AUSTRALIAN & NZ DISTRIBUTOR

Product Catalog

2021

All-In-One Solution

Meteorological Sensor
Environmental Sensor
Water Quality Sensor

ZATA International Limited

Overview

In the current era of intelligence, we have launched all-in-one Series Compact weather stations. In addition to monitoring temperature, humidity, wind direction, wind speed, air pressure, rainfall, radiation, ultraviolet, there are also image capturing functions, rich command formats to meet most of the application scenarios. We believe it is an exciting product.

Application

Smart City
Smart Street Lighting System
Tower Crane Ultrasonic Anemometer
Agricultural Weather Station
Transmission Lines Weather Station

Advantage

Maintenance-free
Easy to install without moving parts
low power consumption
Diversity of power supply
wireless communication

Model

	ZWS200	ZWS300	ZWS400	ZWS500	ZWS600	ZWS700	ZWS800	ZWS900
Wind Speed	■			■	■	■	■	■
Wind Direction	■			■	■	■	■	■
Air Pressure		■	■	■	■	■	■	■
Temperature		■	■	■	■	■	■	■
Humidity		■	■	■	■	■	■	■
Raindfall			■		■	■	■	■
Radiation						■	■	■
UVI							■	■
Photogragh								■
Compass	ZWS200C	ZWS300C	ZWS400C	ZWS500C	ZWS600C	ZWS700C	ZWS800C	ZWS900C
GPS	ZWS200G	ZWS300G	ZWS400G	ZWS500G	ZWS600G	ZWS700G	ZWS800G	ZWS900G
Wireless	LTE -G Wifi -W Lora -L							

Parameter

Measure Item	Measurement Range	Resolution	Accuracy	Remark
Wind Speed	0-60m/s	0.1m/s	±0.3m/s or ±3%	Ultrasonic
Wind Direction	0-360°	0.1°	3°	Ultrasonic
Air Pressure	10-1100hPa	0.1hPa	0.3hPa(25°C)	Silicon Piezoresistor
Temperature	-40-85°C	0.1°C	0.3°C	Platinum Resistance
Humidity	0-100%	0.1%	2%	Capacitance
Raindfall	0-200mm/Hour	0.2mm	3%*	Optics
Radiation	0-2000w/m2	1w/m2	5%*	Silicon Light
UVI	0-15 UVI			Silicon Light
Photogragh	1920*1080			
Compass	0-360°	0.1°	1°*	Electronic

Note

We accept custom configuration requirements.

Overview

With the deterioration of the environment, ZAQ Air Quality Monitoring Sensors can give you more suggestions and choices, hoping that ZAQ sensors can not only ease your nervous mood, but also ease your heart.

Application

Smart Street Lighting System
Tower Crane Ultrasonic Anemometer
Agricultural Weather Station
Transmission Lines Weather Station
Meterological Weather Station
Wind Power

Advantage

Maintenance-free
Easy to install without moving parts
Low power consumption
Diversity of power supply
Wireless communication
Data Hosting, Providing Information Reminder Function

Model

	ZAQ250	ZAQ260	ZAQ270	ZAQ280	ZAQ380	ZAQ550	ZAQ650	ZAQ660
Particle	■	■	■	■	■	■	■	■
Noise	■	■	■	■	■			
Air Pressure	■	■	■	■	■	■	■	■
Temperature	■	■	■	■	■	■	■	■
Humidity	■	■	■	■	■	■	■	■
Wind Direction	■	■	■	■	■	■	■	■
Wind Speed	■	■	■	■	■	■	■	■
Raindfall		■	■	■	■		■	■
Radiation			■	■	■			
UVI				■	■			
Photogragh					■			■
CO						■	■	■
NO2						■	■	■
SO2						■	■	■
O3						■	■	■
Compass								
GPS								
Wireless								

Parameter

Measure Item	Measurement Range	Resolution	Accuracy	Remark
Particle (PM1/PM2.5/PM10)	0-1000ug/m3	0.3ug/m3	±15% or ±10μg/m3	Laser Scattering
Noise	30-130dB(A)		1.5dB	
Air Pressure	10-1100hPa	0.1hPa	0.3hPa(25°C)	Silicon Piezoresistor
Temperature	-40-85°C	0.1°C	0.3°C	Platinum Resistance
Humidity	0-100%	0.1%	2%	Capacitance
Wind Direction	0-360°	0.1°	3°	Ultrasonic
Wind Speed	0-60m/s	0.1m/s	±0.3m/s or ±3%	Ultrasonic
Raindfall	0-200mm/Hour	0.2mm	3%*	Optics
Radiation	0-2000w/m2	1w/m2	5%*	Silicon Light
UVI	0-15 UVI			Silicon Light
Photogragh	1920*1080			
CO	0-1000ppm	0.1ppm		Electrochemical
NO2	0-20ppm	1ppb		Electrochemical
SO2	0-20ppm	1ppb		Electrochemical
O3	0-20ppm	1ppb		Electrochemical
Compass	0-360°	0.1°	1°*	Electronic

Overview

The tipping rain gauge conforming to WMO is a standard instrument for monitoring rainfall data in various industries. It can be used for traceability analysis of various applications.

Application

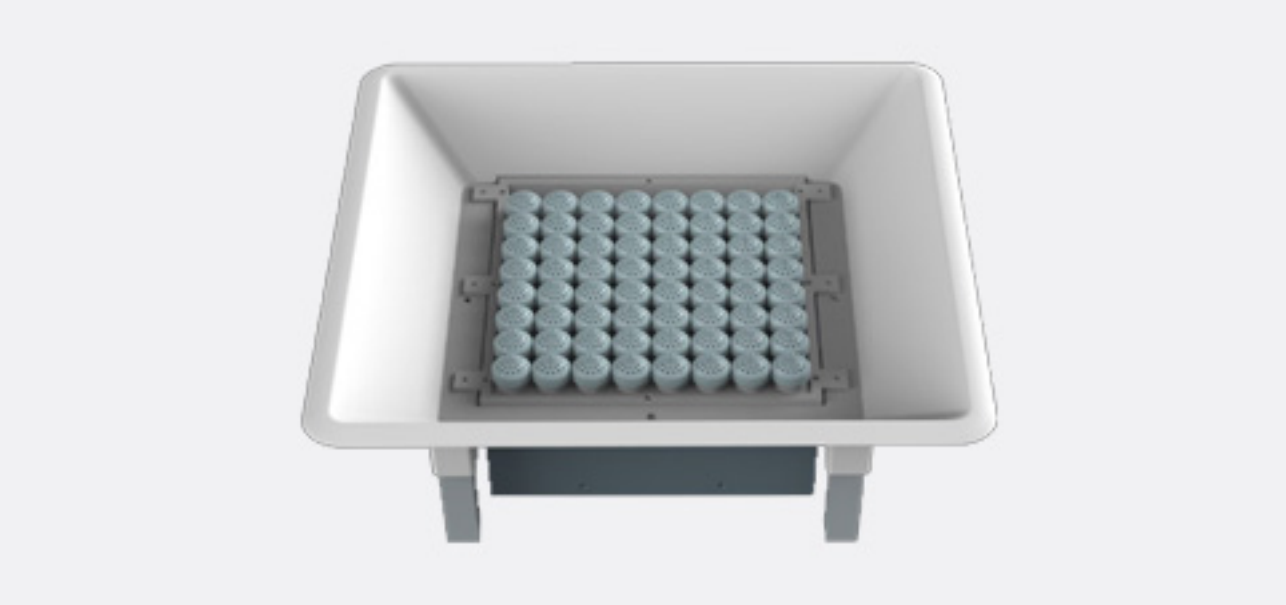
Automatic weather station
Water conservancy
Mountain torrent monitoring
Urban Waterlogging Monitoring
Smart City Monitoring
Road / Dam Area

Advantage

Accurate Monitoring
Standard Method
Long life
Provide customized interface development

Parameter

	ZDR010	ZDR020	ZDR050	ZDR100
Funnel Diameter	Φ200mm	Φ200mm	Φ200mm	Φ200mm
Operating Temperature	0-60°C	0-60°C	0-60°C	0-60°C
Resolution	0.1mm	0.2mm	0.5mm	1mm
Measurement Range	0-4mm/min	0-4mm/min	0-4mm/min	0-4mm/min



Overview

ZAS Doppler sodar wind profiler is a low-cost aerial wind measurement product. It can measure wind speed and wind direction values at 20 levels with an average height of 200m, and has done rigorous comparison tests.

Application

Meteorological Monitoring
Wind Power Generation
General Aviation
Airport Low Altitude Wind Monitoring
Wind resource assessment and measurement
Nuclear power plant safety monitoring

Advantage

Smaller body
Lighter weight
Low power consumption
Low cost
High precision
Good long-term stability

Parameter

	ZAS Sodar
Maximum Layers	20 layers
Vertical Resolution	No less than 10m
Measurement Height Range	10~200m
Detection Average Time	1~10min
Horizontal Wind Accuracy	0.3m/s or 3%V
Vertical Wind Accuracy	0.5m/s
Wind Direction Accuracy	3° (@ wind speed>5m/s)
Horizontal Wind Range	0~30m/s
Vertical Wind Range	-7m/s~+7m/s

Overview

ZDM100 Disdrometer is a laser instrument that measures the drop size distribution falling hydrometeors. It can also monitor rainfall types, visibility, radar reflectivity and other parameters. It is widely used in the field of hydrometeorology.

Application

Assessment of weather modification efficiency
Observation of Raindrop Spectrum and Fog
Measurement of Precipitation and Fog
ZR Factor Calibration of Rainfall Radar
Scientific Research on Precipitation Process
Soil and Water Loss and Soil Conservation

Advantage

No moving parts, Maintenance-free
Long life, low power consumption
Wide range voltage supply 9~15V DC
Various installation bases
Protocols support SDI12/MODBUS/Ascii

Parameter

Detection Area	>60cm2
Rainfall Rate	0.1-22 m/s
Precipitation Type/Code	Drizzle, rain, snow, sleet, hail, etc.,
Precipitation Intensity	0.001-1000 mm/h
Precipitation Accuracy	±5% (liquid precipitation), ±20% (solid precipitation)
Particle Size	0.125-26mm
Rainfall Visibility	10-5000m ±5%
Radar Reflectivity	-9.9-99dBz， ±15%
Store	10 days data
Interface	RS232 / RS485

Overview

The fog is so thick that we don't know where the road is, but through the ZVS visibility sensor, we can sense the direction of the road.

Application

Airport AWOS System
Environmental Protection Monitoring
High Way Measure System
Smart City Project
Automatic Weather Station
Meterological Weather Station

Advantage

Maintenance-free
Easy to install without moving parts
Low power consumption
Diversity of power supply
Wireless communication
Image Acquisition

Parameter

	ZVS100	ZVS200	ZVS300
Measuring range	5-10Km	5-30Km	5-50Km
Accuracy	≤2km ±2% 2Km-10km ±5%	≤2km ±2% 2Km-10km ±5%	≤2km ±2% 2Km-10km ±5%
Consistency	4%	4%	4%
Data Update Interval	0-60s	0-60s	0-60s
Scattering Angle	Forward scatter 39°-51°		

Overview

ZRS Non-Invasive Road Sensor is designed to monitor traffic and road surface status, which uses remote sensing technology, to avoid damage to the road. Multi-spectral measurement technology makes it possible to accurately detect the road surface ice, snow and water thickness.

Application

Airport Pavement Monitoring
Highway Meteo Measure System
Smart City Project

Advantage

Maintenance-free
Non-contact, long life
Can be used for mobile monitoring
Can be used for mobile monitoring
Diversity of power supply
Wireless communication

Parameter

Measuring Range	2-15M
Angle	30-90°
Power Input	DC12/24V Solar
Maximum Power Consumption	2W
Pavement State Output	Water: 0 - 2mm Ice: 0 - 2mm Snow: 0 - 10mm Slippery degree: 0.00 - 1
Accuracy	0.01mm
Interface	RS485/Wifi/LTE/BT/Lora

Overview

ZSTM-3 soil sensor which can measure soil moisture & EC & temperature, provided with high accurate and high sensitive. It is an important tool to observe and study the occurrence, evolution, improvement and the dynamics water of saline soil

Application

Orchard
Tea Garden
Vineyard
Cash Crop

Advantage

Moisture/Electrical conductivity/Temperature
Electrode can withstand a strong external impact
Completely sealed
Resistance to acid-base corrosion

Parameter

Signal Output	0-2V / 4-20mA / RS485 Modbus Protocol
Power Supply	3.6-30V/DC
Power Consumption	6mA@24V DC
Soil Moisture Measurement Range	0-100% volumetric moisture content Resolution: 0-50%, 0.03%, 1% within 50-100% Accuracy: 0-2%, inside 50% 3% within 50-100%
Conductivity Range	Optional range: 0-5000 / 10000 / 20000 us/cm
Soil Temperature Range	Range: -40-80°C

Overview

ZLW-2 leaf wetness sensor can accurately measure the humidity of the leaf surface, and can monitor the trace water or ice crystals on the leaf surface.

Application

Agricultural Weather Station
Orchard
Tea Garden
Vineyard
Cash Crop

Advantage

Blade design
Detect the fog, ice, rain and dew
Waterproof sealing, can be used for outdoors
High precision, fast response, reliable performance
Multiple signal output interfaces

Parameter

Signal Output	RS485(Modbus protocol)
Power Supply	3.6-30V/DC
Power Consumption	6mA@24V DC
Humidity Range	0-100% Accuracy: ±5%
Temperature Range	Range: -40~80°C Resolution: 0.1°C Accuracy: ±0.5°C
Protection Grade	IP65
Dimension	65*13*145mm

ZWQ-PH1 PH ELECTRODE SENSOR

Overview

ZWQ-PH1 pH Electrode Sensor that can be used to detect the pH value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell, easy to install
Double salt bridge design, longer sensor life
The annular exudation interface design
Blue glass bulb design, no drift, higher accuracy
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Glass Electrode
Measure Range	0-14 pH
Measure Resolution	0.01pH
Measure Accuracy	±0.1pH
Response Time	< 15s
Interface	RS485 (Modbus RTU)

Overview

ZWQ500 multi-parameter water quality meter is a portable five-in-one sensor. It can monitor PH, dissolved oxygen, conductivity, turbidity and temperature at the same time. It can also select extra COD, chlorophyll and cyanobacteria items.

Application

Surface water
Groundwater

Advantage

High reliability
Flexible and portable
Scalability
Various applications
Strong case

Parameter

Measure Items	Measuring Principle	Measure Range	Accuracy	Response Time
Temperature	RTD	-30-130°C	±0.1°C	N/A
pH	Glass Electrode	0-14pH	±0.1pH	<15s
Conductivity	Graphite Electrode	0-200000μS/cm	±1%	<15s
Dissolved Oxygen	Fluorescence	0-20mg/L	±0.1mg/L	<45s
Turbidity	Scattering	0-4000NTU	±5%	<30s
Interface	RS485 (Modbus RTU)			
Power	DC12/24V			

Overview

ZWQ-ORP1 ORP Electrode Sensor is used for monitoring ORP in water quality. It has corrosion resistance shell and is suitable for all kinds of harsh working environment.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell, easy to install
Double salt bridge design, longer sensor life
The annular exudation interface design
Blue glass bulb design, no drift, higher accuracy
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Glass Electrode
Measure Range	-2000-2000mV
Measure Resolution	0.1mV
Measure Accuracy	±1mV
Response Time	< 15s
Interface	RS485 (Modbus RTU)

Overview

ZWQ-DO1 is a dissolved oxygen sensor for monitoring water quality. It can be used for on-line monitoring and for harsh environment in the field.

Application

Surface water
Groundwater

Advantage

Annular exudation interface design
No electrolyte, more accurate
Scalability
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Fluorescence
Measure Range	0-20 mg/L
Measure Resolution	0.01 mg/L
Measure Accuracy	±0.1 mg/L
Response Time	< 45s
Interface	RS485 (Modbus RTU)

Overview

ZWQ-COD1 COD Sensor can be used to detect the Chemical Oxygen Demand value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell, easy to install
Self-cleaning function
Double-beam measurement technology
Long-life infrared LED light source
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Ultraviolet Absorption
Measure Range	0-500mg/L; 0-500NTU
Measure Resolution	0.01mg/L; 0.01NTU
Measure Accuracy	±7%
Material	316L Stainless Steel Shell
Interface	RS485 (Modbus RTU)

Overview

ZWQ-TUB1 Turbidity Sensor can be used to detect the turbidity value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell
Digital modulation filtering technology
Long-life infrared LED light source
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Optical Scattering
Measure Range	0-4000NTU
Measure Resolution	0.01NTU
Measure Accuracy	±5%
Material	POM
Interface	RS485 (Modbus RTU)

Overview

ZWQ-INH1 Ammonia Nitrogen Sensor can be used to detect the ammonia nitrogen value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell, easy to install
Accurate measurement
Built-in PT1000 temperature sensor
RS485 output
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Ion Electrode
Measure Range	0-1000 mg/L
Measure Resolution	0.01 mg/L
Measure Accuracy	10% or 0.1mg/L
Material	POM
Interface	RS485 (Modbus RTU)

Overview

ZWQ-BGA1 Blue Green Algae Sensor can be used to detect the Blue Green Algae value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Self-cleaning function
Samples need not be treated and extracted
Accurate measurement
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Fluorescence
Measure Range	0-2000Kcells/mL
Measure Resolution	0.1Kcells/mL
Measure Accuracy	±5%
Material	316L Stainless Steel Shell
Interface	RS485 (Modbus RTU)

Overview

ZWQ-IF1 Fluoride Sensor can be used to detect the Fluoride value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Corrosion resistant shell, easy to install
Accurate measurement
Built-in PT1000 temperature sensor
RS485 output
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Ion Electrode
Measure Range	0-1000 mg/L
Measure Resolution	0.01 mg/L
Measure Accuracy	±5%
Material	POM
Interface	RS485 (Modbus RTU)

Overview

ZWQ-ICL Chloride Sensor can be used to detect the Chloride value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Self-cleaning function
Samples need not be treated and extracted
Accurate measurement
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Ion Electrode
Measure Range	0-10000 mg/L
Measure Resolution	0.01 mg/L
Measure Accuracy	±10%
Material	POM
Interface	RS485 (Modbus RTU)

Overview

ZWQ-CT1 Residual Chlorine Sensor can be used to detect the Residual Chlorine value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

High-efficiency process control
Integrate temperature compensation function
Will not be disturbed by turbidity or dyeing
Protected by the film cap

Parameter

Measuring Principle	Clark Current
Measure Range	0-2mg/L
Measure Resolution	0.001mg/L
Measure Accuracy	±1%
Flow	250-500mL/min
Water Quality	pH: 4~9 Conductivity: 10-50000uS/cm
Material	CPVC
Interface	RS485 (Modbus RTU)

Overview

ZWQ-TP1 Water Transparency Sensor can be used to detect the Transparency value of water quality. It can be used in harsh environment and the monitoring data is stable and reliable.

Application

Surface water
Groundwater

Advantage

Self-cleaning function
Corrosion resistant shell
Accurate measurement
Beam measurement technology
Record storage, plug and play
Sensor supports hot swap function

Parameter

Measuring Principle	Near Infrared Absorption Spectrometry
Measure Range	2-1000cm
Measure Resolution	0.1cm
Measure Accuracy	±5%
Material	316L Stainless Steel Shell
Interface	RS485 (Modbus RTU)