is equipped with one ModBus-RTU slave interface, which can upload data to the customer's monitoring software or PLC configuration screen, etc. via 485 communication. It can also be externally connected to one LED screen for display (default dot matrix number 96*48).

- The external tipping bucket rain gauge can collect total rainfall, instantaneous rainfall, daily rainfall and current rainfall
- Optional 1 relay output, can do remote manual control
- A variety of measurement elements can be freely combined
- Equipped with solar panels and batteries, it is used for field measurement to solve power supply problems
- Support mains power and solar power supply, to ensure that the equipment in bad conditions can also work normally without interruption
- The device has a unique 8-digit address, which is easy to manage and identify. It can be paired with various software platforms provided by our company

RS-RADN/USCN-M20-*-ETH-EX

Topology diagram of the water and rainfall monitoring system:



Radar Flow Meter

This sensor can detect water flow velocity and water level height. The flowmeter uses radar technology to achieve simple and fast non-contact measurement of water surface flow velocity. When the non-contact radar flow measurement system measures speed, the equipment is not corroded by sewage and is not affected by sediment. The surface flow velocity of the fluid is collected, and the average flow velocity of the water passage section is calculated through the model. Then, the water level and section information measured by the water level gauge are connected to calculate the area of the water passage section. Thus, the flow rate is obtained by using the formula flow rate = average flow velocity X water passage section area X correction factor, where the correction factor is calculated based on the standard value obtained from the actual measurement environment.

- Non-contact measurement, free from the influence of sand and mud, and easy to maintain
- It can detect water flow velocity, water level height, water volume and flow rate
- 485 communication, standard ModBus-RTU communication protocol, with a maximum communication distance of 2000 meters
- It is powered by a wide DC voltage range of 10~30V
- Distance range: 0.1~65 meters (maximum range when measuring water level only)
- Waterproof design, can be used outdoors, can be used with the company's water and rain conditions pole, host
- The power supply of the product is 10~30V wide voltage supply, mainly used in channels, rivers and other occasions requiring flow and water level monitoring

RS-RAD-N01-3-EX

Radar Level Sensor

The radar water level gauge series products refer to frequency-modulated continuous wave (FMCW) radar products operating at 76-81 GHZ. The maximum measurement range of the product can reach 70m, and the blind zone is within 10cm. Because of its higher working frequency, larger bandwidth and higher measurement accuracy. The product offers a bracket fixation method and is used in conjunction with our company's water and rain situation poles and main units.

- Based on the self-developed CMOS millimeter-wave RF chip, a more compact RF architecture, higher signal-to-noise ratio and smaller blind area are realized
- The working bandwidth is large, so that the product has higher measurement resolution and measurement accuracy
- The narrowest 6° antenna beam Angle, the interference in the installation environment has less influence on the instrument, and the installation is more convenient
- Integrated lens design, compact in size and easy to install
- Low power consumption and long service life

RS-RAD-N01-1-EX

PRODUCT TYPE
HDROLOGICAL HAZARD MONITORING

RS-YL*-*-2-EX

ABS Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.2mm/0.5mm (optional)
Sharp edge angle: 40°~45°
Working temperature: 0°C~55°C
Working humidity: <95%(at 40°C)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ±0.32mm
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*260mm

ABS tipping bucket
ABS rain socket

RS-YL-*-4-EX

Stainless Steel Single Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.2mm/0.5mm
Sharp edge angle: 40°~45°
Working temperature: 0°C~55°C
Working humidity: <95%(at 40°C)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*430mm

Stainless steel tipper

RS-YL-*-5-EX

All-stainless Steel Single Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.1mm/0.2mm/0.5mm
Sharp edge angle: 40°~45°
Working temperature: 0°C~55°C
Working humidity: <95%(at 40°C)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±4%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*360mm

ABS tipping bucket stainless steel rain socket

RS-YL-*-6-EX

Stainless Steel Single Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.2mm/0.5mm
Sharp edge angle: 40°~45°
Working temperature: 0°C~55°C
Working humidity: <95%(at 40°C)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*360mm

ABS tipping bucket stainless steel rain socket

RS-YL*-*-6S-*-EX

Stainless Steel Double Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.2mm/0.1mm (optional)
Sharp edge angle: 40°~45°
Working temperature: 0℃~55℃
Working humidity: <95%(at 40℃)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*430mm

RS-YL*-*-6SP-*-EX

All-stainless Steel Double Tipping Bucket Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.2mm/0.1mm (optional)
Sharp edge angle: 40°~45°
Working temperature: 0℃~55℃
Working humidity: <95%(at 40℃)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±3%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*430mm

RS-YL-*-7-EX

All-stainless Steel Rain Gauge

Rain gauge cylinder diameter: ϕ200mm
Resolution: 0.5mm/0.2mm/0.1mm (optional)
Sharp edge angle: 40°~45°
Working temperature: 0℃~55℃
Working humidity: <95%(at 40℃)
Output signal: Pulse signal output/RS485/4~20mA/0~2V/0~5V/0~10V
Measurement accuracy: ≤±4%
Rain intensity range: 0mm~4mm/min, allowed through the maximum rain intensity of 8mm/min
Product dimensions: 200mm*360mm
(Upgradable height: 430mm, 510mm)

RS-GYL-*-1-EX

Optical Rain Gauge

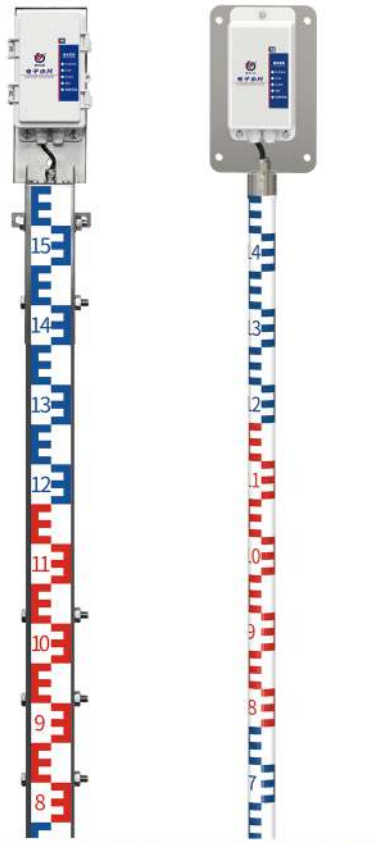
Rain-sensing diameter: 6cm
Power supply voltage: 9~30V DC
Power consumption: Less than 0.24W(12VDC, current less than 20mA)
Resolution: Rainfall: Standard 0.1mm Light: 1Lux
Accuracy: Rainfall: ±5%(Data from Renke Laboratory)
Illumination accuracy: ±7%(at 25℃)
Maximum instantaneous rainfall: 24mm/min
Output signal: Pulse signal output/RS485

PRODUCT TYPE
HDROLOGICAL HAZARD MONITORING

Water Level Staff RS-DR-*-1-EX

The equipment adopts an advanced processor chip as the controller and acquires data by measuring the water level of the electrode, featuring extremely high precision and anti-interference capability. It can be used for water level monitoring in water conservancy projects such as rivers, lakes, reservoirs, hydropower stations, irrigation areas and water conveyance. It can also be applied to the monitoring of water levels in municipal projects such as tap water, urban sewage treatment, and urban road waterlogging.

By adopting advanced production techniques, stainless steel is used as the shell protection material, and the interior is specially treated with materials with high sealing performance, ensuring that the product is not affected by external environments such as slurry, corrosive liquids, pollutants, and sediment.



(Square shell) (Round tube shell)

- Power supply: 10~30V DC
- Water level measurement accuracy: 1cm(full range, equal accuracy)
- Resolution: 1cm
- Output signal: RS485/4~20mA/0~5V/0~10V
- Maximum power consumption of the host: RS485 output: 0.8W, Analog type: 1.2W
- Range: 50cm, 100cm, 150cm, 200cm, 250cm, 300cm..... 80cm, 160cm, 240cm, 320cm, 400cm, 480cm..... It is available in any combination of lengths of 50cm and 80cm electronic water scale sections
- Installation method: Wall-mounted

Doppler Current Meter RS-DOPL-N01-1/2-EX

In the field of acoustics, when there is relative motion between the sound source and the receiver (i.e., the probe and the reflector), the frequency of the echo will change. This frequency change is called frequency shift, or the doppler effect. The frequency of sound waves increases as they move towards the observer and decreases as they move away from it. The doppler current meter calculates the flow velocity by calculating the frequency variation.

- Power supply: DC10~15V
- Power consumption:
  Working current: ≤40mA/12V(at the moment of transmission)
  Standby current: ≤20mA/12V
- Sound wave frequency: 2MHZ
- Flow rate range: 0.03m~5m/s
- Flow velocity accuracy: ±1.0%±1cm/s
- Water level range: 0.03m~5m (10m can be customized)
- Water level accuracy: 0.3%±0.5cm
- Temperature range & accuracy: -10℃~60℃, ±1℃
- Instantaneous flow range: 0~99.99m^3/s
- Cumulative flow range: 0.1m^3~999999m^3

Handheld Doppler Current Meter

RS-SCLS-N01-1/2-EX

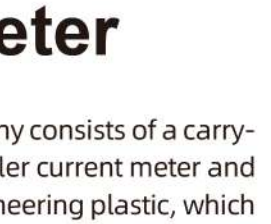
The recorder adopts a large-sized full-color LCD screen, which can display readings in real time. At the same time, it uses a detection circuit designed with digital chips from international major manufacturers, achieving extremely high sensitivity and excellent repeatability. Moreover, this recorder integrates measurement, storage, recording and analysis. The housing of the doppler flowmeter is made of ABS engineering plastic, which is sturdy, impact-resistant and can effectively seal and prevent water. It is small in size, high in precision, light in weight and has a wide range of measurement coverage.

If the bidirectional measurement version is selected, it can distinguish the direction of water flow on the basis of measuring the flow velocity, statistically analyze the flow in different directions, and calculate the forward net flow. It is applicable to places in various industries where fluid flow velocity needs to be measured, and is widely used in open channels, rivers and non-full pipe metering and monitoring.

- Can directly display the measurement results, simple and convenient, low measurement cost, fast measurement speed
- The measurement accuracy is high and the measurement variety is rich
- Large-sized color display screen with an attractive interface
- Data can be exported with one click, which is convenient and fast
- 485 devices can be freely connected
- Large storage space, up to 34w pieces of data
- Over-limit alarm, multiple prompts
- Use high quality air conductor cable, can soak in water all year round

Portable Doppler Current Meter

The portable doppler current meter developed and designed by our company consists of a carrying case, a detection rod, a handheld rapid measurement recorder, a doppler current meter and a bluetooth printer. The doppler current meter housing is made of ABS engineering plastic, which is sturdy, impact-resistant and can effectively seal and prevent water. It is small in size, high in precision, light in weight, and has a wide range of measurement coverage. It can distinguish the direction of water flow, statistically analyze the flow rate in different directions, and calculate the forward net flow rate. It is applicable to places in various industries where fluid flow velocity needs to be measured, and is widely used in open channels, rivers and non-full pipe metering and monitoring.



- Can directly display the measurement results, simple and convenient, low measurement cost, fast measurement speed
- The measurement accuracy is high and the measurement variety is rich
- Large-sized color display screen with an attractive interface
- All the equipment adopts electronic design, wide voltage power supply, low power consumption, no mechanical parts.Measurement accurate and stable
- It features high reliability and strong anti-interference ability
- Large storage space, up to 340000 pieces of data
- Over-limit alarm, multiple prompts
- Use high quality air conductor cable, can soak in water all year round

RS-BXLX-N01-1/2-EX

TEMPERATURE AND HUMIDITY SENSOR

DUCT WIND SPEED SENSOR

DIFFERENTIAL PRESSURE SENSOR

GAS SENSOR

AIR QUALITY SENSOR

NOISE SENSOR

WATER LEAK SENSOR

BUILDING AUTOMATION

HVAC Fresh Air

RS-WS-*-2D-*-EX

Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Easy to install, it can be wall-mounted or rail-mounted
Product dimensions: 122mm*102mm*36mm

RS-WS-*-2D-LCD-*-EX

Indoor Type LCD Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.4W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Range: Temperature: -40℃~+120℃ default -40℃~+80℃
Humidity: 0%RH-100%RH
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: The shell is equipped with an LCD liquid crystal display screen, which is elegant and generous, and has a high anti-dust protection level
Product dimensions: 122mm*102mm*36mm

RS-WS-*-5-EX

Temperature and Humidity Sensor EE10

Power supply: 10~30V DC(P≤0.2W)
Accuracy: Temperature: ±0.5℃(25℃)
Humidity: ±3%RH(60%RH, 25℃)
Range: Temperature: -40℃~+80℃
Humidity: 0%RH~100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -40℃ ~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Wall-mounted installation, suitable for HVAC measurement and control
Product dimensions: 100mm*85mm*26mm

RS-WS-*-5-LCD-EX

Wall-mounted Temperature and Humidity Sensor

Power supply: 10~30V DC(P≤0.036W)
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH,25℃)
Range: Temperature: -40℃~+80℃ Humidity: 0%RH~100%RH
Response time: Temperature: ≤25s(1m/s wind speed)
Humidity: ≤8s(1m/s wind speed)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Wall-mounted installation, suitable for HVAC measurement and control
Product dimensions: 100mm*85mm*26mm

PRODUCT TYPE
BUILDING AUTOMATION
HVAC FRESH AIR

Duct Temperature Sensor for HVAC

This transmitter is specifically designed for measuring the temperature and humidity of pipelines. It adopts standard industrial interfaces for 4~20mA/0~10V/0~5V analog signal output and can be connected to on-site digital display meters, PLC, frequency converters, industrial control hosts and other equipment. The duct installation method makes on-site installation convenient.

- Power supply: Analog type: 10~30V DC
  Voltage analog type: AC 24V±20% or DC 18~35V(P≤1.3W)
- Temperature accuracy: Analog type: ±0.5℃(25℃)
  Voltage analog type: ±0.3℃(25℃)
- Humidity accuracy: ±3%RH(60%RH, 25℃)
- Range: Temperature: -40℃~+80℃
  Humidity: 0%RH~100%RH
- Output signal: 4~20mA/0~5V/0~10V
- Typical features: Flange mounting, suitable for measuring temperature and humidity inside pipelines
- Product dimensions: 80mm*80mm*225mm Probe: ϕ14mm Flange: ϕ57mm

RS-WS-*-9TH-EX

LCD Duct Temperature Humidity Sensor

The measurement unit imported from Switzerland is adopted, ensuring precise measurement. It adopts a dedicated 485 circuit, ensuring stable communication. It is powered by a wide voltage range of 10-30V, with complete specifications and easy installation.

- Power supply: 10~30V DC(P≤0.4W)
- Accuracy: Temperature: ±0.4℃(25℃)
  Humidity: ±2%RH(60%RH,25℃)
- Range: Temperature: -40℃~+120℃ default -40℃~+80℃
  Humidity: 0%RH~100%RH
- Temp&Hum resistance of transmitter elements: -40℃~+60℃, 0%RH~95%RH(non-condensation)
- Output signal: 4~20mA/0~5V/0~10V/RS485 (ModBus-RTU)
- Typical features: The probe sheath is made of sintered particles, and the probe is directly connected to the housing, resulting in an aesthetically pleasing appearance
- Product dimensions: 110mm*85mm*44mm. Probe length can be customized

RS-WS-*-SMG-*-EX

Metal Duct Temperature and Humidity Sensor

RS-WS-*-ATH/BTH-EX

The transmitter is applied to duct temperature and humidity measurement, using imported temperature and humidity measurement unit, with small drift, accuracy, anti-interference ability and other characteristics, to ensure the excellent measurement performance of the product.This product adopts particle sintered probe sheath, protection class IP65, can be applied to various industrial environments.

- Power supply: RS485 type: DC 7~30V; Analog type: 10~30V DC
- Working environment: -40℃~+60℃, 0%RH~95%RH(non-condensation)
- Temperature and humidity measurement range: -40℃~+120℃ default -40℃~+80℃, 0%RH~100%RH
- Temperature display resolution: 0.1℃
- Humidity display resolution: 0.1RH%
- Output signal: RS485/4~20mA/0~5V/0~10V
- Installation method: G1/2 threaded installation Waterproof grade: IP65
- Product dimensions: Top-opening type: 336.7*122.5*77mm
  Slanted opening type: 332.3*99.47*72.6mm

(Top-opening type)

(Slanted opening type)

PRODUCT TYPE

BUILDING AUTOMATION
HVAC FRESH AIR

RS-WD-*-9C-EX

Industrial Duct Type Temperature Sensor

Power supply: DC12~36V or AC24V(±20%) (P≤0.1W)
Accuracy: ±0.2°C(25°C)
Temperature range: -40°C~120°C default -40°C~+80°C
Temp&Hum resistance of transmitter elements: -40°C~+80°C, 0%RH~99.9%RH(non-condensation)
Probe working environment: -40°C~120°C default -40°C~+80°C, 0%RH-100%RH
Output signal: 4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Typical features: Sliding flange, adjustable installation height
Product dimensions: 88mm*90mm*276mm

RS-WD-*-9C-LCD-EX

Industrial Duct Type LCD Temperature Sensor

Power supply: DC12~36V or AC24V(±20%)(P≤1.2W)
Accuracy: ±0.2°C(25°C)
Temperature range: -40°C~120°C Default: -40°C~+80°C
Temp&Hum resistance of transmitter elements: -20°C~+60°C, 0%RH~99.9%RH(non-condensation)
Probe working environment: -40°C~120°C default -40°C~+80°C, 0%RH-100%RH
Output signal: RS485(ModBus-RTU)
Typical features: Sliding flange, adjustable installation height
Product dimensions: 88mm*90mm*276mm

RS-FST-N01-*-EX

Duct Type Wind Speed and Temperature Sensor

Power supply: 24V(-20%~+10%)AC/19~30V DC (P≤2.4W)
Measured medium: Air, nitrogen, cooking fume and exhaust gas
Accuracy: Temperature: ±0.5°C(25°C)
Wind speed: ±(0.2+2%FS)m/s
Range: Wind speed: default 0~30m/s
Temperature: -40°C~+120°C default -40°C~+80°C
Transmitter circuit working temperature: -40°C~+60°C
Communication protocol: ModBus-RTU communication protocol
Output signal: RS485
Typical features: Open-hole flange installation, high-quality silicone sealing ring, minimal air leakage, and durability
Product dimensions: 80mm*80mm*226.7mm

RS-RFS-*-AC/DC-1-EX

Wind Speed Measuring Instrument

Power supply: 220V AC/10~30V DC
Measured medium: Air, nitrogen, cooking fume and exhaust gas
Accuracy: ±2%FS
Working environment: -40°C~+80°C, ≤95%RH
Range: Wind speed: 0-30m/s
Wind pressure: 0-500Pa
Wind speed display resolution: 0.1m/s
Protection grade: IP65
Parameter settings: Set via keys or 485 commands
Product dimensions: 75mm*88mm*357mm

Air Velocity Sensor

RS-FS-*-9TH-EX-EX

The transmitter is designed for duct wind speed measurement, our independent research and development of high-precision speed measurement unit, sensitive response, can quickly and accurately measure small wind speed, good stability, small drift, high precision. At the same time, the transmitter can calculate the real-time air volume value according to the set measured duct cross-sectional area.The product adopts anti-interference circuit design, which can withstand all kinds of strong electromagnetic interference such as field inverter. The equipment adopts imported screw-free terminal connection, which is more convenient to use.

Integrated air velocity sensor

Without display type

With OLED display type

Split-type air velocity sensor

Without display type

With OLED display type

Low starting wind speed
Open-hole flange mounting
Low air leakage and durable

Support software configuration
Supports DIP switch Settings
Imported screw-free terminal

Specialized EMC anti-interference devices
Centralized power supply for a long distance
Direction marked with wind speed

Product parameters

- DC type equipment power supply: 10~30V DC
- AC and DC equipment power supply: 24V(-20%~+10%)AC/19~30V DC
- Maximum power consumption: DC type: 0.5W AC/DC type: 2.4
- Measured medium: Air, nitrogen, cooking fume and exhaust gas
- Accuracy: ± (0.2+2%FS) m/s
- Transmitter circuit working temperature: -10℃~+50℃
- Communication protocol: ModBus-RTU communication protocol
- Output signal: RS485
- Range: default 0~30m/s
- Wind speed display resolution: 0.1m/s
- Response time: 2s
- Long-term stability: ≤0.1m/s/year

PRODUCT TYPE

BUILDING AUTOMATION HVAC FRESH AIR

RS-YC*-*-2-EX

Differential Pressure Sensor

Power supply: 10~30V DC(P≤0.1W(DC24V))
Accuracy: Temperature: ±0.4℃(25℃)
Humidity: ±2%RH(60%RH, 25℃)
Differential pressure accuracy: ±(3% reading+0.08Pa)@25℃
Pressure difference resolution: 0.1Pa
Differential pressure measurement range: Default -120Pa~120Pa (Optional -200Pa~200Pa, -500Pa~500Pa)
Temp&Hum resistance of transmitter elements: -40℃~+80℃, 0%RH~95%RH(non-condensating)
Output signal: LORA/4~20mA/0~5V/0~10V/RS485 (ModBus-RTU)
It adopts a wall-mounted waterproof case, which is easy to install and has a high protection level
Product dimensions: 110mm*85mm*44mm

RS-YC-*-AL-*-EX

Differential Pressure Sensor (Aluminum Alloy Housing)

Power supply: DC10~30V power supply
(P≤0.3W(less than 0.1W without display))
Output signal: 4~20mA/0~5V/0~10V/RS485
Measurement range: -10kPa~10kPa
Measurement accuracy: ±1%FS
Temp&Hum resistance of transmitter elements: -30℃~+70℃, 0%RH~95%RH(non-condensation)
LCD working temperature: -20℃~+60℃
Pressure interface: Tower mouth ϕ6mm
Shell material: Aluminum alloy
Measured medium: Gas compatible with the material in contact
Product dimensions: With display: 69.4mm*84.6mm*33mm
Without display: 59.4mm*64.7mm*64.7mm

RS-YC-*-2D-*-EX

Differential Pressure Sensor (Industrial Wall-mounted Housing)

Power supply: DC10~30V power supply (P≤0.1W)
Output signal: RS485
Measurement range: -10kPa~10kPa
Measurement accuracy: ±1%FS
Temp&Hum resistance of transmitter elements: -20℃~+70℃, 0%RH~95%RH(non-condensation)
LCD working temperature: -20℃~+60℃
Pressure interface: Tower mouth ϕ6mm
Measured medium: Gas compatible with the material in contact
Product dimensions: 88mm*75mm*41mm

RS-TSP-*-2H-EX

TSP Sensor

Power supply (default): 10~30V DC
Resolution: 1μg/m³
Range: 0-20000μg/m³
Accuracy: ±20% or ±30μg/m³
(Whichever is greater, @1000μg/m³, 25℃, 50%RH)
Working environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Response speed: ≤6s
Warm-up time: ≤2min
Output signal: 4~20mA/0~5V/0~10V/RS485

TVOC Sensor

RS-TVOC-*-2-4-EX

With the development of the construction industry, indoor environmental pollution caused by interior decoration has received increasing attention. TVOC is one of the three organic pollutants in the air (polycyclic aromatic hydrocarbons, volatile organic compounds and aldehydes) that has a relatively serious impact.
Our company's TVOC sensor can effectively monitor the TVOC content in the environment. The product adopts a 485 communication interface and marks the ModBus-RTU communication protocol, which can directly communicate with PLCS, user hosts, configuration software, etc., facilitating secondary development.

- Power supply: DC10~30V(0-10V output type can only supply 24V)
- Working environment: -40℃~+85℃, 0%RH~95%RH non-condensation
- TVOC measurement range: 0~60000ppb
- Measurement object: Volatile organic compounds
- TVOC display resolution: 1ppb
- Data refresh time: 1s Preheating time: ≤24h
- Output signal: RS485(ModBus Protocol)
- It adopts high-sensitivity gas detection probes imported from abroad, with mature technology, stable signals and high accuracy
- Product dimensions: 110mm*85mm*44mm

Single carbon monoxide sensor

Single carbon monoxide sensor with OLED display

RS-CO-*-2-EX

CO Sensor

Power supply: 10~30V DC
CO resolution: 1ppm
CO accuracy: ±5ppm or ±10%
Zero drift: ±3ppm
Working temperature: -20~50℃
Working humidity: 15~90%RH without condensation
Stability: ≤2% signal value per month
Response time: ≤30s
Preheating time: ≥5min
Measurement range: 0-1000ppm, 0-2000ppm
Product dimensions: 110mm*85mm*44mm. Probe length can be customized

RS-CO-*-*-*-EX

Duct CO Sensor

Power supply: 10~30V DC(0~10V output type can only supply 24V)
CO resolution: 1ppm
CO accuracy: ±5ppm or ±10%
Zero drift: ±3ppm
Working temperature: -20~50℃
Working humidity: 15~90%RH without condensation
Stability: ≤2% signal value per month
Response time: ≤30s
Preheating time: ≥5min
Measurement range: 0-1000ppm, 0-2000ppm
Product dimensions: 264mm*85mm*44mm
Pipe length: 220mm

PRODUCT TYPE

BUILDING AUTOMATION HVAC FRESH AIR

Single carbon dioxide sensor

Single carbon dioxide sensor with OLED display

RS-CO2*-*-2-EX

CO2 Sensor

Power supply: 10~30V DC
Measurement range: 0~5000ppm(default)
Optional: 0~2000ppm 0~10000ppm
CO_2 accuracy: 0~5000ppm: ±(45ppm+3%FS)(25℃)
0~10000ppm: ±(45ppm+5%FS)(25℃)
Working environment: -10~+50℃, 0-80%RH(no condensation)
System warm-up time: 2min(available), 10min(maximum accuracy)
Output signal: LORA/4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Product dimensions: 110mm*85mm*44mm. Probe length can be customized

RS-CO2-*-2FL-*-EX

Duct CO2 Sensor

Power supply: 10~30V DC(0~10V type can only supply 24V)
Measuring range: 0~5000ppm
CO_2 accuracy: ±(50ppm+3%FS)(at 25℃)@400-5000ppm
Working temperature: -10℃~+50℃
Working humidity: 0%RH~95%RH(non-condensation)
Stability: <2%FS
Nonlinearity: <1%FS
System warm-up time: 2min(available), 10min(maximum accuracy)
Output signal: LORA/4~20mA/0~5V/0~10V/RS485(ModBus-RTU)
Product dimensions: 264mm*85mm*44mm

Single carbon dioxide sensor

Carbon dioxide temperature and humidity 3-in-1 sensor

RS-CO2*-*-2D/2DY-*-EX

Industrial Wall-mounted Carbon Dioxide Sensor

Power supply: 10~30V DC(P≤0.3W(24V DC))
Range: 0~5000ppm(default)0-10000ppm(optional)
Stability: <5%FS or<10% of the reading per year
Working environment: -10~+50℃, 0-95%RH(non-condensation)
Warm-up time: 2min(available), 10min(maximum precision)
Accuracy: ±(50ppm+3%FS)(25℃)@400-5000ppm
Typical features: It adopts a wall-mounted waterproof case, which is easy to install and has a high protection level
Product dimensions: 147mm*88mm*41mm

RS-PM-*-2-EX

PM2.5 PM10 Sensor

Power supply: 10~30V DC(P≤0.5W)
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH(non-condensation)
Measurement PM2.5/PM10/PM1.0 range: 0-1000μg/m³
Resolution: 1μg/m³
Temperature measurement range: -40~+80℃
Humidity measurement range: 0%RH-100%RH
Response speed: ≤90s Preheating time: ≤2min
Output signal: RS485/4~20mA/0~5V/0~10V
Typical features: Advanced laser anti-attenuation technology is adopted to ensure the long-term stability of the equipment
Product dimensions: 110mm*85mm*44mm

RS-PM-*-2HFL-EX

Duct Type Air Quality Sensor(PM2.5/PM10)

Power supply: 10~30V DC
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH non-condensation
Accuracy:
Particulate matter counting efficiency: 50%@0.3μm, 98%@≥0.5pm
PM2.5: ±3%FS (@100μg/m³, 25℃, 50%RH)
Measurement range: PM2.5: 0~1000μg/m³ PM10: 0~1000g/m³
Response time: ≤90s Preheating time: ≤2min
Output signal: 4~20mA/0~5V/0~10V/RS485 (ModBus-RTU)
It uses a unique dual-frequency data acquisition technology for screening, and outputs PM2.5 and PM10 simultaneously, with a consistency of ±10%.

RS-MG101-*-1-EX

Indoor PM2.5/PM10 Sensor

Power supply: DC 10~30V
Maximum power consumption: 0.5W (24V DC supply)
Detection parameters: Temperature, humidity, PM2.5, PM10, atmospheric pressure, light, noise, TVOC, CO_2, formaldehyde, O_3
Working environment: Temperature: -10℃~55℃
Humidity: 0~95%RH (non-condensation)
Output signal: RS485 (standard ModBus-RTU protocol)
Product material: ABS
Installation method: Wall-mounted, Ceiling-mounted
Product dimensions: Circular disc ϕ168mm

Single ozone sensor

Single ozone sensor with OLED display

RS-O3-*-2-*-EX

Ozone Sensor

Power supply: 0~30V DC
Ozone measurement range: 0~10.00ppm, 0~100ppm
Resolution: 0~10ppm: 0.01ppm
0~100ppm: 1ppm
Accuracy: 0~10ppm: ±6%FS (@5ppm, 25℃, 50%RH)
0~100ppm: ±6%FS (@50ppm, 25℃, 50%RH)
Working temperature: -10℃~55℃
Working humidity: 15%RH~90%RH (no condensation)
Product dimensions: 110mm*85mm*44mm. Probe length can be customized

RS-O3-*-2FL-*-EX

Duct Type Ozone Sensor

Power supply: 10~30V DC
Ozone measurement range: 0~10.00ppm, 0~100ppm
Resolution: 0~10ppm: 0.01ppm
0~100ppm: 1ppm
Accuracy: 0~10ppm: ±6%FS (@5ppm, 25℃, 50%RH)
0~100ppm: ±6%FS (@50ppm, 25℃, 50%RH)
Working temperature: 0~10ppm: -10℃~55℃
0~100ppm: -20℃~50℃
Working humidity: 15%RH~90%RH (no condensation)
It adopts an anti-interference circuit design and can withstand various strong electromagnetic interference from on-site frequency converters and other sources.

PRODUCT TYPE

BUILDING AUTOMATION
HVAC FRESH AIR

Wall-mounted Multi-element Sensor

This wall-mounted multi-element sensor can be widely applied in various environmental monitoring. It can monitor various factors such as temperature, humidity, atmospheric pressure, PM2.5, PM10, etc. At the same time, it has multiple signal output methods, which is convenient for use in various environments, safe and reliable, has an attractive appearance, is easy to install, and is durable. This product uses high-precision sensors and has the characteristics of wide measurement range, high accuracy, good linearity, good versatility, easy use, long transmission distance, and moderate price.

- Small in size and light in weight, easy to install
- Temperature collection, accurate measurement, range up to -40℃~+80℃
- Humidity collection, the range of 0~100%RH, high measurement accuracy
- The CO_2 measurement range is wide, and multiple measurement ranges are available for selection
- The wide range is 0-120 kPa pressure range, which can be applied to various environments
- It can simultaneously measure PM2.5 and PM10 concentrations
- 10~30 V DC wide voltage range for power supply
- Power consumption: ≤1.2W (12V DC, 25℃)
- Average current: <85mA
- Output signal: RS485

(Without display type) (With display type)

RS-*-N01-*-EX

AQI Sensor

RS-MG111-*-1-EX is an air environment multi-element sensor independently developed by our company. It is used to detect various elements in the air environment, including temperature, humidity, PM2.5, PM10, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2, H_2, H_2S, NH_3, etc., basically covering all the indicators reflecting air quality.

- Power supply: DC10~30V
- The pressure range is wide, covering 0-120kPa, and can be applied at various altitudes.
- PM2.5 and PM10 are collected at the same time. The measurement range is 0-1000μg/m³, and the resolution is 1μg/m³
- The unique dual-frequency data acquisition and automatic calibration technology ensures consistency of ±10%
- The gas unit uses electrochemical and catalytic combustion sensors, featuring excellent sensitivity and repeatability
- Output signal: RS485 (standard ModBus-RTU protocol)/WIFI
- Product material: ABS Installation method: Wall-mounted, ceiling-mounted
- Product dimensions: Disc ϕ168mm

RS-MG111-*-1-EX

Air Quality Monitor

RS-MS111-N01-1-EX is an air quality monitor independently developed by our company. The device is equipped with a large-screen LCD display, which has a user-friendly interface and is easy to operate. It is used to detect various elements in the air environment, including temperature, humidity, PM2.5, PM10, TSP, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2, H_2, H_2S, NH_3, etc., basically covering all the indicators reflecting air quality.

- Integrates multiple measurement elements, up to 15 measurement elements can be integrated simultaneously
- 4.3-inch large-screen liquid crystal display, simple and friendly interface; touch screen control, simple and intuitive operation
- Measurable elements include temperature, humidity, PM2.5, PM10, TSP, atmospheric pressure, light, noise, odor, TVOC, CO_2, formaldehyde, O_3, CO, CH_4, O_2, SO_2, NO_2, H_2, H_2S, NH_3, etc
- Wall-mounted installation, convenient installation
- 10-30V wide voltage range power supply
- Working environment: Temperature: -10℃~55℃; Humidity: 0~95%RH without condensation
- Output signal: RS485/WIFI/ETH
- Product material: ABS Installation method: Wall-mounted, ceiling-mounted

RS-MS111-*-1-EX

Negative Ion Detector

This detector features a color touch screen that displays the concentration of negative oxygen ions in the air in real time. It can also be optionally equipped with sensors for temperature and humidity, formaldehyde, PM, and TVOC. It has data storage and USB export functions. The device adopts the standard ModBus-RTU communication protocol and outputs RS485 signals. The communication distance can reach up to 2000 meters (as measured). The concentration of negative ions in the air is one of the indicators of air quality. The World Health Organization has also set relevant standards for the concentration of negative ions in fresh air. The highly sensitive negative oxygen ion detector has a fast response speed and is mainly used to monitor the negative oxygen ion concentration of negative oxygen ion materials, such as negative oxygen ion coatings and negative oxygen ion fabrics.

- Color display, touch screen setup, convenient operation
- Adopting high-precision negative oxygen ion measurement unit, with good long-term stability and small drift
- Data storage: 65,535 data entries
- Working environment: Temperature: -20℃~50℃
  Humidity: <95% RH without condensation
- Charging time: ≤4 hours Battery life: 10 hours
- Default range of negative oxygen ions:
  0-500 million/cm^3 0-800 million/cm^3
  (optional 50,000/100,000/500,000/5,000,000/500 million)
- Minimum resolution: 10/cm^3 Typical accuracy: ±15%
- Typical features: RS485 signal output, communication range up to 2,000 meters (measured)

Color screen negative oxygen ion detector

RS-NEGO-N01-2*-*-EX

Desktop negative oxygen ion detector

RS-NEGO-N01-5-*-EX

PRODUCT TYPE

BUILDING AUTOMATION HVAC FRESH AIR

RS-ZS-*-2-EX

Noise Sensor

Power supply: 10~30V DC (P ≤ 0.4W)
Measurement range: 30dB~130dB
Frequency range: 20Hz~12.5kHz
Working temperature and humidity: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Resolution: 0.1dB Response time: ≤3s
Output signal: RS485/4~20mA/0~5V/0~10V
Typical features: Uses highly sensitive capacitive microphone, stable signal, high accuracy
Product dimensions: 110mm*85mm*44mm

RS-ZS-*-FL-EX

Industrial Noise Detector

Power supply: 10~30V DC (P ≤ 0.1W)
Measurement range: 30dB~130dB
Frequency range: 20Hz~12.5kHz
Working temperature and humidity: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Resolution: 0.1dB Response time: ≤3s
Output signal: RS485/4~20mA/0~5V/0~10V/TTL
Typical features: The equipment shell is made of 304 stainless steel and is installed by flange
Product dimensions: 110mm*85mm*44mm

RS-ZS-*-BK-EX

Industrial Noise Sensor

Power supply: 10~30V DC
Output signal: TTL/RS485/0~5V/0~10V/4~20mA
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH (non-condensation)
Measurement range: 30dB~130dB Frequency range: 20Hz~12.5kHz
Response time: ≤3S
Stability: Less than 2% within the usage period
Noise accuracy: ±0.5dB (at reference pitch, 94dB@1kHz)
Product size: 141.5mm*ϕ18mm

RT-ZS-BZ-*-EX

Noise Module

Power supply: 4.5~5.5V (default) 10~28V (optional)
Power consumption: 18.9mA@5V 31.0mA@12V 27.8mA@24V
Temp&Hum resistance of transmitter elements: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Output signal: UART (TTL)/RS485/0~5V/0~10V/4~20mA
Measurement range: 30dB~130dB
Frequency weighting: A weighting
Frequency response range: 20Hz~12.5kHz
Noise accuracy: ±0.5dB (at reference pitch, 94dB @ 1kHz)

RS-ZS-*-XD2-EX

Ceiling-mounted Noise Sensor

DC power supply (default): 10~30V DC (Analog)/7~30V DC (RS485)
Output signal: 4~20mA/0~5V/0~10V/RS485
Working environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Measurement range: 30dB~130dB
Frequency range: 20Hz~12.5kHz
Resolution: 0.1dB
Noise accuracy: ±0.5dB (at reference pitch, 94dB@1kHz)
Response time: ≤3s

RS-SJ-*-4-EX

Rail-mounted Water Leak Sensor

Power supply: DC10-30V
Maximum power consumption: Relay output 0.5W;
RS485 output 0.1W
Detection object: Tap water, purified water
Working environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Output signal: Relay output; RS485 output

RS-SJ-*-2-EX

Wall-mounted Water Leak Sensor

Power supply: DC10-30V
Maximum power consumption: Relay output 1.2W;
RS485 output 0.4W
Detection object: Tap water, purified water
Working environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Output signal: Relay output; RS485 output

RS-SJ-DW-N01R01-1-EX

Positioning Water Leak Sensor

Power supply: 10-30V DC
Power consumption: 0.35W
Positioning display: LCD screen
Accuracy: ±(0.5% + 0.5m of the leaky rope length)
Working environment: -30~60℃, 10~95%RH (non-condensing)
Installation method: 35mm DIN rail mounting
Output signal: RS485

PRODUCT TYPE
BUILDING AUTOMATION
HVAC FRESH AIR

Dust Particle Counter

RS-CALZ-N01-1*-EX

The dust particle counter is an instrument used to measure the concentration of dust particles in the air. This instrument is widely applied in clean rooms and air conditioning systems, drug inspection institutions, blood centers, epidemic prevention stations, disease control centers, quality supervision institutions, electronics industry, pharmaceutical workshops, semiconductors, optics or precision mechanical processing, plastics, painting, hospitals, environmental protection, inspection institutions, etc., as well as authoritative institutions and manufacturing enterprises.

The RS-CALZ-N01-1-EX dust particle counter is based on the principle of laser scattering to continuously collect and calculate the number of suspended particles of different diameters in the air within a unit volume, that is, the particle concentration distribution, and then convert it into a mass concentration and output. It can simultaneously detect the six set particle size channels, and users can set parameters such as sampling time, sampling interval, and sampling frequency by themselves.

The instrument uses a 7-inch large-screen liquid crystal touch screen for display. By clicking the touch screen, operations such as particle collection switch, parameter setting, data printing, time and date modification, data storage switch, and query can be achieved. At the same time, the instrument has functions of temperature and humidity measurement and alarm.

The instrument data can be exported via USB, or data can be printed using the built-in Bluetooth printer. At the same time, the upper computer can read and control the sensor switch of each channel of the instrument's data through registers.

- With temperature, humidity and atmospheric pressure measurement functions
- Built-in Bluetooth printer
- Uses dedicated 485 circuit, standard ModBus-RTU communication protocol, communication address and baud rate can be set
- Built-in battery, external 10~30V DC wide voltage range power supply
- Default with storage function and can be plugged in a USB drive for export
- Uses laser scattering principle for particulate matter sensor, with good stability and low error rate

Power supply	DC10~30V / Battery power supply	Self-cleaning time	≤10min(3 consecutive counts of zero within 10 minutes)
Rated power consumption	4.0W	Collection mode	Continuous collection, Periodic collection
Battery capacity	4000mAh	Sampling time	1s-10000s adjustable, default 120s
Charging time	6 hours	Sampling interval	1-1800s adjustable
Battery lifespan	Continuous testing time of about 8 hours	Sampling delay	0-99s adjustable
Data storage	60,000 sets of measurement data, queryable	UCL sampling times	1-50 adjustable
Operating environment		UCL sampling points	1-50 adjustable
Particle size grading	0.3um, 0.5um, 1um, 2.5um, 5um, 10um	Counting mode	Cumulative count
Particulate matter count efficiency	50% @ 0.3μm, 98% @ ≥0.5μm	Cleanliness level determination standard	ISO14644-1

NETWORK CONCENTRATOR

DATA COLLECTOR

SIGNAL CONVERTER

VISUALIZED DATA ELECTRONIC DASHBOARD

LEVEL SENSOR

PRESSURE SENSOR

VIBRATION SENSOR

INDUSTRYE

Control Module

Ethernet Concentrator

The RS-ETH-M-EX is a data transmission concentrator via Ethernet. It can connect up to 8 RS485 type transmitters of our company's various types. It is suitable for collecting data from multiple points within a space and uploading the data to the network through a single concentrator. This solution has a relatively low overall equipment cost.

- Can be connected to 1-8 sets of our company's RS485 transmitter (temperature and humidity, light, water immersion, power off, etc.)
- Data can be uploaded via Ethernet, for communication within the local area network or across gateway wide area networks. It supports dynamic domain name resolution DNS
- The collector can provide centralized power supply for the connected RS485 devices. Device parameters can be configured through the network port, which is simple and convenient

RS-ETH-M-EX

Parameter name	Scope or interface	Explanation
Communication interface	RJ45	Supports static IP address, automatic IP address acquisition function, supports cross-gateway, domain name resolution
	CN-M interface	Power supply and communication for RS485 type transmitters
Data upload interval	1s ~1000s	The data upload interval of 1s ~1000s can be set
Temp&Hum resistance of transmitter elements	-40℃~+80℃, 0%RH-95%RH (non-condensation)	
Power supply	0~30V DC	Power supply
Power	1.5W	The equipment itself, excluding the power supply for subordinate equipment

WIFI Concentrator

The RS-WIFI-M-EX is an industrial-grade WIFI-based concentrator. It can be connected to 1 to 8 of our 485-type transmitters via a 485 bus, suitable for collecting data from multiple points within a space. It uploads the data to the platform software via WIFI wireless method.

- Can be connected to 1-8 sets of our company's RS485 transmitter (temperature and humidity, light, water immersion, power off, etc.)
- Data can be uploaded via WIFI wireless, communication within the local area network, cross-gateway wide area network communication, and supports dynamic domain name resolution DNS
- The collector can provide centralized power supply for the connected RS485 devices

RS-WIFI-M-EX

Parameter name	Scope or interface	Explanation
Power supply	10~30V DC	10~30V DC power supply
Power	1.5W	Equipment itself, excluding subordinate equipment power supply
Communication interface	WIFI wireless	Uses standard WIFI wireless (2.4GHz)
	CN-M interface	Power supply and communication for RS485 type transmitters
IP address	Supports static IP addresses, automatic IP address acquisition function, cross-gateway and domain name resolution	Support wide area network connection
WIFI communication parameters	Supports 802.11b/g/n wireless standards.	/
WIFI encryption performance	Supports multiple encryption parameters such as WEP-H, WEP-A, AES, and TKIP	/
Data upload interval	1s-10000s	The data upload interval of 1s~10000s can be set
Temp&Hum resistance of transmitter elements	-40℃~+80℃, 0%RH~95%RH (non-condensation)	/

PRODUCT TYPE

NEWORK-TYPE CONCENTRATOR

Network Collector

The network collector is a data acquisition device that can connect all our RS485 type transmitters (temperature and humidity, rainfall and snowfall, wind speed, etc.) via the 485 bus. It can connect up to 8 485-type devices at most and upload data in real time to our free cloud platform or the customer's own server through Ethernet/WIFI. Users can achieve intelligent monitoring of the on-site environment through web pages, WeChat official accounts, and mobile apps. The device supports NFC near-field communication technology. Parameters can be quickly and conveniently configured by "touching NFC configuration" with the mobile phone and "touching" with the device. Real-time values and device status can also be read.

- Power supply: 10~30V DC (P≤0.8W)
- Temp&Hum resistance of transmitter elements: -40°C~+80°C, 0%RH~95%RH(non-condensation)
- 485 communication distance: Maximum 2000m
- Output signal: WIF/Ethernet
- Upload data interval: Default 30s(1s~60000s can be set)
- Configuration method: NFC "tap-and-go" configuration
- Small in size, flexible in installation, easy to use
- Can automatically identify whether the RS485 interface slave devices are working properly

Ethernet network collector

RS-ETH-YM-EX

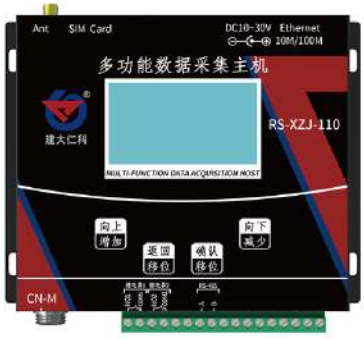
WIFI network collector

RS-WIFI-YM-EX

Multifunctional Data Acquisition Host

RS-XZJ-110-Y-EX is a multi-functional monitoring host developed by our company for monitoring environments such as computer rooms and warehouses. Through the RS485 interface, all our RS485 type transmitters (temperature and humidity, water immersion, power failure detection, smoke detection, etc.) can be connected to the environmental monitoring host, and the data will be uploaded in real time to the cloud platform provided by our company or to the customer's own server.

- It has 1 ModBus-RTU master station interface, which can connect to all types of 485 transmitters produced by our company, such as wind speed, wind direction, air quality, soil moisture, etc.
- It has 1 RJ45 network port, which can upload the monitoring data to the remote monitoring software platform.
- It has 1 ModBus-RTU slave station interface, which can be externally connected to the user's own monitoring host, PLC, configuration screen or configuration software.



RS-XZJ-110-Y-EX

Handheld Rapid Measuring Recorder

Our company has developed and designed a handheld rapid measurement recorder, which is a brand-new intelligent handheld detector designed with the latest digital integrated circuit technology and international detection technology. The recorder features a large-sized full-color LCD display, which can display the readings in real time. It also uses the detection circuit designed with digital chips from international major manufacturers, which can achieve very high sensitivity and excellent repeatability. Moreover, this recorder integrates storage, recording, and analysis functions. It adopts the standard ModBus-RTU communication mode and can be flexibly connected to various 485 devices. It can preset up to 32 channels and collect up to 32 elements.

RS-HHT-N01-2-EX

- The measurement results can be displayed directly, which is simple and convenient, with low measurement cost and fast speed.
- A large-sized color display screen with an attractive interface, data can be exported in one click, and it is convenient and fast.
- 485 devices can be freely connected, with over-limit alarms and various prompts.
- The storage space is large, and it can store up to 340,000 pieces of data.
- Power supply: Battery power supply (5000mAh lithium battery)
- Display method: 2.8 inch liquid crystal display
- Data storage: 340,000 pieces of data
- Working environment: Temperature: -20℃~60℃; Humidity: < 95%RH without condensation
- Standby time: >8 hours continuous
- Product dimensions: 174*88.5*35mm Weight: 284g

RS-REC-USBN01-1-EX

485-USB Data Logger

Power supply: 5V/10~30V DC
Installation method: Rail-mounted Installation
Export file type: .CSV File
Maximum power consumption: 1.2W (24V DC Power Supply)
Parameters can be set through the device buttons or through the configuration software
It can store 32 different factor data, and can store up to 131,000 pieces of information
The product supports a capacity of up to 32GB USB drive or memory card, and supports the management firmware of FAT16/FAT32/-FAT12 file systems
Product dimensions: 88.6mm*54.6mm*44mm

RS-120/V05/V10-485-1-3-EX

Waterproof Analog to 485 Module

Power supply: DC24V
Working temperature: -40℃~60℃
Available input signal: 4~20mA/0~5V/0~10V
Output signal: RS485
Communication interface: ModBus-RTU
Waterproof grade: IP65
Baud rate: Numerical range 0-7
0:2400bps1:4800bps2:9600bps3:19200bps4:38400bps5:57600bps6:115200bps7:1200bps
Default: 4800bps

PRODUCT TYPE
INDUSTRIAL CONTROL MODULE

RS-*-485-*-EX

Analog to RS485 Module (2 channels)

Power supply: 10~30V DC
Output signal: RS485
Communication protocol: ModBus-RTU
Input channel number: 1 channel or 2 channels selectable
AD conversion resolution: 10 bits or 12 bits selectable
Available input signal: 4~20mA/0~5V/0~10V selectable
Working environment: -10℃~50℃, ≤95%, no condensation
The product is designed and manufactured according to industrial standards, with overvoltage protection, overcurrent protection, and strong anti-interference ability
Product dimensions: 96mm*50mm*31mm

RS-I20/V05/V10-485-4-1-EX

Analog to 485 Module (4 channels)

Power supply: 10~30V DC
Maximum power Consumption: 0.08W (DC12V)
Working temperature: -40℃~+60℃
AD conversion resolution: 12 bits
Accuracy: Typical Accuracy: ±0.1%FS
Available input signal: 4~20mA/0~5V/0~10V
Output signal: RS485
Communication interface: ModBus-RTU
Address range: 1-254 (default 1)
Product dimensions: 96mm*50mm*31mm

RS-I20/V05-485-7-2-EX

Analog to 485 Module (7 channels)

Power supply: 5~30V DC
Maximum power consumption: 0.08W (DC 12V)
Working temperature: -40℃~+60℃
AD conversion resolution: 12 bits
Accuracy: Typical accuracy: ±0.1%FS
Available input signal: 4~20mA/0~20mA/0~5V/1~5V
Communication interface: ModBus-RTU (2 channels, completely independent)
Address range: 1-254 (default 1)
Anti-reverse connection, overvoltage protection, overcurrent protection, short circuit protection
Product dimensions: 122.5mm*70mm

RS-I20/V05-485-8-2-EX

Analog to 485 Module (8 channels)

Power supply: 5~30V DC (P≤0.5W)
Maximum power consumption: 0.08W (DC 12V)
Working temperature: -40℃-+60℃
AD conversion resolution: 12 bits
Accuracy: Typical Accuracy: ±0.1% FS
Available input signal: 4~20mA/0~20mA/0~5V/1~5V (optional)
Communication interface: ModBus-RTU
Address range: 1-254 (default 1)
Anti-reverse connection, overvoltage protection, overcurrent protection, short-circuit protection
Product dimensions: 122.5mm*70mm

RS-I20-485-SMG-EX

Hersman Analog to 485 Module

Power supply: 10~30V DC Maximum power consumption: 0.1W
Output signal: RS485, standard ModBus-RTU communication protocol
Display range: -999~9999 (can be Set)
Accuracy: ≤0.1%
Display mode: 0.36-inch LED (red)
Through current: Standard 4-20mA, maximum Not Exceeding 22.8mA
Temp&Hum resistance of transmitter elements: -40℃~+80℃,
0%RH~95%RH non-condensation
Sampling rate: Fastest 100 times/s, slowest 10 times/s,
default 20 times/s
Product dimensions: 92mm*54mm*51mm

RS-USB-485-3-EX

USB to 485 Module

- Powered by USB bus, no need for external power supply
- Complies with USB 2.0 standard and is backward compatible
- Transparent transmission, no need for protocol modification by users
- Supports plug-and-play and hot swapping (USB end)
- Overcurrent and overvoltage protection uses self-recovery fuses + TVS protection circuit to prevent reverse connection
- RS-485 end uses advanced automatic flow control technology, which can automatically identify the flow direction of RS-485 signals
- The USB interface is a standard USB socket. A USB cable is included with the product for convenient connection to a computer
- Product dimensions: 96mm*50mm*31mm

RS-485TO-*-2-1-EX

485 to Analog Module (2 channels)

Power supply: 5~30V DC
Maximum power consumption: 0.08W (DC 12V)
Working temperature: -40℃~+60℃
AD conversion resolution: 12 bits
Accuracy: Typical Accuracy: ±0.1% FS
Output signal: 4~20mA/0~5V/0~10V optional
Communication interface: ModBus-RTU
Address range: 1-254 (default 1)
The product is designed and manufactured according to industrial standards, with overvoltage protection, overcurrent protection, and strong anti-interference ability
Product dimensions: 96mm*50mm*31mm

RS-485TO-*-4-1-EX

485 to Analog Module (4 channels)

Power supply: 5~30V DC
Maximum power consumption: 0.08W (DC 12V)
Working temperature: -40℃~+60℃
AD conversion resolution: 12 bits
Accuracy: Typical accuracy: ±0.1% FS
Output signal: 4~20mA/0~5V/0~10V optional
Communication interface: ModBus-RTU
Address range: 1-254 (default 1)
The product is designed and manufactured according to industrial standards, with overvoltage protection, overcurrent protection, and strong anti-interference ability.
Product dimensions: 96mm*50mm*31mm

ENVIRONMENTAL MONITORING

PRODUCT TYPE
INDUSTRIAL CONTROL MODULE

Network Relay

RS-YK-*-R08-EX

This product is a controller that controls 8 relays. The 8-bit digital output can be used for immediate control in various scenarios and can control devices with a current of less than 10A and a voltage of 250V AC/30V DC. If controlling large equipment, an intermediate relay can be connected.

This product can achieve centralized control of various devices, significantly reducing the construction workload, improving construction costs and maintenance costs. At the same time, the module adopts standard 35mm rail installation, which is convenient to use. It is widely applied in: smart switch control for home, smart switch control for hotels, smart electrical appliance control for guesthouses, smart switches for shopping malls, smart switches for company factories, time management for internet cafes, karaoke timing control, internet of things, industrial control equipment, power control for test equipment, street lamp management, intelligent management, centralized power management, etc.

- The 8 output points can be controlled either synchronously as a whole or independently at each point, enabling centralized control of various devices
- The device adapts to DC10~30V wide voltage supply, and automatically disconnects the relay after power off
- It is installed with a standard 35mm card rail and communicates through multiple methods such as Ethernet
- It is connected to our cloud platform through the established communication network and can be controlled remotely via computer login to the cloud platform, WeChat mini-program, and mobile APP

RS-ACI-N01-*-EX

Current Acquisition Device

Power supply: 10~30V DC (P≤0.3W)
Collected signal: AC current
Measurement range: 0~5A
Resolution: 0.01A
Accuracy: 2.5%FS ± 0.05A
Temp&Hum resistance of transmitter elements: -20℃~+80℃, 0%RH~95%RH (non-condensing)
Output signal: RS485
Data upload time: Default 10s/once
Product dimensions: 110mm*85mm*44mm

RS-DD-*-EX

Power Failure Alarm

Power supply: DC10-30V
Maximum power consumption: Relay output: 1.2W
RS485 output: 0.4W
Working environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Output signal: Relay output/RS485 output

Visualized Data Electronic Dashboard RS-KB-*-EX

Visualized data electronic dashboard using imported high precision sensors to ensure excellent reliability, high precision and interchangeability. This product features an aluminum alloy frame and a high-quality acrylic panel, with an elegant and modern appearance. It adopts a 21.7-inch panel with red light high-brightness digital tubes, which can display clearly during the day, night and even in strong light. The product statically displays values and time to prevent video images from flickering. Product built-in buzzer, out of limit can be alarm. This product also has a calendar display options, can display the year, month, day, week, hour, minutes, and the time after power off automatically run. The product can be wall-mounted or hung for installation, and can be applied in various on-site environments. It is widely applied in fields such as interrogation rooms, conversation rooms, laboratories, construction sites, factory workshops, warehouses, computer room monitoring systems, sewage treatment, medical and health monitoring, and smart homes.

The default output signal type of this product is RS485, with a maximum communication distance of 2000 meters. It follows the standard ModBus-RTU protocol and supports secondary development. Expandable WIFI and network port for data upload.

- It adopts imported sensors, with a temperature accuracy of ±0.4℃ and a humidity accuracy of ±2%RH. The performance is stable and reliable
- With a large-sized panel and a bright red LED display, it can be clearly displayed both during the day and at night, even in strong light. The visibility range of the calendar model is over 15m, and that of the temperature and humidity model is over 35m
- The frame is made of high-hard aluminum alloy, which is firm and reliable
- The product adopts a 485 communication interface and the standard ModBus-RTU communication protocol. The communication address and baud rate can be set. The maximum communication distance is 2000 meters
- 10~30V DC wide voltage supply
- Over-limit conditions can be alarmed by the built-in buzzer of the product, or simultaneously by the sound and light alarm device (optional). The upper and lower limit values and hysteresis values for alarms can be set
- Static display of temperature, humidity and time to prevent the video image from flickering
- The device can be quickly modified with the remote control, which is convenient and fast
- Product dimensions: 490mm*290mm*40mm

A variety of elements can be freely combined. There are six styles for you to choose from

Any single-element electronic display board

Any three elements electronic board

Temperature and humidity + any element electronic board

Temperature and humidity electronic display board

Temperature and humidity + calendar electronic board

Temperature and humidity + time electronic board

PRODUCT TYPE

INDUSTRIAL SENSOR

RS-KT-N01-EX

Air Conditioner Thermostat

Power supply: DC 10~30V
Power consumption: 1.2W
Workting environment: -20℃~+60℃, 0%RH~95%RH (non-condensing)
Output signal: RS485; standard ModBus-RTU protocol

RS-YG*-N01-EX

Smoke Sensor

DC power supply (default): DC10~30V
Alarm sound: ≥80dB (within 3m)
Output signal: RS485
Smoke sensitivity: 1.06±0.26%FT
Working environment: -10℃~50℃, ≤95% (non-condensing)
Housing material: ABS

RS-HW/WB-N01-3-EX

PIR Motion Sensor

Power supply: 10~30V DC
Power consumption: 0.4W
Output signal: RS485
Working environment: -20℃~+50℃, 0%RH~95%RH (non-condensing)
Sensor type: Microwave sensor;dual-element pyro-infrared sensor
Microwave working frequency: 24.00~24.25GHz
Detection angle: 360°(all-around)
Communication protocol: ModBus-RTU
Detection range: Diameter 6m (when the installation height is 3.6m)
Installation method: Ceiling mount
Installation height: 2.5~6m

RS-CYW-N01-1-EX

Capacitive Level Gauge

Power supply: DC7-30V
Maximum power consumption: 0.2W
Output signal: RS485
Measuring range: Default 0.3m, other ranges can be customized
Working environment: -40℃~+80℃, 0%RH~95%RH (non-condensing)
Pressure range: -0.1~16Mpa
Temperature drift: ≤0.02%FS/℃ (at -40℃~+80℃)
Long-term stability: 0.1FS%/year
Protection rating: IP68
Mounting method: Threaded installation M20*1.5 or flange installation

Submersible Liquid Level Sensor

RK-PM200-*-I20/N01-*-EX

The front protective cap of the PM200 series immersion level transmitter serves to protect the sensor diaphragm and enables the liquid to smoothly come into contact with the diaphragm. The waterproof wires are sealedly connected to the housing. The ventilation tube is connected to the outside through the cable, and the internal structure features a dew prevention design. It is equipped with a micro signal processing circuit that can perform remote transmission. It has excellent stability and reliability.

It can be widely applied in fields such as water plants, sewage treatment plants, urban water supply, high-rise water tanks, wells, geothermal wells, mines, industrial water tanks, oil pools, hydrogeology, reservoirs, rivers, oceans, etc. for liquid level measurement and control.

Submersible liquid level sensor

Split-type liquid level sensor

Anti-polarity protection

Instant over current and over voltage protection

Complies with EMI protection requirements

Automatic temperature compensation

Automatic correction of temperature drift

Strong anti-interference capability

Core automatic correction algorithm

High-quality gas-conducting cable

Precise and stable measurement

Product parameters

- Measurement range: 0~100m (optional)
- Measurement accuracy: 0.2% FS, 0.5% FS (default)
- Output signal: 4~20mA/0~5V/0~10V
- Overload capacity: <1.5 times the range
- Power supply: 12~36V DC (typical 24V)
- Power consumption: 0.48W
- Medium temperature: -10~50℃
- Measured medium: Oil, water, etc. without corrosion to stainless steel
- Protection level: IP68
- Load capacity: Current load capacity: ≤500Ω Voltage output resistance: ≤510Ω

PRODUCT TYPE

INDUSTRIAL SENSOR

RS-FPCH-YW-*-DY-EX

Wireless Liquid Level Sensor

Power supply: 10~30V DC
Output signal: LORA
Measurement accuracy: ±0.5%FS
Product power: Maximum power 0.8W
Installation method: Transmitter is installed vertically; liquid level sensor is installed submerged
Measuring medium: Oil or water without corrosion to stainless steel
Temp&Hum resistance of transmitter elements: -30℃~+70℃, 0%RH~95%RH (non-condensation)
Work environment: -40℃~+60℃, 0%RH~95%RH (non-condensation)

RS-FPCH-YW-*-DC-EX

Wireless Liquid Level Sensor (With Built-in Battery)

Power supply: 10~30V DC
Output signal: LORA
Measurement accuracy: ±0.5%FS
Installation method: The transmitter is installed vertically; the liquid level sensor is installed submerged
Measuring medium: Oil or water without corrosion to stainless steel
Line length: For measuring ranges below 0-5m, select 5m; for measuring ranges above 0-5m, select the measuring range length.
Protection level: Explosion-proof housing part IP67; Probe part IP68

RK-PM220-*-N01-JF-EX

PM220 Split-Type Liquid Level Sensor

Power supply: 10~30V DC
Measuring range: -0.1~+100MPa(optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Output signal: RS485 standard ModBus-RTU communication protocol
Zero point drift: ≤±1.5%FS
Medium temperature: 0-60℃
Measuring medium: Gases and liquids without corrosion to this stainless steel
Protection grade: Transmitter part IP65; Probe part IP68

RK-PM222-EX

PM222 Series Level Sensor

Power supply: 10~30V DC
Measuring range: -0.1~+100MPa(optional)
Measurement accuracy: 0.2%FS/0.5%FS (default)
Output signal: RS485 standard ModBus-RTU communication protocol
Product power: 0.35W
Long-term stability: ≤±0.3%FS
Response time: ≤1ms
Transmitter element temperature: -30℃~+70℃

Wireless Pressure Sensor (With Built-in Battery)

The wireless pressure sensor (built-in battery) developed by our company uses a high-performance pressure sensor chip, with advanced circuit processing and temperature compensation technology to convert pressure changes into LORA signals and upload them to our free cloud platform or local platform. The product is compact, easy to install, using stainless steel shell isolation anti-corrosion, suitable for measuring and contact part of the material compatible with gas and liquid and other media, can be used to measure gauge pressure and absolute pressure.

The equipment is powered by batteries, with a low-power design. Under default upload intervals and collection intervals, it can be used for up to 5 years. The equipment comes with storage, and automatically stores data in offline situations to prevent data loss. The device is equipped with a display that can show the current pressure data and the pressure level of the current range. Configuring parameters via the mobile phone APP via USB is convenient and fast. It is suitable for occasions such as in the wild and where power supply is inconvenient, meeting the demand for intelligent upgrading of traditional pressure gauges.

Applications: Such as water supply, drainage, fire water system, oil pipelines, gas pipelines and other related scenarios.

- It comes with a display screen, allowing direct viewing of the values on-site
- It is powered by a built-in battery, with a large capacity battery providing a runtime of up to 5 years and the option to replace the battery
- The device has data storage capabilities, automatically storing data in offline mode
- The temperature compensation process ensures higher measurement accuracy and greater stability
- Automatic temperature compensation and automatic correction of temperature drift
- Resistant to vibration, shock, and radio frequency electromagnetic interference
- With overload and anti-interference capabilities, it is economical, practical, and stable
- It can be uploaded to our company's free cloud platform or local platform
- The LORA type can be used in conjunction with our company's LORA gateway or small host

RS-FPCH-PV-*-DC-EX

RS-FPCH-PV-*-DY-EX

Wireless Pressure Sensor

Power supply: 10~30V DC
Measuring range: -0.1~+100MPa(optional)
Pressure type: Gauge pressure, absolute pressure
Temp&Hum resistance of transmitter elements: -30℃~+70℃, 0%RH~95%RH(non-condensation)
Output signal: LORA Inlet head material: 304 stainless steel
Diaphragm material: 316L stainless steel
Shell material: Cast aluminum with epoxy resin coating
Installation interface: M20*1.5

RK-PM402-EX

PM402 Series Pressure Sensor

Power supply: 10~30V DC
Measuring range: -0.1~+100MPa(optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Output signal: RS485 standard ModBus-RTU communication protocol
Product power: 0.35W
Long-Term stability: ≤±0.3%FS
Response time: ≤1ms
Transmitter element temperature: -30℃~+70℃
Medium temperature: -40~75℃; -40~150℃(high temperature type)

PRODUCT TYPE

INDUSTRIAL SENSOR

RK-PM400-EX

PM400 Series Pressure Sensor

Power supply: 12~36V DC (Typical: 24V)
Measuring range: -0.1~+100MPa(optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Output signal: RS485/4~20mA/0~5V/0~10V
Overload capacity: <1.5 Times of Range
Temperature drift: 0.03%FS/℃
Medium temperature: -40~+75℃, -40~+150℃(high temperature type)
Ambient temperature: -40℃~+80℃
Measuring medium: Gases and liquids without corrosion to stainless steel

RK-PM420/PM422-EX

2088 Universal High-temperature Pressure Sensor

Power supply: 10~30V DC
Measuring range: -0.1~+100MPa(optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Output signal: RS485 standard ModBus-RTU communication protocol
Product sower: 0.35W
Long-Term stability: ≤±0.3%FS Response time: ≤1ms
Measuring medium: Gases and liquids without corrosion to stainless steel
Protection grade: IP65

RK-PM300-EX

General-purpose Pressure Sensor

Power supply: 10~30V DC
Maximum power consumption: 0.2W(485 type)
Output signal: RS485/4~20mA/0~5V/0~10V
Measurement range: -0.1~100MPa (optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Overload capacity: ≤1.5 times
Temperature drift: 0.03%FS/℃
Medium temperature: -40~75℃, -40~150℃ (for high-temperature type)
Work environment: -40℃~+80℃
Measured medium: Gas or liquid without corrosion to stainless steel

RK-PM301-EX

Digital Tube Display Pressure Sensor

Power supply: 10~30V DC
Maximum power consumption: 0.3W
Output signal: RS485, standard ModBus-RTU communication protocol
Measurement range: -0.1~100MPa (optional)
Measurement accuracy: 0.2%FS, 0.5%FS (default)
Overload capacity: ≤1.5 times (continuous), ≤2.5 times (instantaneous)
Temperature drift: 0.03%FS/℃
Medium temperature: -40~75℃, -40~150℃ (high-temperature type)
Equipment operating temperature range: -40~60℃
Measured medium: Gas or liquid without corrosion to stainless steel

Industrial Vibration Sensor RS-WZ*-*-*-EX

Industrial vibration sensor is a selection of high-performance MEMS chip, embedded technology, temperature sensing technology, vibration sensing technology development and production of a high-performance, low power consumption, anti-interference and composite vibration sensor. The product is widely used in industries such as coal mining, chemical engineering, metallurgy, power generation, etc., for the online measurement of temperature and vibration of rotating equipment such as motors, reducers, fans, generators, air compressors, centrifuges, and water pumps.

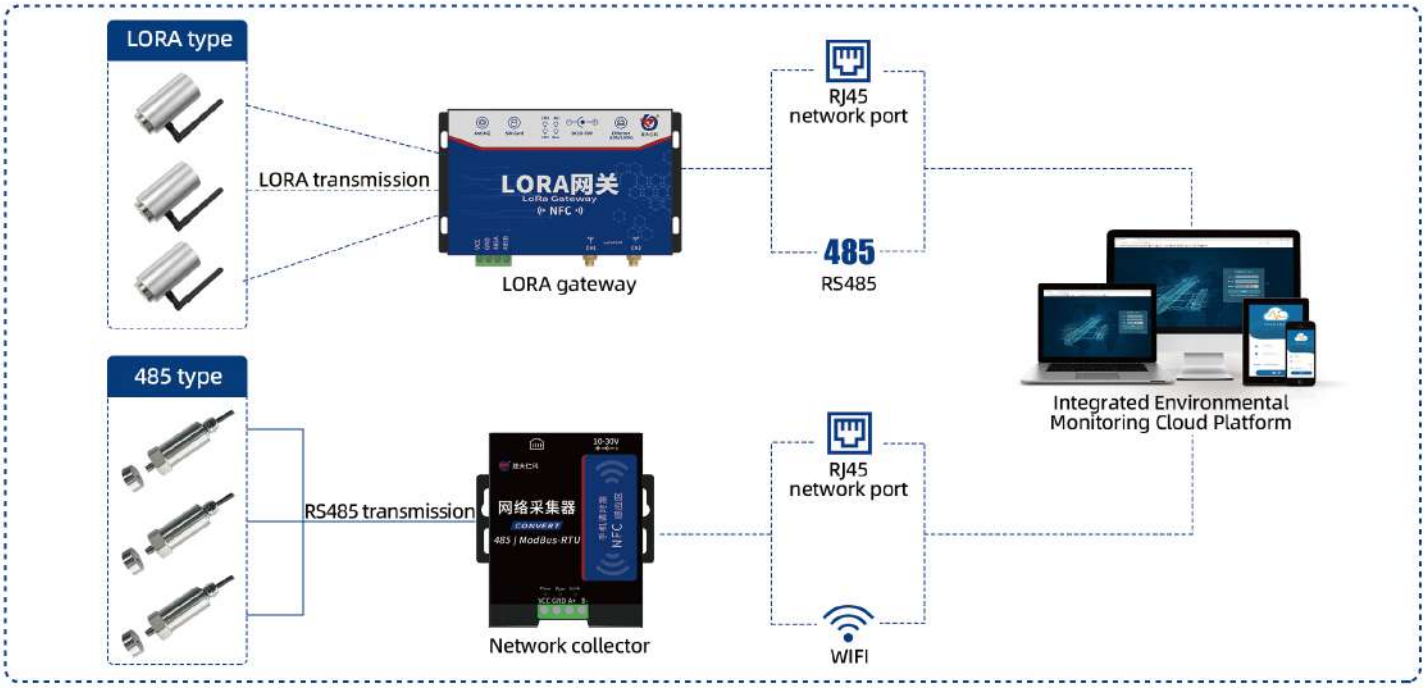
The LORA temperature and vibration collector transmits the collected parameters such as motor surface temperature, vibration speed, battery power of the equipment, and communication strength to the LORA gateway via LORA wireless communication. The LORA gateway then sends the obtained element information values to the background server through the ETH communication module, with the entire process being wire-free and having low power consumption. In addition, our company can provide a LORA gateway with 485 output, making it more convenient for users to connect to their own developed local terminals.

The entire shell is made of stainless steel. In cases where conditions permit on-site, it can be installed using threaded connections. The standard threads on the metal shell can be quickly connected to the installation site. Alternatively, a magnetic installation method can be chosen, eliminating the need for drilling on-site and making the installation more convenient.

- The product adopts high-performance MEMS chips, featuring high measurement accuracy and strong anti-interference capability
- The product offers options for threaded installation and magnetic attachment
- It can measure parameters such as the surface temperature of the equipment, single-axis and three-axis vibration velocity, and vibration displacement
- 10-30V DC wide voltage supply, protection level IP67, and supports remote upgrade.
- Output signal: LORA/RS485/0~5V/0~10V/4~20mA
- Frequency range (Hz): 10-1600/10-5000
- Transformer circuit working temperature: -40℃~+80℃, 0%RH~80%RH
- Vibration velocity measurement range (mm/s): 0-50
- Vibration displacement measurement range (μm): 0-5000
- Surface temperature measurement range (℃): -40~+80

LORA type Analog type / RS485 type

Application topology diagram:



LOCALIZED ENVIRONMENTAL MONITORING SYSTEM

INTEGRATED ENVIRONMENTAL MONITORING PLATFORM

ENVIRONMENTAL MONITORING APP

SOFTWARE

Latform

Local deployment Environmental monitoring system RS-RJ-K

RS-RJ-K temperature and humidity monitoring platform software

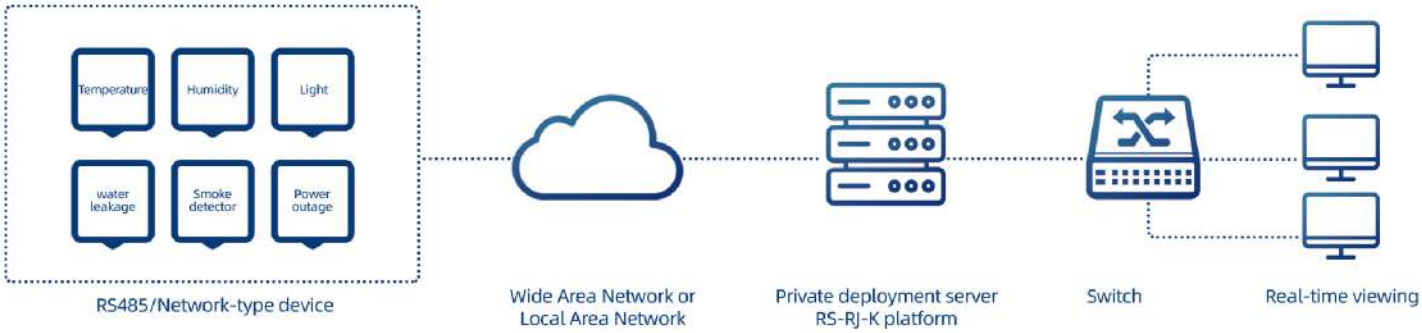
Environmental Monitoring System RS-RJ-K

Private Deployment / Data Encryption / Multi-level Management / Remote Control

The environmental monitoring system RS-RJ-K is an environmental temperature and humidity monitoring platform software. It can be connected to the company's RS485 type temperature and humidity transmitters, Ethernet type temperature and humidity transmitters, and WIFI wireless type temperature and humidity transmitters to form a temperature and humidity monitoring network. The software can run on operating systems such as Windows Server 2008, Windows 7, Windows 8, and Windows 10, and has functions of temperature and humidity collection, recording, and alarming. It can support data display on a floor plan and is convenient for overall monitoring.

This software platform supports terminals such as computers, mobile phones, and tablets to view temperature and humidity data through web pages and download Excel electronic spreadsheet data for printing. It is an environmental monitoring software platform widely used in the temperature and humidity monitoring industry.

- Support connection of 485 type transmitters
  Network type transmitters or concentrators
- Support voice alarm
  Email alarm, SMS alarm
- Support custom device names
  Customize data units and conversion functions
- Support remote web access
  Device permission-based management



Environmental monitoring

01 Professional Platform

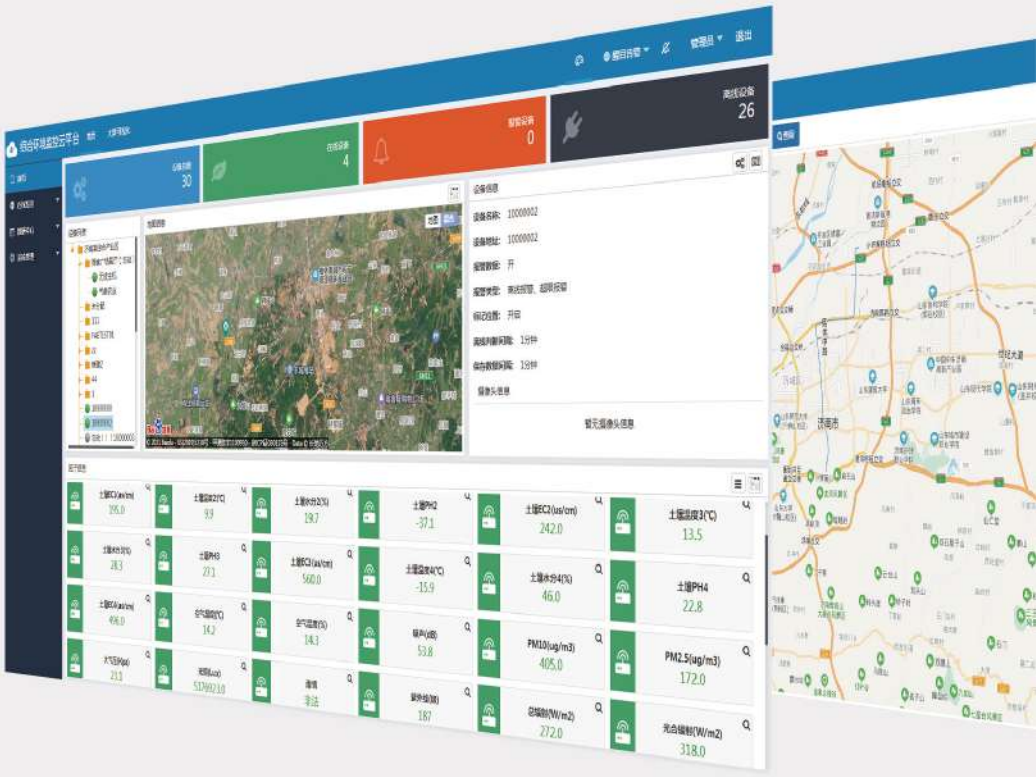
The comprehensive environmental monitoring cloud platform is a web login platform specially developed by our company to provide users with convenient services. The platform is stable and reliable, and has connected over ten thousand devices.

02 Free Maintenance

The company's cloud platform is free. The interface is completely neutral. After the equipment is delivered to the site, users do not need to perform complex network settings and can connect to the cloud platform directly, greatly saving the time for on-site construction.

03 Powerful Functions

Supports multi-level access permissions and supports customers adding sub-accounts. Customers can log in at any time with their accounts and conveniently view their equipment status, query data records, download and print data, etc. They can also choose services such as SMS alerts and email alerts as needed.



Web version

APP version

WeChat version

Mini Program

▶ Self-developed IoT cloud platform

The comprehensive environmental monitoring cloud platform is a web login platform specially developed by our company to provide users with the most convenient services. The cloud platform is deployed on public network servers and can conveniently connect to all our network-type devices. Customers no longer need to set up their own servers, eliminating the cost of server maintenance and eliminating the need for public IP or domain name resolution services. After the equipment arrives at the site, users do not need to perform complex network settings to connect to the cloud platform, greatly saving on on-site construction time.

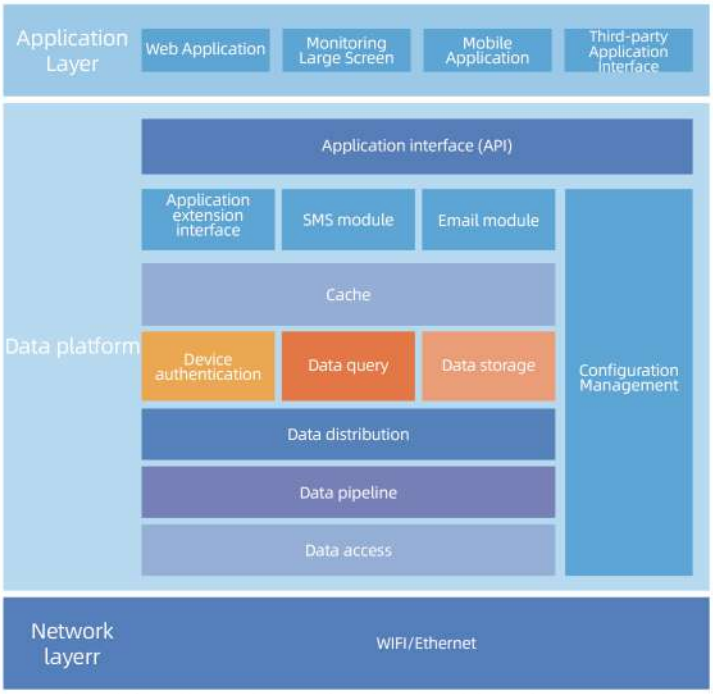
The company promises that the cloud platform is permanently free, with a completely neutral interface, supporting multi-level access permissions, and supporting customers to add sub-accounts. Customers can log in with their accounts at any time and conveniently view their equipment status, query data records, download and print data, and can also choose services such as SMS alerts and email alerts as needed. The platform is stable and reliable, and has connected more than ten thousand devices.

CLOUD PLATFORM

INTEGRATED ENVIRONMENTAL MONITORING CLOUD PLATFORM

Software + Hardware One-stop Service

For users of small-scale applications, the cloud platform provides configurable "tailored for each user" interfaces and private domain name resolution services. Customers only need to invest a few dozen yuan to purchase a domain name and can have their own private cloud platform.



The platform has a clear and understandable architecture, and the operation is simple, making it convenient for your use.

Large-screen visualization

It can be projected and displayed on the screen in the application center, automatically refreshing and scrolling through all device information.

Intelligent alarm

Supports SMS and email alerts to promptly notify users when the device data exceeds the limit.

Real-time map

The map displays the device's location, online status and some data information in real time.

Historical data

Supports querying historical data for multiple time periods as well as historical transportation trajectories, etc.

Equipment linkage

The switch status of relays can be remotely controlled via the cloud platform.

Account classification

The cloud platform supports account hierarchical management. Under a main account, multiple sub-accounts can be assigned. Different account levels have different operation/viewing permissions.

Cloud Control Network

Mobile Terminal Multi-functional Environmental Monitoring Cloud Platform

Mobile APP

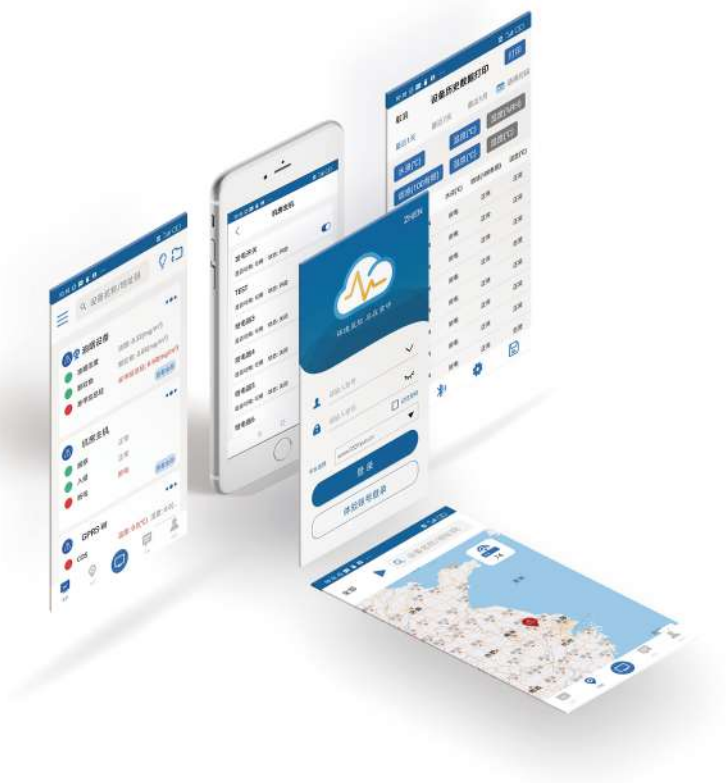
One-click control for over ten thousand devices

To facilitate data monitoring by mobile users, the company has developed and launched the "Cloud Control" mobile APP. This makes it possible for users to monitor data in real time 24 hours a day. Through the mobile APP "Cloud Control", one can control over ten thousand devices with a single click. It supports equipment failure and abnormal alarm functions, offline alarm function, real-time data viewing, historical data viewing, and can also connect to a Bluetooth printer for data printing. The functions are very powerful.

Download the APP

- Test account: jnrstest
- Password: jnrstest321

Download and install the Cloud Control APP (please scan with QQ for download)



Cooperation for a better future

Be the first brand in China's environmental monitoring

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