Be Excellent Be Perfect

About us

Introduction

Hunan Rika Electronic Tech Co., Ltd is located in Changsha, the national intelligent manufacturing base. We are a professional sensor manufacturer and solution provider of weather & environmental monitoring for 10+ years.

Business

Rika is committed to developing and providing cost-effective intelligent IoT environmental monitoring products and services, including: wind energy measurement, solar radiation measurement, air quality monitoring, hydrometeorological monitoring, soil moisture measurement, water quality monitoring, dataloggers and various kind of weather stations and monitoring stations. Products are widely used in meteorological and environmental monitoring fields such as photovoltaic power generation, smart agriculture, aquaculture, sewage treatment, air quality, wind power generation, and traffic monitoring.

Values

Hunan Rika Electronic Tech Co., Ltd. is pursuing to be excellent and perfect, and is committed to providing clients with accurate, high-quality and intelligent measuring instruments and solutions.

Development

We have introduced modern high-tech production lines. And after years of technology accumulation, we have established a modern R&D and production system and a complete quality control system. Now we are a state-level high-tech enterprise, with more than 20 patent authorizations, and having established close production-study-research cooperations with universities and research institutes in the industry. Our company has already obtained ISO9001, TUV Quality Management System certification, and products have passed CE, ROHS and other international certifications.

Along with the development of business and the diversification of demand, we provide clients with customized and high-quality project solutions through a full range of products and services. With timely and effective support and delivery system, we are offering OEM/ODM solutions to clients for more than 80 countries around the world, and have won wide recognition at home and abroad.
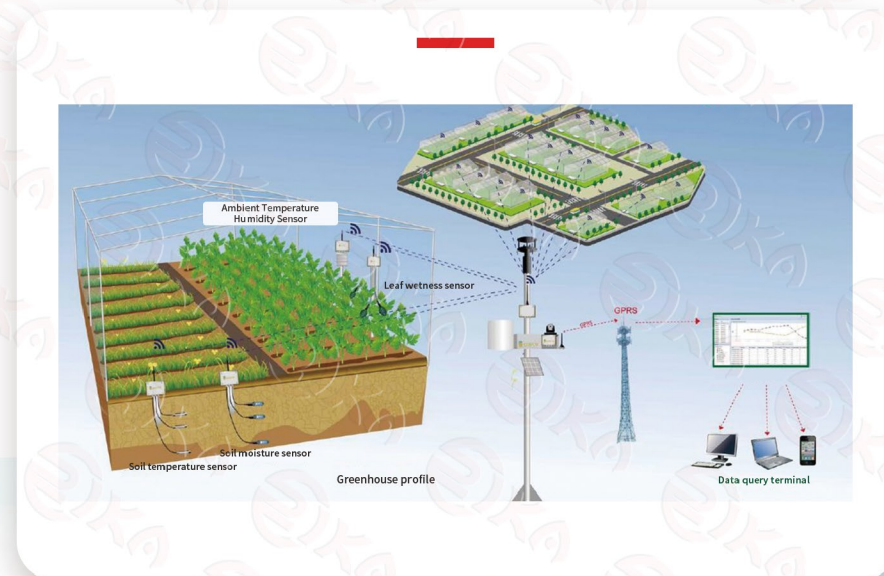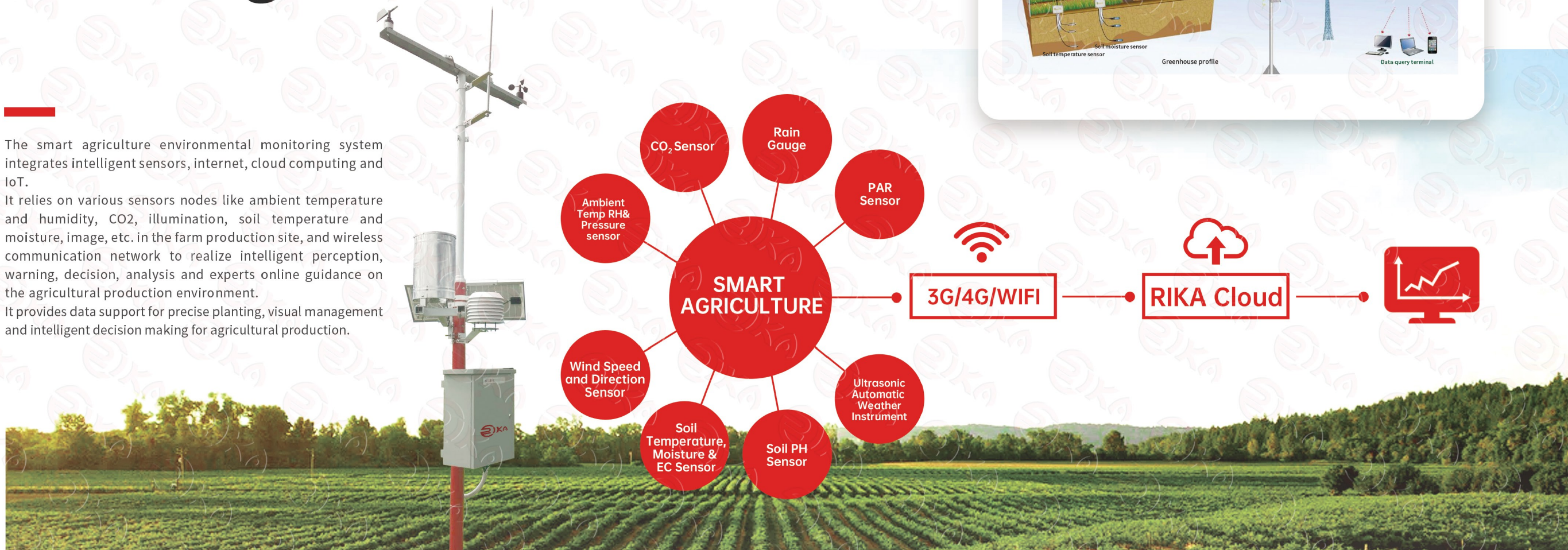
Certification

SOLUTION①

Smart Agriculture

The smart agriculture environmental monitoring system integrates intelligent sensors, internet, cloud computing and IoT.

It relies on various sensors nodes like ambient temperature and humidity, CO2, illumination, soil temperature and moisture, image, etc. in the farm production site, and wireless communication network to realize intelligent perception, warning, decision, analysis and experts online guidance on the agricultural production environment.

It provides data support for precise planting, visual management and intelligent decision making for agricultural production.

CO₂ Sensor
Rain Gauge
PAR Sensor
Ambient Temp RH& Pressure sensor
SMART AGRICULTURE
Wind Speed and Direction Sensor
Ultrasonic Automatic Weather Instrument
Soil Temperature, Moisture & EC Sensor
Soil PH Sensor

3G/4G/WIFI → RIKA Cloud

Main sensor

www.rikasensor.com

Ultrasonic Automatic Weather Instrument	Wind Speed Sensor	Wind Direction Sensor	PAR Sensor	CO₂ Sensor	Ambient Temp RH& Pressure sensor	Rain Gauge	Soil PH Sensor	Soil Temperature Moisture & EC Sensor
RK900-10	RK100-02	RK110-02	RK200-02	RK300-03	RK330-01	RK400-01	RK500-22	RK520-02

SOLUTION²

PHOTOVOLTAIC POWER GENERATION

In order to ensure the normal operation of photovoltaic power plants and data analysis, a weather station is required to monitor solar radiation intensity (horizontal and tilt), ambient temperature and humidity, pv module temperature, wind speed, wind direction and etc.

The weather station can be connected to the SCADA system to display, record, and analyz the data. The weather station can also be connected to the inverter control system, which analyzes the data to ensure the effective operation of the photovoltaic power station.

PHOTOVOLTAIC POWER GENERATION

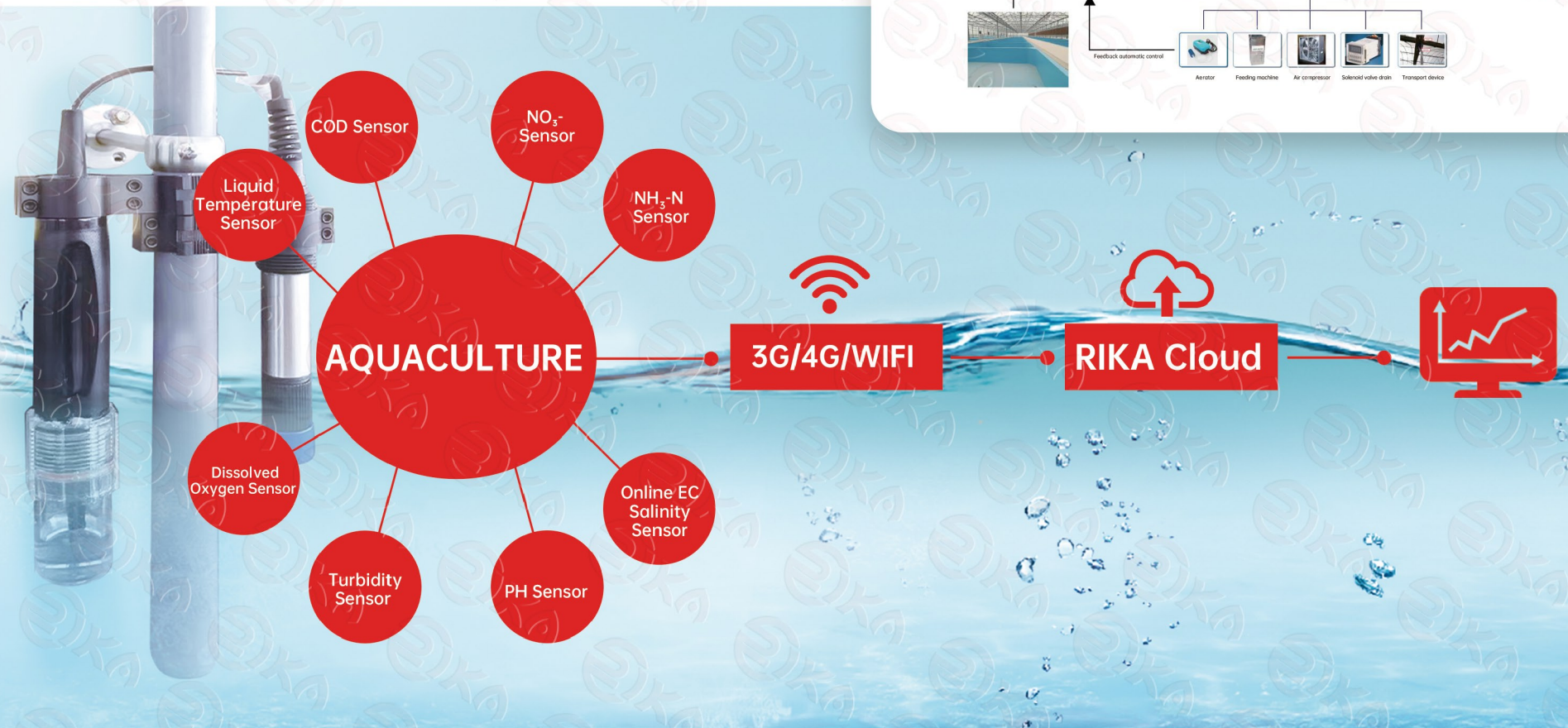- Rain Gauge
- Ambient Temp RH& Pressure sensor
- PV Module Temperature Sensor
- Ultrasonic Wind Speed & Direction Sensor
- Wind Speed and Direction Sensor
- Pyranometer
- Solar Radiation Sensor

INVERTER → **SCADA**

Main sensor

www.rikasensor.com

Wind Speed Sensor	Wind Direction Sensor	Ultrasonic Wind Speed & Direction Sensor	PV Module Temperature Sensor	Pyranometer	Solar Radiation Sensor	Ambient Temp RH& Pressure sensor	Rain Gauge
RK100-02	RK110-02	RK120-03	RK220-01	RK200-03	RK200-04	RK330-01	RK400-01

SOLUTION³

Aquaculture

Fine aquaculture management is to control the basic water temperature, light, PH, water dissolved oxygen (DO), turbidity, electrical conductivity and other parameters directly affect the production efficiency of aquaculture.

Intelligent reservoir aquaculture data acquisition system provides water monitoring, remote control management, and makes full use of IoT technology to realize real-time monitoring and early warning of the basic parameters in the process of aquaculture. The manager can obtain detailed information on the situation of the fish pond at any time anywhere.

COD Sensor

NO₃⁻ Sensor

Liquid Temperature Sensor

NH₃-N Sensor

AQUACULTURE

Dissolved Oxygen Sensor

Online EC Salinity Sensor

Turbidity Sensor

PH Sensor

3G/4G/WIFI

RIKA Cloud

www.rikasensor.com

Main sensor

Liquid Temperature Sensor	Dissolved Oxygen Sensor	Turbidity Sensor	PH Sensor	Online EC/Salinity Sensor	NH₃-N Sensor	NO₃⁻ Sensor	COD Sensor
RK500-01	RK500-04	RK500-07	RK500-12	RK500-13	RK500-15	RK500-16	RK500-25

SOLUTION⁴

Hydrology

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Hydrological weather stations are used for real-time monitoring of hydrological parameters for rivers, lakes, reservoirs, channels and groundwater, reflecting the hydrological characteristics of each water area in a timely manner, so as to facilitate relevant departments to make arrangements and prevent the occurrence of flood and waterlogging disasters.

Monitoring includes: water temperature, water level, flow rate, etc.

Hydrological weather stations can be widely used in meteorological research, disaster prevention and mitigation, scientific research and etc.

Radar Water Level Sensor
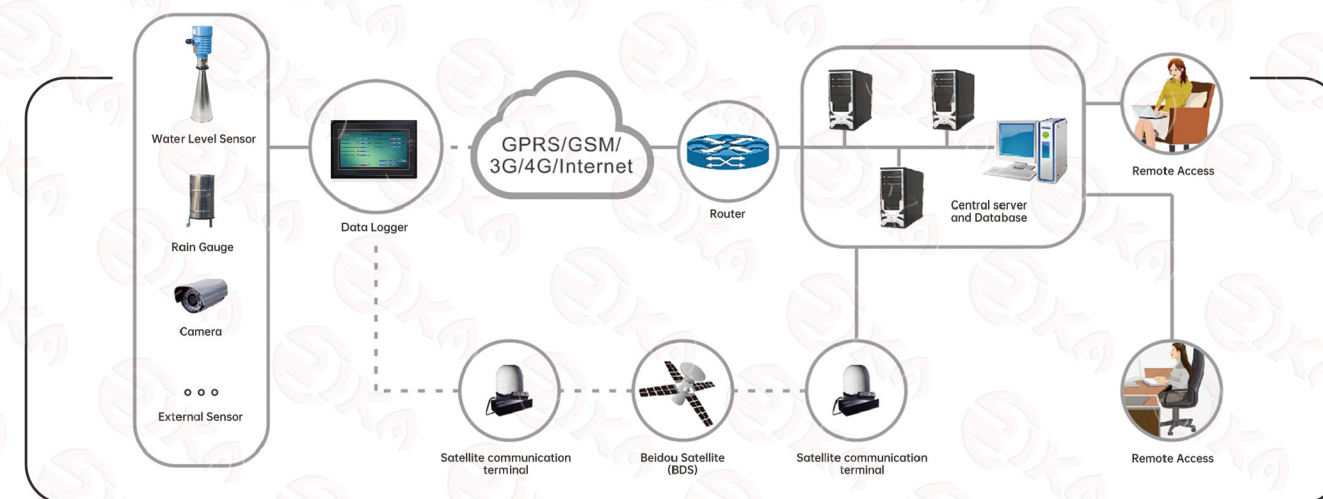
Rain Gauge

Hydrology

Radar velocity meter

Liquid Temperature Sensor

3G/4G/WIFI

RIKA Cloud

Main sensor

Radar Water Level Sensor	Radar velocity meter	Rain Gauge	Liquid Temperature Sensor
RKL-02	RKL-05	RK400-01	RK500-01

Water Level Sensor

Data Logger

GPRS/GSM/ 3G/4G/Internet

Router

Central server and Database

Remote Access

Rain Gauge

Camera

External Sensor

Satellite communication terminal

Beidou Satellite (BDS)

Satellite communication terminal

Remote Access

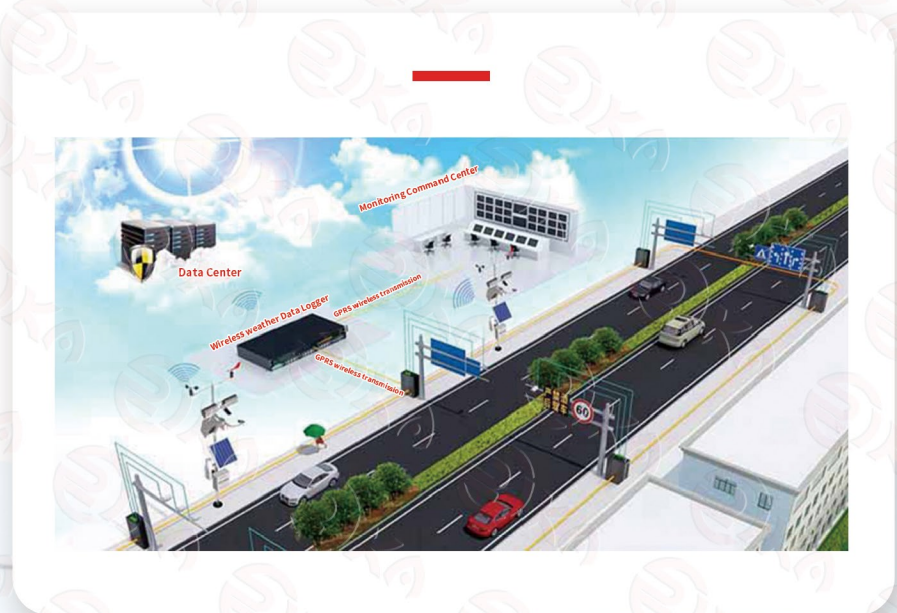# SOLUTION⁵

Traffic Meteorology

The traffic weather station is specially designed for traffic weather and is a typical comprehensive road inspection station. It focuses on detecting visibility, weather phenomena and road conditions, and related basic meteorological parameters.

It is mainly used to detect abnormal traffic environmental factors and meteorological conditions in time, and provide scientific and real-time basis for meteorological services and traffic management departments.
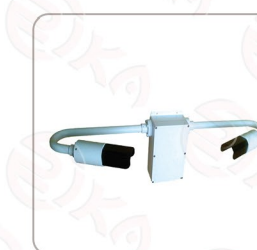
Visibility Meter

Road Condition Sensor

Ambient Temp RH& Pressure sensor

Traffic Meteorology

Wind Speed and Direction Sensor

Rain Gauge

3G/4G/WIFI

RIKA Cloud

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Main sensor

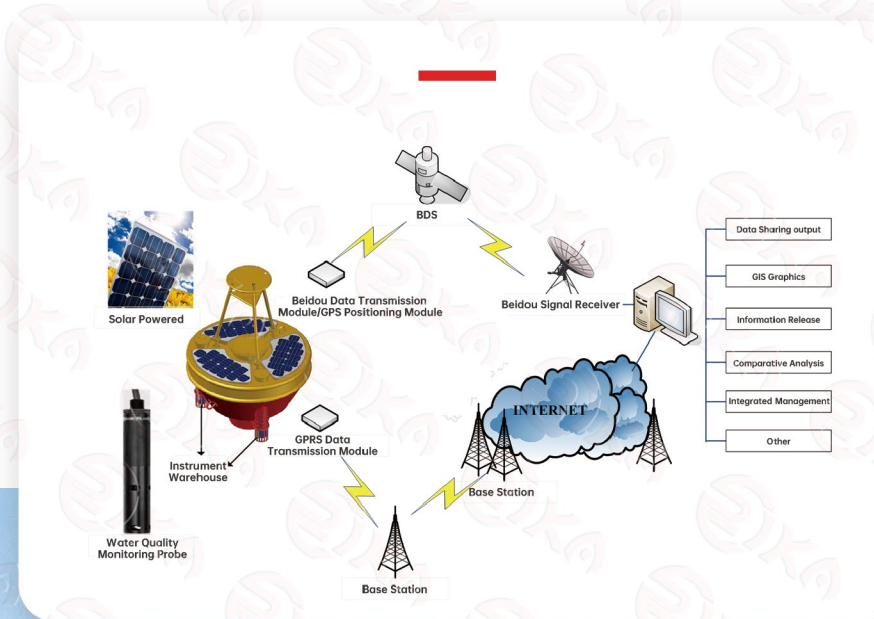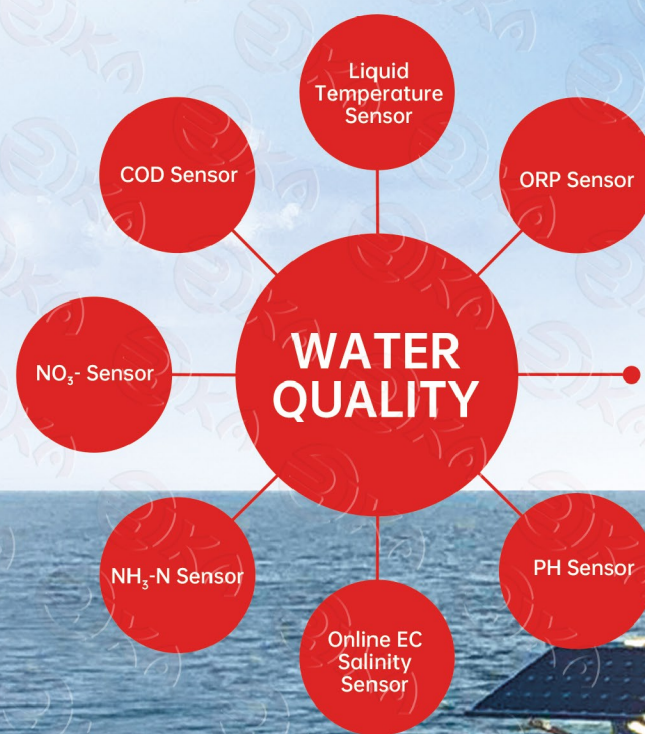| Wind Speed Sensor	Wind Direction Sensor	Ambient Temp RH& Pressure sensor	Visibility Meter	Rain Gauge	Road Condition Sensor
RK100-02	RK110-02	RK330-01	RK300-10	RK400-01	RK500-55

SOLUTION⁶

Water Quality

The deterioration of water quality due to environmental pollution or malicious discharge may cause major harm to human health, aquatic organisms and the entire ecosystem.

Water temperature,electrical conductivity, PH, ORP, dissolved oxygen, turbidity, NH3-N, COD, etc. are all critical monitoring indicators ,timely monitoring are essential to minimize the harm of water quality deterioration and determine the source of pollution

COD Sensor
Liquid Temperature Sensor
ORP Sensor
NO₃- Sensor
WATER QUALITY
NH₃-N Sensor
Online EC Salinity Sensor
PH Sensor

3G/4G/WIFI

RIKA Cloud

Main sensor

www.rikasensor.com

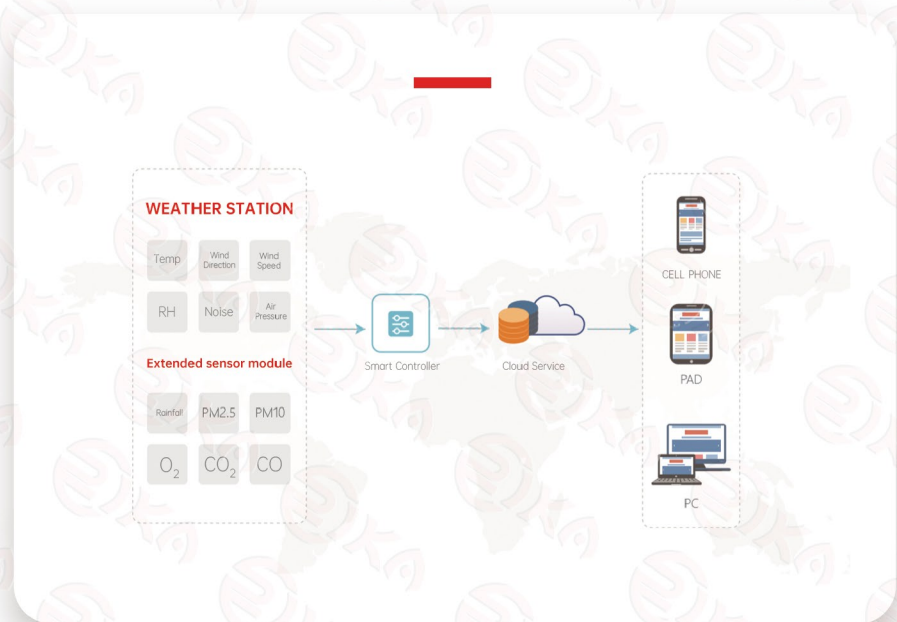| Liquid Temperature Sensor	ORP Sensor	PH Sensor	Online EC/Salinity Sensor	NH₃-N Sensor	NO₃- Sensor	COD Sensor
RK500-01	RK500-06	RK500-12	RK500-13	RK500-15	RK500-16	RK500-25

SOLUTION⁷

Smart City

The automatic meteorological environment monitoring system detects environmental parameters automatically without manual intervention, and uploads data to the designated data center through wire or wireless, which is an important means to make up for the gab of meteorological observation data in space area.

It is composed of meteorological sensor, intelligent data logger, power supply, radiation shield, protection box, communication module and so on.

WEATHER STATION

Temp | Wind Direction | Wind Speed
RH | Noise | Air Pressure

Extended sensor module

Rainfall | PM2.5 | PM10
O₂ | CO₂ | CO

Smart Controller → Cloud Service → CELL PHONE / PAD / PC

SMART CITY

Wind Speed and Direction Sensor
Ambient Temp RH& Pressure sensor
Ultrasonic Automatic Weather Instrument
Rain Gauge
Noise Sensor
CO₂ Sensor
Dust Sensor

3G/4G/WIFI → RIKA Cloud

www.rikasensor.com

Main sensor
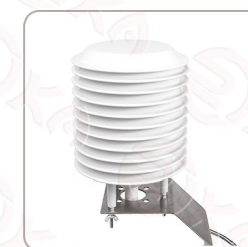
Ultrasonic Automatic Weather Instrument	Wind Speed Sensor	Wind Direction Sensor	Dust Sensor	CO₂ sensor	Noise sensor	Ambient Temp RH& Pressure sensor	Rain Gauge
RK900-10	RK100-02	RK110-02	RK300-02	RK300-03	RK300-06	RK330-01	RK400-01

SOLUTION[8]

Stockbreeding Monitoring

RIKA www.rikasensor.com

Moderate light can promote the growth of livestock, the appropriate temperature can reduce the mortality rate, timely discharge of harmful gases can ensure the health of livestock, the impact of environmental factors on breeding efficiency can not be ignored.

The system adopts high-precision sensors to collect environmental parameters in the enclosure in real time.

The central processing unit calculates the data collected from the front end and the breeding conditions, and controls the ventilation system, wet curtain, air conditioning and other equipment in the enclosure according to the calculation results.

CO_2 Sensor

Ambient Temp RH& Pressure sensor

NH_3 Sensor

STOCKBREEDING MONITORING

3G/4G/WIFI

RIKA cloud

H_2S Sensor

illuminance Sensor

Main sensor

CO_2 Sensor	Ambient Temp RH& Pressure sensor	illuminance Sensor	NH_3 Sensor	H_2S Sensor
RK300-03	RK330-01	RK210-01	RK300-07	RK300-15

Environmental control

Bullpen monitoring

Environmental monitoring

Electronic archive management

Cattle product traceability

Livestock & Poultry Breeding IoT Ststem

Feeding records & management

Health record of quarantine & epidemic prevention

Body temp monitoring

SOLUTION⁹
Crane Safety Monitoring

RIKA www.rikasensor.com
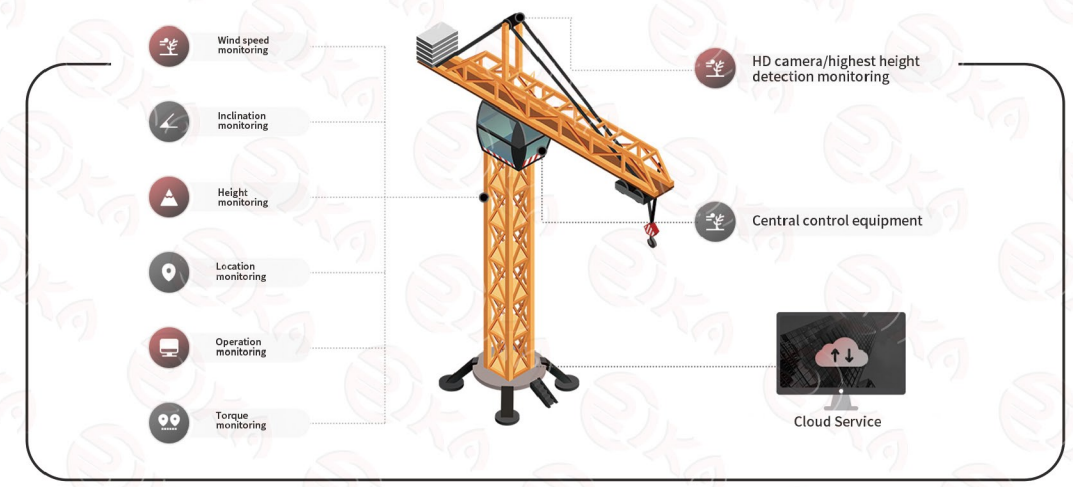
Tower cranes are the most common type of crane in the high-rise construction industry and are usually erected on a concrete foundation.

The wind speed alarm controller is one of the important safety monitoring equipment for high-altitude operation equipment, which can ensure it operates in a safe and controllable natural environment.

The product is made of high-strength and corrosion-resistant materials to ensure that accurate wind data can be provided even in harsh working conditions.

Wind Speed Sensor

Wind Speed Alarm Controller

CRANE SAFETY MONITORING

Tilt Sensor

Alarm Indicator

Main sensor

Wind Speed Sensor
RK100-01

Wind Speed Alarm Controller
RK150-01

Tilt Sensor
RK700-01

Alarm Indicator

Wind speed monitoring

Inclination monitoring

Height monitoring

Location monitoring

Operation monitoring

Torque monitoring

HD camera/highest height detection monitoring

Central control equipment

Cloud Service

RIKA Cloud

RIKA CLOUD

RIKA cloud is a universal IoT platform that integrates solutions of various industries as one. It is an IoT system that integrates data collection, data analysis, remote control and early warning release, etc. with solutions as the benchmark.

◆ Cloud ecosystem intergrates with software and hardware, one-stop solution by providing more than 300 kinds of sensors.

◆ The integration of various industry solutions, with data collection, analysis, early warning, linkage control function.

◆ Customized hardware access platform services, whole-process technical support.

| Environmental Information | Meteorological Conditions | Data Display | Real-time Monitoring | Interconnected Control | Map Presentation |

CASE SHOW