



# MIILKIIA

Product manual

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Miilkiia Grow



Miilkiia Agriculture



Miilkiia Agriculture



Miilkiia Agriculture



Miilkiia Agriculture

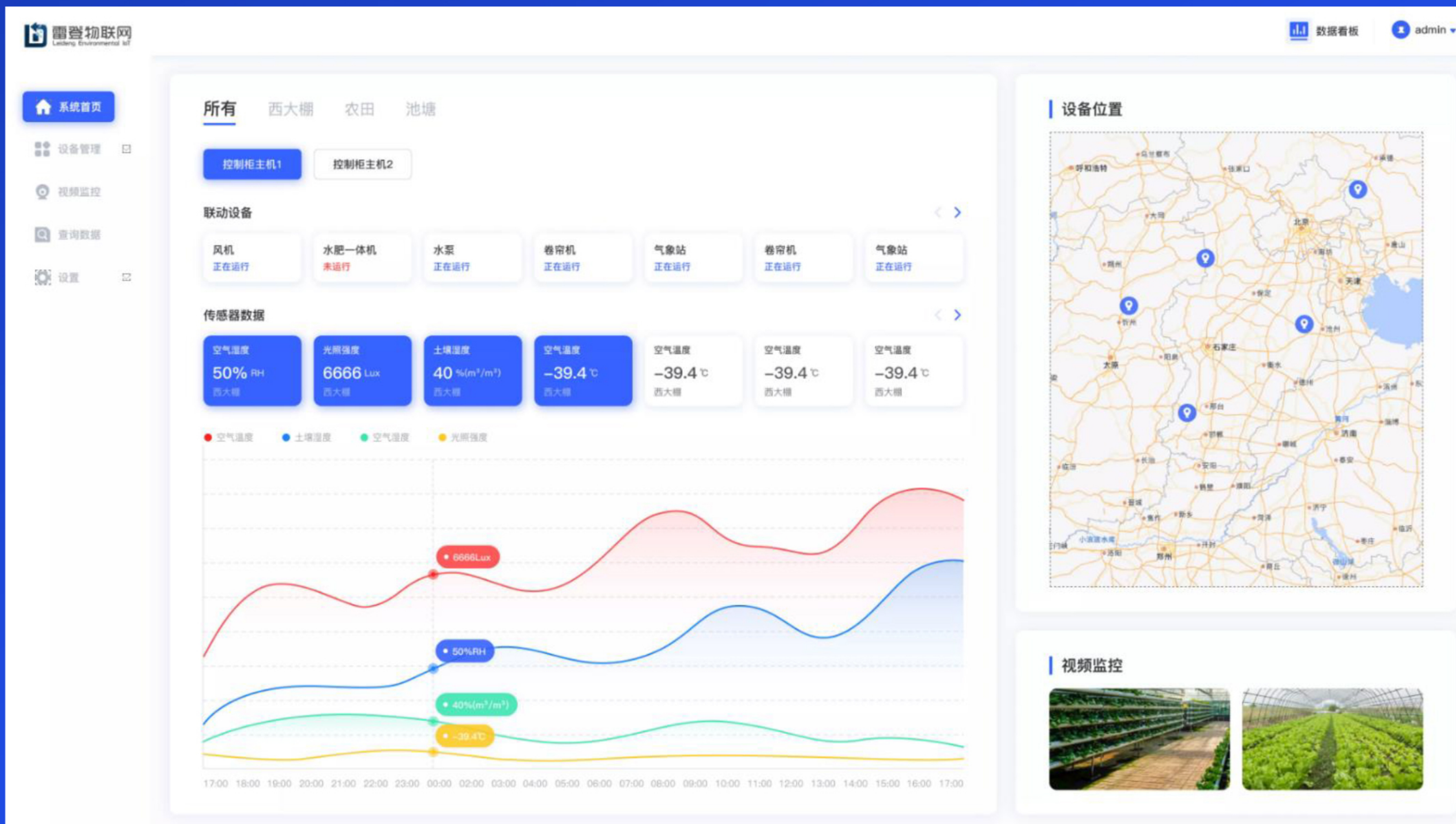


# IOT PLATFORM

A concise and easy-to-use IoT platform.

Data inquiry&export/linkage device control/video surveillance/  
data dashboard/abnormal alarm/device management.....

PC



small program





# PRODUCT CATALOG

## 1. Automatic control system

Greenhouse Automatic Control System  
Smart aquaculture system  
Smart irrigation system

## 2. Automatic weather station

Agricultural meteorological station  
Greenhouse meteorological station  
Reservoir meteorological station  
Scenic Area Meteorological Station  
Campus Meteorological Station  
Port Meteorological Station  
Dust monitoring station  
automatic precipitation station

## 3. Soil moisture monitoring

Soil moisture monitoring system  
Pipe type soil moisture monitoring system  
Handheld moisture rapid measurement

## 4. Water quality monitoring system

Water quality monitoring system

## 5. Plant growth monitoring

Stem growth monitoring system  
Fruit growth monitoring system

## 6. Sensor products



## AUTOMATIC CONTROL SYSTEM

Realize the informatization and intelligent remote management of greenhouses, fully leverage the role of IoT technology in facility agriculture production, and ensure that the environment inside the greenhouse is maintained in a suitable state for crop growth.



## REAL-TIME DETECTION

Air temperature and humidity,  
soil temperature and humidity,  
carbon dioxide concentration  
Light intensity video image

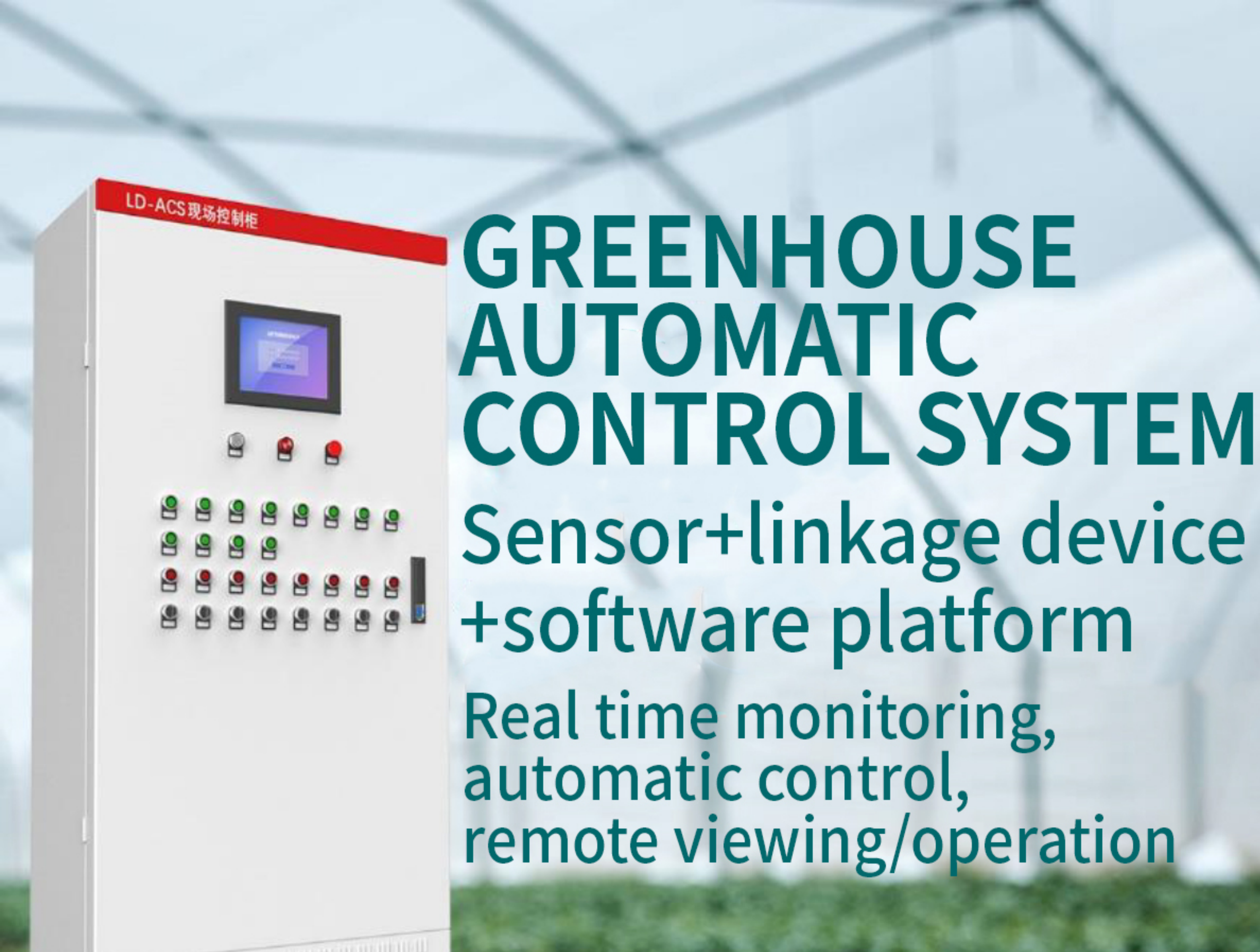
## AUTOMATIC CONTROL

Wet curtain fan,  
inner and outer sunshade roof windows,  
side windows  
Heating, supplementary lighting,  
spray irrigation

## REMOTE MANAGEMENT

Through information terminals such as mobile phones and computers, to Managers send real-time monitoring and alarm information





## GREENHOUSE AUTOMATIC CONTROL SYSTEM

### LINKAGE EQUIPMENT

Fan, roll film, insulation blanket, wet curtain, water fertilizer machine irrigation, etc

### EQUIPMENT LIST

Automatic greenhouse control cabinet

### SENSOR:

Air temperature and humidity sensor

Carbon dioxide concentration sensor

Illuminance sensor

Photosynthetically active sensor

Soil temperature and humidity sensor

Soil temperature and humidity conductivity sensor

Soil pH sensor

Soil nitrogen, phosphorus, and potassium sensors

Pipe type soil moisture tester

### LINKAGE EQUIPMENT:

Fan, film roller, insulation blanket, wet curtain, water fertilizer machine, fill light, etc

(The above sensors and linkage devices are selected and matched according to the actual situation)

### OPTIONAL

DL1/DL3 data acquisition host

2-meter stainless steel tripod bracket

Protective box

Solar energy kit





# SMART AQUACULTURE SYSTEM

Sensor+  
linkage device+  
software platform  
Real time monitoring,  
automatic control,  
remote viewing/operation

## SMART AQUACULTURE SYSTEM

### LINKAGE EQUIPMENT

Automatic feeding machine, fan, water curtain, heating, ventilation window, etc.

### Optional selection

LED screen

DL1/DL3 data acquisition host

2-meter stainless steel tripod bracket

Protective box

Solar energy kit

### EQUIPMENT LIST

#### Sensor:

Air temperature and humidity sensor

Carbon dioxide concentration sensor

Air temperature and humidity carbon dioxide sensor

Ammonia gas sensor

Methane sensor

Illuminance sensor

(The above sensors and linkage devices are selected and matched according to the actual situation)

Automatic greenhouse control cabinet





# SMART IRRIGATION SYSTEM

Sensor+  
linkage device+  
software platform

Real time monitoring,  
automatic control,  
remote viewing/operation

## SMART IRRIGATION SYSTEM

### LINKAGE EQUIPMENT

Water fertilizer machine

### EQUIPMENT LIST

Soil temperature and humidity conductivity sensor

Soil nitrogen, phosphorus, and potassium sensors

Automatic greenhouse control cabinet

### Optional selection

LED screen





## **AUTOMATIC WEATHER STATION**

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Automatic weather stations can accurately measure various meteorological elements on site 24/7. It can store meteorological data for at least one year and transmit it to the central computer meteorological database through various communication methods. Widely used in fields such as meteorology, environmental protection, airports, agriculture and forestry, scientific research, etc.

## **REAL-TIME DETECTION**

Wind speed, wind direction, rainfall, temperature, humidity, radiation, atmospheric pressure

## **STABLE AND RELIABLE**

Can operate in various harsh outdoor environments, with low power consumption, high stability, and high precision. Can store meteorological data for at least one year.

## **ON DEMAND CUSTOMIZATION**

Meteorological sensors can be configured according to demand. Multiple communication methods are available for selection. Open design of hardware and software, which can be flexibly combined and used.



# AGRICULTURAL METEOROLOGICAL STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, atmospheric pressure, wind speed, wind direction, light intensity, rainfall, PM2.5, soil temperature, soil humidity, soil DH, soil ammonia, phosphorus, and potassium

## EQUIPMENT LIST

Air temperature, humidity, illumination, atmospheric pressure sensor

PM2.5 sensor

Wind speed sensor

Wind direction sensor

rain sensor

Soil temperature and humidity sensor

Soil pH sensor

Soil nitrogen, phosphorus, and potassium sensors

2-meter stainless steel tripod bracket

Protective box

DL1/DL3 data acquisition host

## OPTIONAL

Solar energy kit



# GREENHOUSE METEOROLOGICAL STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, carbon dioxide concentration, photosynthetically active radiation, soil temperature, soil humidity, soil salinity

## EQUIPMENT LIST

Air temperature and humidity carbon dioxide sensor  
Photosynthetically active radiation sensor  
Soil temperature and humidity sensor  
Soil salinity sensor

2-meter stainless steel tripod bracket  
Protective box  
DL1/DL3 data acquisition host

## OPTIONAL

Solar energy kit



# RESERVOIR METEOROLOGICAL STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, wind speed, wind direction, light intensity, rainfall, water pH value, water conductivity, water dissolved oxygen, water turbidity, water ammonia nitrogen, water ORP, water temperature

## EQUIPMENT LIST

Air temperature and humidity sensor  
Illuminance sensor  
Wind speed sensor  
Wind direction sensor  
rain sensor  
Water ammonia nitrogen sensor  
Water conductivity sensor  
Water pH sensor  
Water turbidity sensor  
Water temperature sensor  
Dissolved oxygen sensor for water bodies  
ORP sensor for water body  
Customized 3.5-meter stainless steel cage bracket  
Protective box  
DL1/DL3 data acquisition host

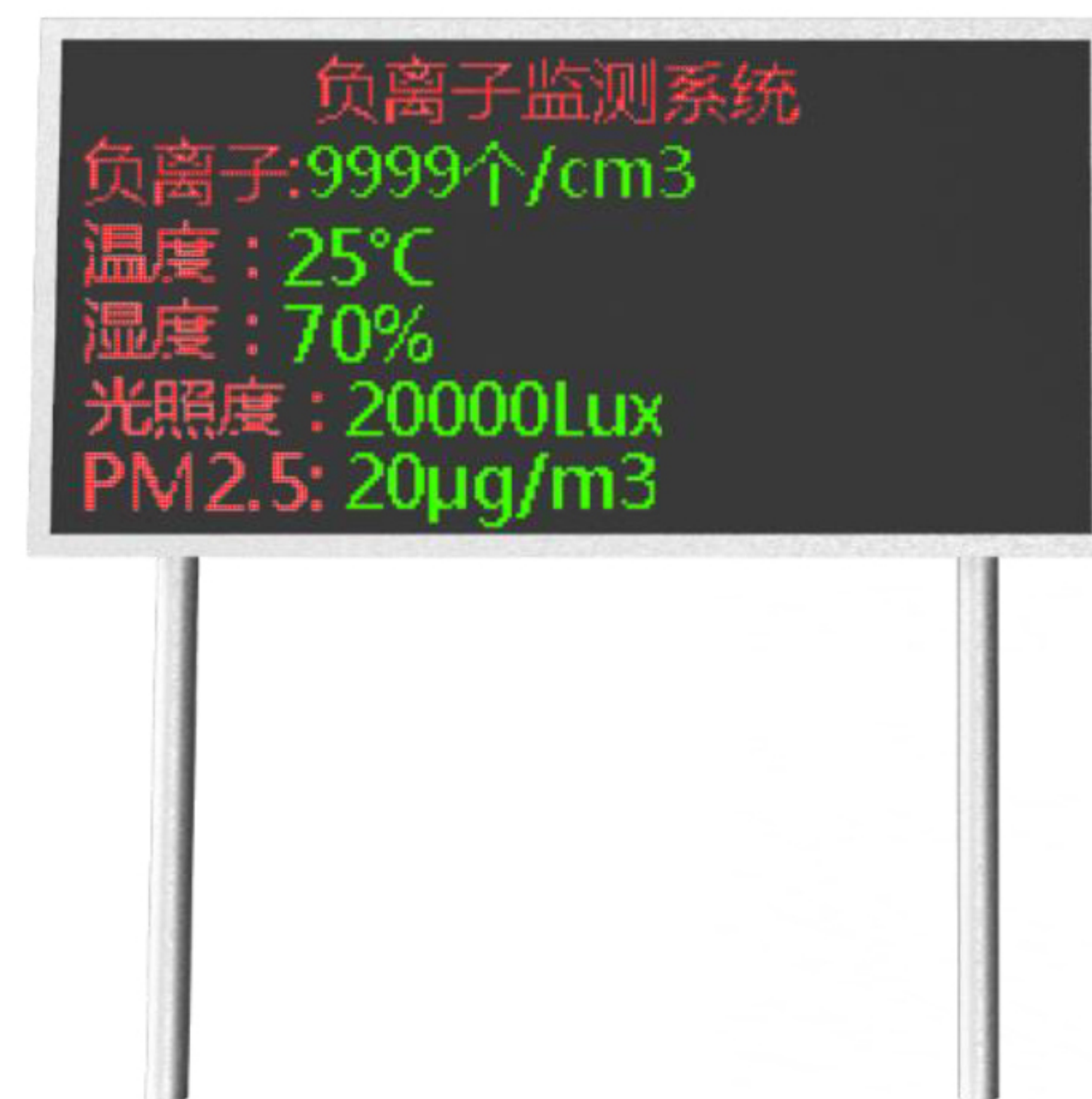
## OPTIONAL

Solar energy kit



# SCENIC AREA METEOROLOGICAL STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, atmospheric pressure, PM, wind speed, wind direction, negative oxygen ions

## EQUIPMENT LIST

Air temperature, humidity, and atmospheric pressure sensor  
Air particulate matter concentration sensor  
Wind speed sensor  
Wind direction sensor

Customized 3.5-meter stainless steel cage bracket  
Protective box  
DL1/DL3 data acquisition host

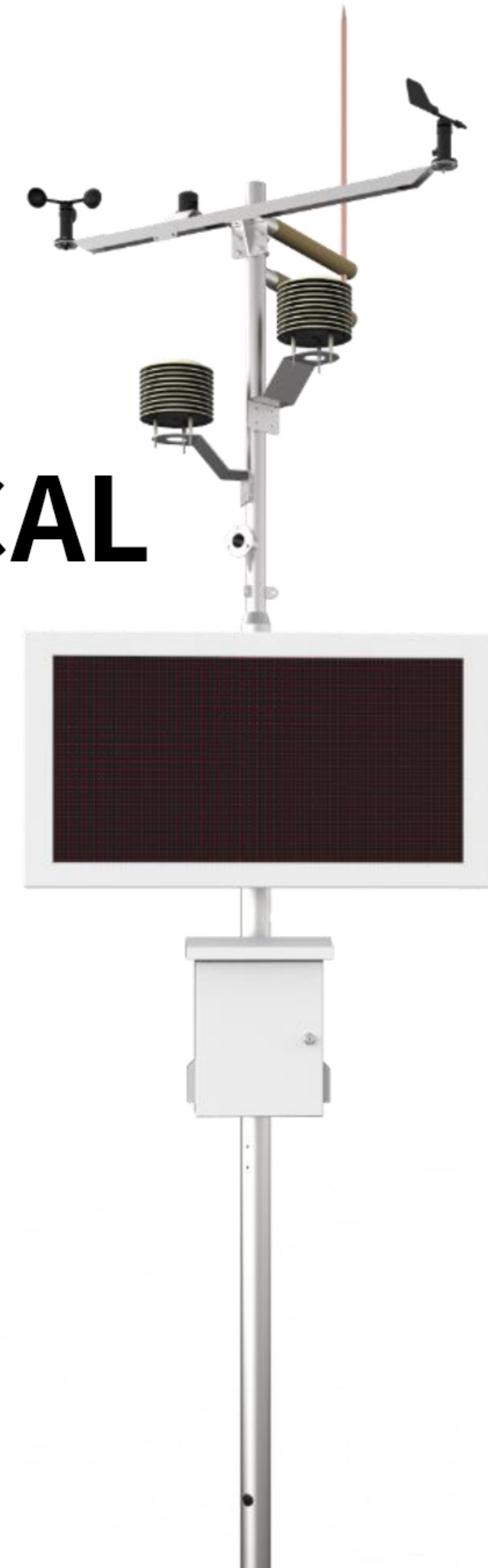
## OPTIONAL

Solar energy kit  
LED screen  
Negative oxygen ion detector



# CAMPUS METEOROLOGICAL STATION

Customizable  
on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, atmospheric pressure, PM, wind speed, wind direction, lighting, UV

## EQUIPMENT LIST

Air temperature, humidity, and atmospheric pressure sensor  
Air particulate matter concentration sensor  
Illuminance sensor  
Wind speed sensor  
Wind direction sensor

Customized 3.5-meter stainless steel cage bracket  
Protective box  
DL1/DL3 data acquisition host

## OPTIONAL

UV radiation sensor  
Surveillance camera  
Solar energy kit  
LED screen



# PORT METEOROLOGICAL STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, atmospheric pressure, wind speed, wind direction, lighting, rainfall, evaporation rate

## EQUIPMENT LIST

Air temperature, humidity, and atmospheric pressure sensor  
Illuminance sensor  
Wind speed sensor  
Wind direction sensor  
rain sensor  
Water surface evaporation sensor

Customized 3.5-meter stainless steel cage bracket  
Protective box  
DL1/DL3 data acquisition host

## OPTIONAL

Solar energy kit



# DUST MONITORING STATION

Customizable on demand



## MEASUREMENT PARAMETERS

Air temperature, air humidity, PM, wind speed, wind direction, noise

## EQUIPMENT LIST

Air temperature and humidity sensor  
Air particulate matter concentration sensor  
Wind speed sensor  
Wind direction sensor  
Noise sensor

Customized 3.5-meter stainless steel cage bracket  
Protective box  
DL1/DL3 data acquisition host

## OPTIONAL

Solar energy kit  
led screen



# **AUTOMATIC PRECIPITATION STATION**

Customizable  
on demand



## **MEASUREMENT PARAMETERS**

Rainfall

## **EQUIPMENT LIST**

Rain sensor  
Solar energy kit

## **OPTIONAL**

Protective enclosure



## **SOIL MOISTURE MONITORING**

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The automatic soil moisture monitoring system mainly monitors the soil moisture content and soil temperature, measuring the soil volumetric moisture content (VWC) and temperature values through soil moisture sensors and temperature sensors.

## **REAL-TIME DETECTION**

Real time collection of soil moisture information and automatic wireless transmission to the monitoring platform.

## **ACCURATE MEASUREMENT AND REPORTING**

Adopting high-precision sensors. The system operation does not require manual participation, and the measurement and reporting are accurate

## **UNATTENDED**

Solar powered, can be connected to wireless transmission modules  
Waterproof, dustproof, and lightning resistant, suitable for long-term use in outdoor environments.

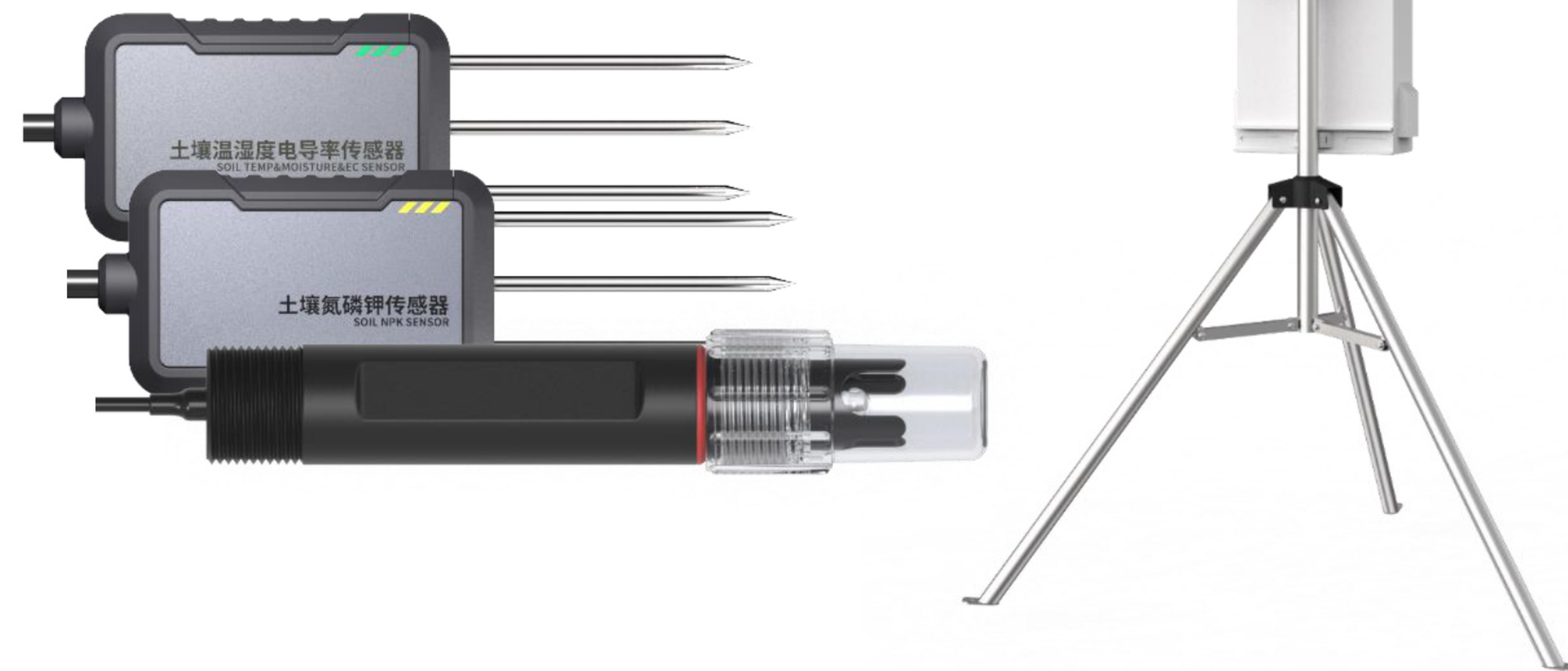
## **SCALABLE DEVELOPMENT**

Drought prediction and forecasting, irrigation area optimization, water distribution, seedling situation, water-saving irrigation, early monitoring system



# SOIL MOISTURE MONITORING SYSTEM

Customizable on demand



## MEASUREMENT PARAMETERS

Soil temperature, soil moisture, soil conductivity, soil pH value, soil nitrogen, phosphorus, and potassium

## EQUIPMENT LIST

Soil temperature and humidity conductivity sensor  
Soil pH sensor  
Soil nitrogen, phosphorus, and potassium sensors

DL1/DL3 data acquisition host  
2-meter stainless steel tripod bracket  
Protective box

## OPTIONAL

Solar energy kit



# SOIL MOISTURE MONITORING SYSTEM

Tube type moisture tester

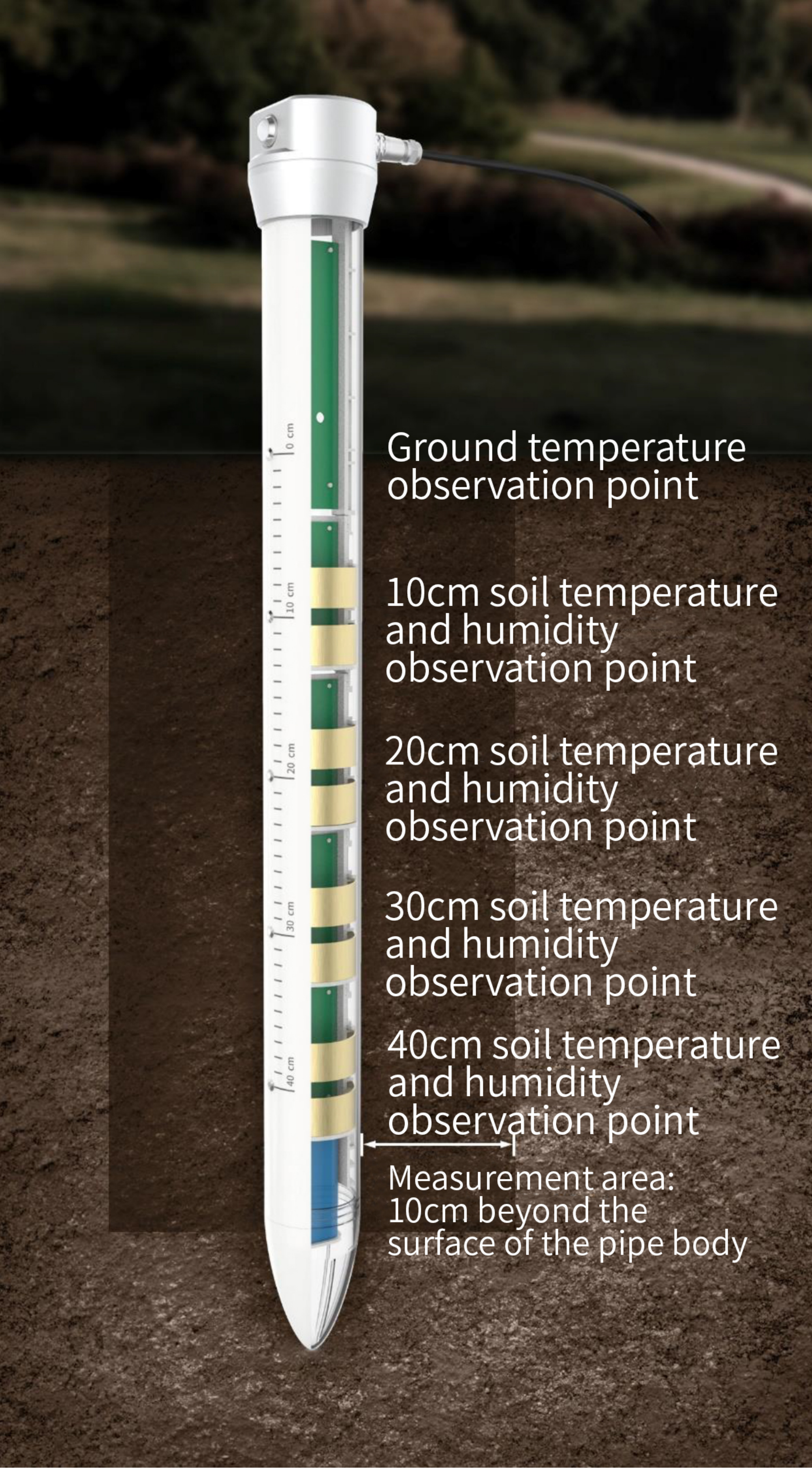


## MEASUREMENT PARAMETERS

Soil temperature, soil moisture, X-axis inclination angle, Y-axis inclination angle

## EQUIPMENT LIST

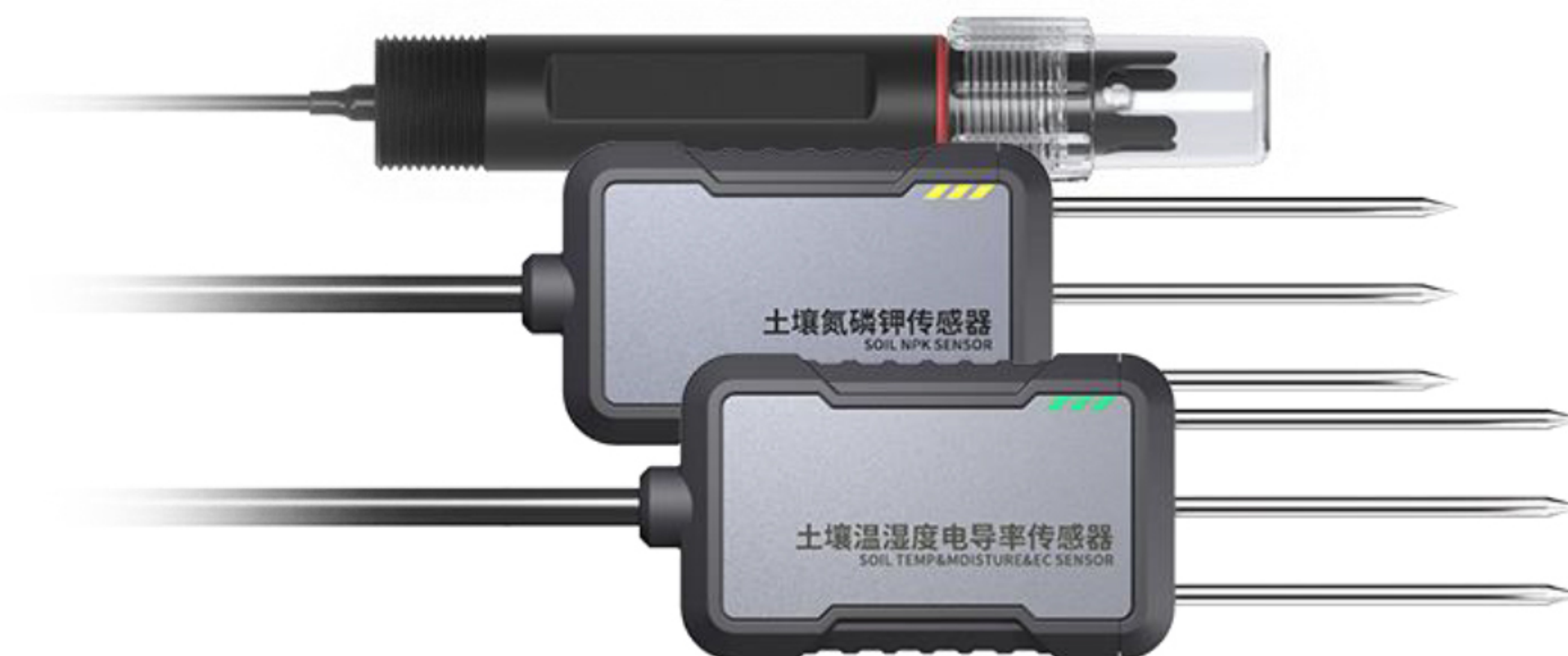
Tube type moisture tester  
Solar energy kit





# RAPID MEASUREMENT OF SOIL MOISTURE

Temperature, humidity, conductivity, pH, nitrogen, phosphorus, and potassium are automatically stored and exported in Excel format



## MEASUREMENT PARAMETERS

Soil temperature, soil moisture, soil conductivity, soil pH value, soil nitrogen, phosphorus, and potassium

## EQUIPMENT LIST

- Soil temperature and humidity conductivity sensor
- Soil pH sensor
- Soil nitrogen, phosphorus, and potassium sensors
- Handheld speedometer set



## **WATER QUALITY MONITORING SYSTEM**

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The water quality monitoring system conducts real-time monitoring of various indicators of water bodies and objectively evaluates the water quality status through sensor data.

### **REAL-TIME COLLECTION**

Real time collection of soil moisture information and automatic wireless transmission to the monitoring platform

### **ACCURATE MEASUREMENT AND REPORTING**

Adopting high-precision sensors. The system operation does not require manual participation, and the measurement and reporting are accurate

### **UNATTENDED**

Powered by solar energy, can be connected to wireless transmission modules. Waterproof, dustproof, and lightning resistant, suitable for long-term use in outdoor environments.



# WATER QUALITY MONITORING SYSTEM

Customizable on demand

## MEASUREMENT PARAMETERS

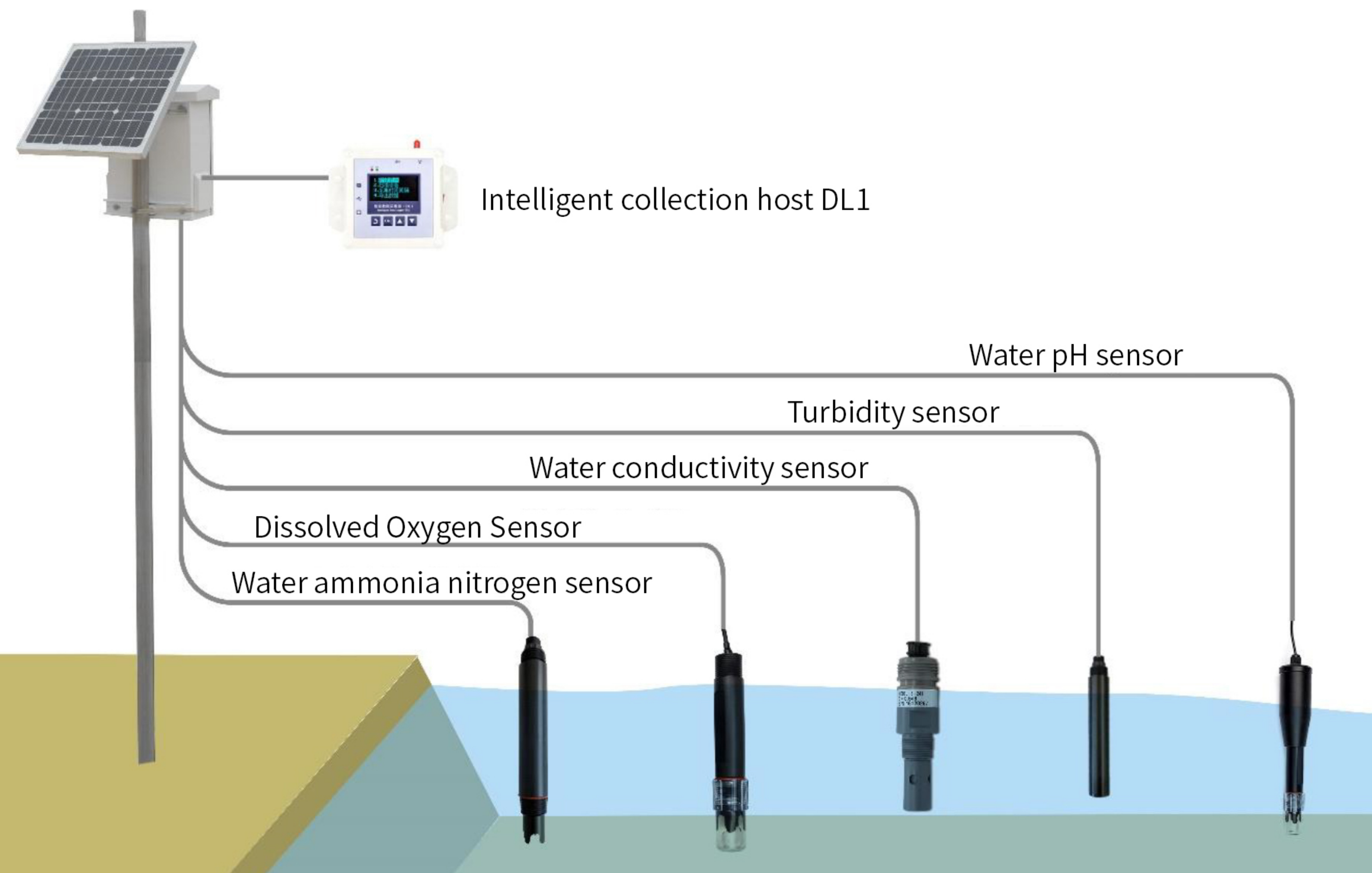
Water pH value, water conductivity, water dissolved oxygen, water turbidity, water ammonia nitrogen, water ORP, water temperature

## EQUIPMENT LIST

- Water ammonia nitrogen sensor
- Water conductivity sensor
- Water pH sensor
- Water turbidity sensor
- Water temperature sensor
- Dissolved oxygen sensor for water bodies
- ORP sensor for water body
- Customized stainless steel bracket
- Protective box
- DL1/DL3 data acquisition host

## OPTIONAL

Solar energy kit





## **PLANT GROWTH MONITORING**

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High precision displacement increment sensor, used to measure the growth rate of plants. The displacement sensor recorded the growth size of the complete fruit. High precision detection of micrometer scale displacement has been achieved, which is suitable for measuring various plant stems and has no harm to plants.

## **REAL-TIME COLLECTION**

Real time collection of soil moisture information and automatic wireless transmission to the monitoring platform

## **ACCURATE MEASUREMENT AND REPORTING**

Adopting high-precision sensors. The system operation does not require manual participation, and the measurement and reporting are accurate

## **UNATTENDED**

Powered by solar energy, can be connected to wireless transmission modules. Waterproof, dustproof, and lightning resistant, suitable for long-term use in outdoor environments.



# FRUIT/STEM GROWTH MONITORING SYSTEM

Range and measurement range can be selected with wired/4G upload



## MEASUREMENT PARAMETERS

Fruit expansion/stem growth

## EQUIPMENT LIST

Fruit growth sensor  
Stem growth sensor  
DL1/DL3 data acquisition host

2-meter stainless steel tripod bracket  
Protective box

## OPTIONAL

Solar energy kit






oxygen,  
pH,

## SENSOR

Focus on professional fields.  
The product is widely used in  
national scientific research  
projects, modern farms,  
agricultural greenhouses,  
meteorology, automatic irrigation  
and other fields.






# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Wind speed sensor	Wind speed: range 0-30m/s, accuracy 0.15m/s
	Wind direction sensor	Wind direction: range 0~360 °, 16 directions
	Wind direction sensor	Wind direction: range 0~360 °, accuracy $\pm 1^{\circ}$






# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Integrated wind speed and direction sensor	<b>Wind speed:</b> range 0~30m/s, accuracy 0.15m/s <b>Wind direction:</b> range 0~360 °, 16 directions
	Rain sensor	<b>Precipitation intensity:</b> Range<4mm/min (8mm/min available), error±4% (2mm/min indoor static test)
	Evaporation sensor	<b>Water surface evaporation:</b> range 0~75mm, accuracy ± 0.1mm






# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Illuminance sensor	<b>Light intensity:</b> Range 0-2/20/200kLux, accuracy $\pm 3\%$
	Illuminance sensor	<b>Light intensity:</b> Range 0~65535 Lux, accuracy $\pm 3\%$
	Photosynthetically active sensor	<b>Photosynthetically active radiation:</b> range 0~2500umol/m2s, resolution 1umol/m2s






# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Air temperature and humidity sensor	<b>Air temperature:</b> range -40-70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ (25 °C C) <b>Relative humidity:</b> Range 0~100% RH, accuracy $\pm 2\%$ RH (106~90%)
	Carbon dioxide sensor	<b>Air temperature:</b> range -40-70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ (25 °C C) <b>Relative humidity:</b> Range 0~100% RH, accuracy $\pm 2\%$ RH (106~90%)
	Air temperature and humidity sensor	<b>Carbon dioxide concentration:</b> range 0-2000/5000/10000/30000/50000, accuracy $3\% \pm 50\text{ppm}$ (0-2000/5000ppm), $3\% \pm 100\text{ppm}$ (0-10000/30000ppm), $3\% \pm 300\text{ppm}$ (0-50000ppm)






# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Air particulate matter concentration sensor	<b>Total particulate matter:</b> Measurement parameters PM1.0, PM2.5, PM10, range 0-500ug/m3, accuracy $\pm 3\%$
	Three parameter sensors for air temperature, humidity, and illuminance	<b>Air temperature:</b> range -40~70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ <b>Relative humidity:</b> Range 0-100MRH, accuracy $\pm 3\% \text{ 6RH}$ <b>Light intensity (outdoor type):</b> Range 0~2/20/200kLux, accuracy $\pm 3\%$ <b>Light intensity (indoor type):</b> Range 0-65535Lux, accuracy $\pm 3\%$
	Three parameter sensors for air temperature, humidity, and atmospheric pressure	<b>Air temperature:</b> range -40-70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ <b>Relative humidity:</b> Range 0~100MRH, accuracy $\pm 3\% \text{ RH}$ <b>Atmospheric pressure:</b> range 300-1100hPa, accuracy $\pm 1\text{hPa}$




# ENVIRONMENTAL METEOROLOGY SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Air temperature and humidity, dew point temperature Three parameter sensor	<b>Air temperature:</b> range -40~70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ <b>Relative humidity:</b> Range 0-100% RH, accuracy $\pm 3\%$ RH <b>Dew point temperature:</b> range -70~30 °C, accuracy $\pm 0.2\%$
	Air temperature and humidity, carbon dioxide Illumination four parameter senso	<b>Air temperature:</b> Range -40~70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ <b>Relative humidity:</b> Range 0-100% RH, accuracy $\pm 3\text{MRH}$ <b>Carbon dioxide concentration:</b> Range 0~2000/5000/10000, accuracy $\pm 20\text{ppm}$ <b>Light intensity:</b> Range 0-2/20/200kLux, accuracy $\pm 3\%$
	Air temperature, humidity, and illuminance Atmospheric pressure four parameter sensor	<b>Air temperature:</b> Range -40~70 °C, accuracy $\pm 0.3\text{ }^{\circ}\text{C}$ <b>Relative humidity:</b> Range 0-100% RH, accuracy $\pm 3\text{MRH}$ <b>Light intensity (outdoor type):</b> Range 0~2/20/200kLux, accuracy $\pm 3\%$ <b>Light intensity (indoor type):</b> Range 0-65535Lux, accuracy $\pm 3\%$ <b>Atmospheric pressure:</b> Range 300~1100hPa, accuracy $\pm 1\text{h}$






# ENVIRONMENTAL METEOROLOGY SERIES



PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Five parameter sensors for air temperature and humidity, atmospheric pressure carbon dioxide, and illuminance	<p><b>Air temperature:</b> Range -40-70 °C, accuracy <math>\pm 0.3</math> °C</p> <p><b>Relative humidity:</b> Range 0~100% RH, accuracy <math>\pm 3\%</math> RH</p> <p><b>Atmospheric pressure:</b> Range 300-1100hPa, accuracy <math>\pm 1</math>hPa</p> <p><b>Carbon dioxide concentration:</b> Range 0~2000/5000/10000, accuracy <math>\pm 20</math>ppm</p> <p><b>Light intensity:</b> Range 0-2/20/200kLux, accuracy <math>\pm 3\%</math></p>






# AUTOMATIC WEATHER STATION SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	DL1 Data collection host	This host is powered by a 12V DC power supply, a 2.54-inch screen, a GPRS network transmission module, a wired network module, a USB data output module, and other hardware components. It is used to collect digital sensor signals that are compatible with our company and can be transmitted to servers and computers through GPRS network, wired network, and bus; Supports exporting data from USB flash drives and allows for USB upgrade.
	DL2 Intelligent data collection host	This host is powered by a 12V DC power supply, a 5-inch color touch screen, a full network 4G network transmission module, a wired network module, a USB data output module, an aviation plug, and other hardware components. It is used to collect digital sensor signals and analog current and voltage sensor signals that are compatible with our company. These signals can be transmitted to servers and computer terminals through GPRS network, wired network, and bus; Supports exporting data from USB flash drives, allowing for USB upgrade or 4G remote upgrade, and also supports GPS positioning for remote viewing of the host's geographical location.
	DL3 Data collection host	This host supports 9-24V DC power supply, with two status indicator lights, a full network 4G network transmission module, a USB data output module, 2 relay outputs, 2 RS485 buses and 1 RS232 bus, with LORA local wireless acquisition and transmission module, supports USB data export, USB upgrade, supports multiple 485 bus modbus format data acquisition, and supports 4G transmission to the server




# AUTOMATIC WEATHER STATION SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	MDL5 Intelligent data collector	Used for all-weather on-site monitoring of nine meteorological elements including wind direction, wind speed, rainfall, temperature, relative humidity, air pressure, solar radiation, soil temperature, and soil moisture. Equipped with mobile weather SMS function, it can communicate through various methods; The wired, data transmission radio, GPRS mobile microcomputer meteorological data acquisition instrument has functions such as meteorological data acquisition, real-time clock, timed storage of meteorological data, parameter setting, friendly human-machine interface, and standard communication.
	LPDL Low power data collector	This host is equipped with 6 5th batteries, RGB operation indicator lights, USB upgrade and USB data export functions, upper computer connection interface, up to 12 analog signal acquisition channels, and excellent configuration with ultra-low standby current of 9uA. It supports USB insertion wake-up and USB cable insertion wake-up functions, making it very suitable for use in outdoor situations where power supply is inconvenient.
	OXZ-ZJ20 Three legged bracket for meteorological station	2-meter stainless steel bracket, sturdy and stable, carrying protective boxes, sensors, solar energy, etc. Easy to install and move.






# AUTOMATIC WEATHER STATION SERIES



PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Customization of Weather Station Cage Support	Customized ground cage meteorological bracket. The installation method of the ground cage is reliable and stable, with strong wind resistance.






# SOIL MOISTURE SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	S400L Tube type moisture tester	<b>Soil temperature:</b> Range -30~70 °C, accuracy $\pm 0.5$ °C <b>Soil volumetric moisture content:</b> Range 0~100% ( $\text{m}^3/\text{m}^3$ ), accuracy $\pm 3\%$ ( $\text{m}^3/\text{m}^3$ )
	S400 Soil temperature, humidity, conductivity, salinity sensor	<b>Soil temperature:</b> Range -30~70 °C, accuracy $\pm 0.2$ °C <b>Soil volumetric moisture content:</b> within the range of 0-100% ( $\text{m}^3/\text{m}^3$ ) and 0-50% ( $\text{m}^3/\text{m}^3$ ), with an accuracy of $\pm 2\%$ ( $\text{m}^3/\text{m}^3$ ) <b>Soil conductivity:</b> Standard range 0~10mS/cm (can be customized 0~20mS/cm, etc.), accuracy $\pm 2\%$ <b>Soil salinity:</b> Range 0~5000mg/L, accuracy $\pm 2\%$
	Soil nitrogen, phosphorus, and potassium sensors	<b>Soil nitrogen content:</b> Range 0-1999mg/kg, accuracy $\pm 2\%$ <b>Soil phosphorus content:</b> Range 0~1999mg/kg, accuracy $\pm 2\%$ <b>Soil potassium content:</b> Range 0~1999mg/kg, accuracy $\pm 2\%$



# SOIL MOISTURE SERIES






PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	S200 Soil temperature and humidity sensor	<b>Soil temperature:</b> Range -30~70 °C, accuracy $\pm 0.2\text{ }^{\circ}\text{C}$ <b>Soil volumetric moisture content:</b> Within the range of 0-100% ( $\text{m}^3/\text{m}^3$ ) and 0-50% ( $\text{m}^3/\text{m}^3$ ) accuracy is $\pm 3\%$ ( $\text{m}^3/\text{m}^3$ )
	S100 Soil moisture sensor	<b>Soil moisture content:</b> Range 0~100% ( $\text{m}/\text{m}^3$ ), accuracy $\pm 3\%$ ( $\text{m}^3/\text{m}^3$ )
	T1 Soil Temperature Sensor	<b>Temperature of soil/air/solution/flame/boiler:</b> accuracy $\pm 0.2\text{ }^{\circ}\text{C}$



# SOIL MOISTURE SERIES


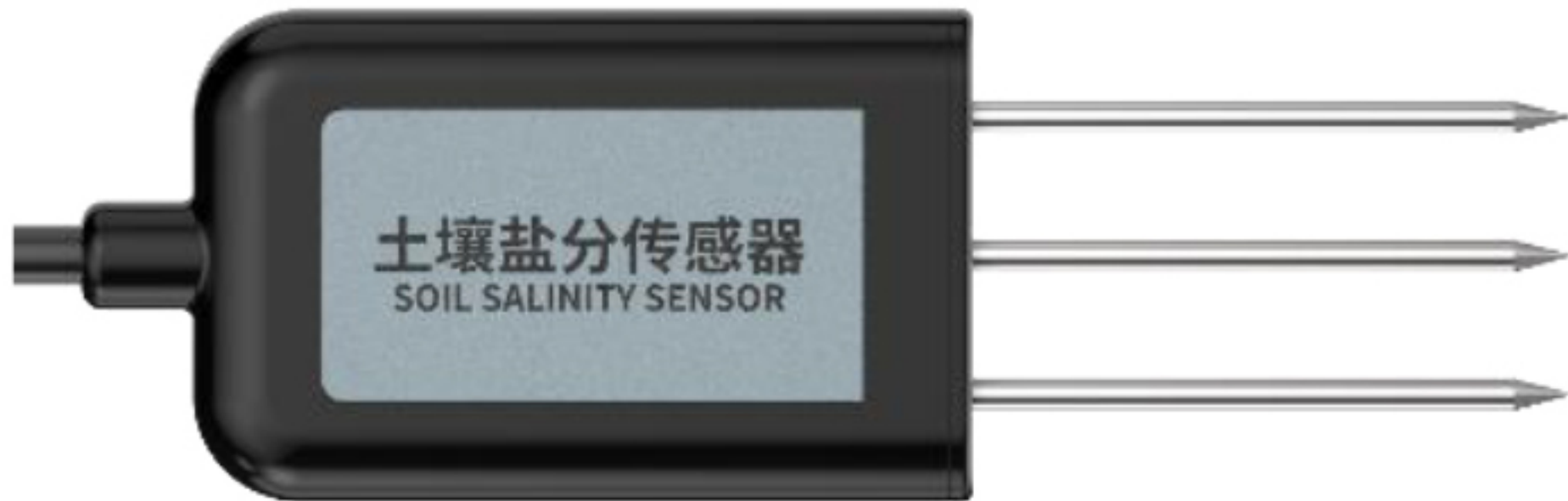
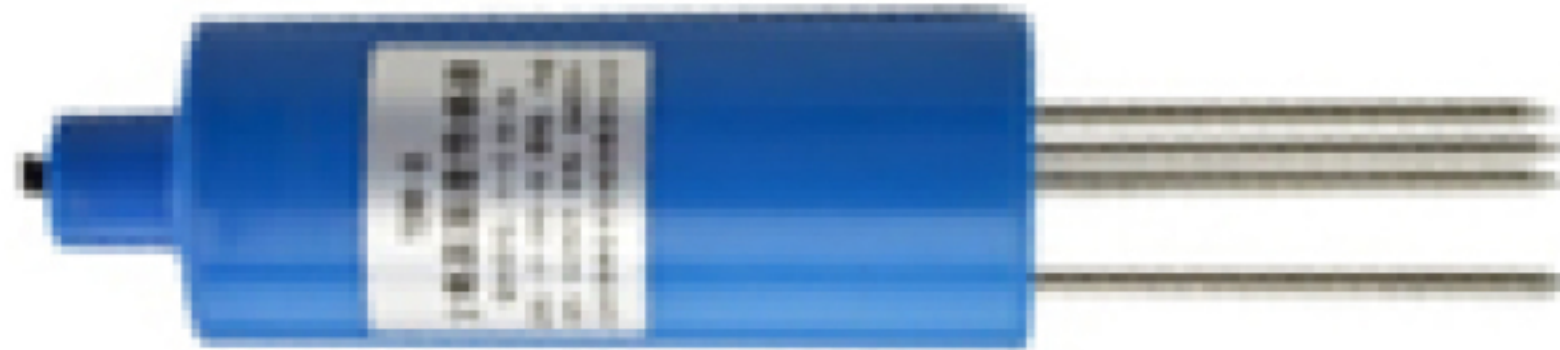


PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Soil pH sensor	<b>Soil pH value:</b> Range 0-14, accuracy $\pm 0.02$ (pH 4-9)
	TSC-1 Soil moisture analyzer	The TSC-1 soil moisture analyzer can quickly measure the volumetric moisture content of soil and porous media. The instrument has multiple functions, including storing, calculating average values, viewing historical data, and automatically recording and storing data from 1 minute to 23:59 minutes. And the data curve can be viewed on the upper computer, and the data can also be exported and stored as an Excel spreadsheet file.
	TSC-IW Soil temperature and humidity rapid measuring instrument	The TSC-IW rapid measuring instrument can quickly measure the volumetric moisture content and temperature of soil and porous media. The instrument has multiple functions, including storage, calculation of average values, viewing of historical data, and automatic recording and storage of data from 1 minute to 23:59 minutes. And the data curve can be viewed on the upper computer, and the data can also be exported and stored as an Excel spreadsheet file.



# SOIL MOISTURE SERIES




PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Soil conductivity sensor	<b>Soil conductivity:</b> Standard range 0~20mS/cm (can be customized to 0~10mS/cm, 0~5mS/cm, etc.), accuracy $\pm 2\%$
	Soil salinity sensor	<b>Soil salinity:</b> Standard range of 0~0.15mol/L (customizable 0~0.75mol/L, 0~0.05mol/L, etc.), accuracy $\pm 2\%$
	TDR-5 Soil temperature and humidity sensor	<b>Soil temperature:</b> Range -30~70 °C, accuracy $\pm 0.2\text{ }^{\circ}\text{C}$ <b>Soil volumetric moisture content:</b> Within the range of 0-100% (m <sup>3</sup> /m <sup>3</sup> ) and 0-50% (m <sup>3</sup> /m <sup>3</sup> ), the accuracy is $\pm 2\%$ (m <sup>3</sup> /m <sup>3</sup> )



# SOIL MOISTURE SERIES





PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	TDR-4 Soil moisture sensor	Soil volumetric moisture content: Ranging from 0 to 100% (m <sup>3</sup> /m <sup>3</sup> ), within the range of 0 to 50% (m <sup>3</sup> /m <sup>3</sup> ), with an accuracy of ± 3% (m <sup>3</sup> /m <sup>3</sup> )



# WATER MONITORING SERIES






PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	PH14A Water pH sensor	Soil pH value: Range 0~14, accuracy $\pm 0.02$ (pH 4~9)
	Liquid conductivity sensor	Conductivity: Standard range of 1-20mS/cm (can be customized to 10.00 $\mu$ S~500.0mS), accuracy $\pm 2\%$
	Redox potential sensor	Redox potential: Range -2000mV~2000mV, accuracy $\pm 10$ mV



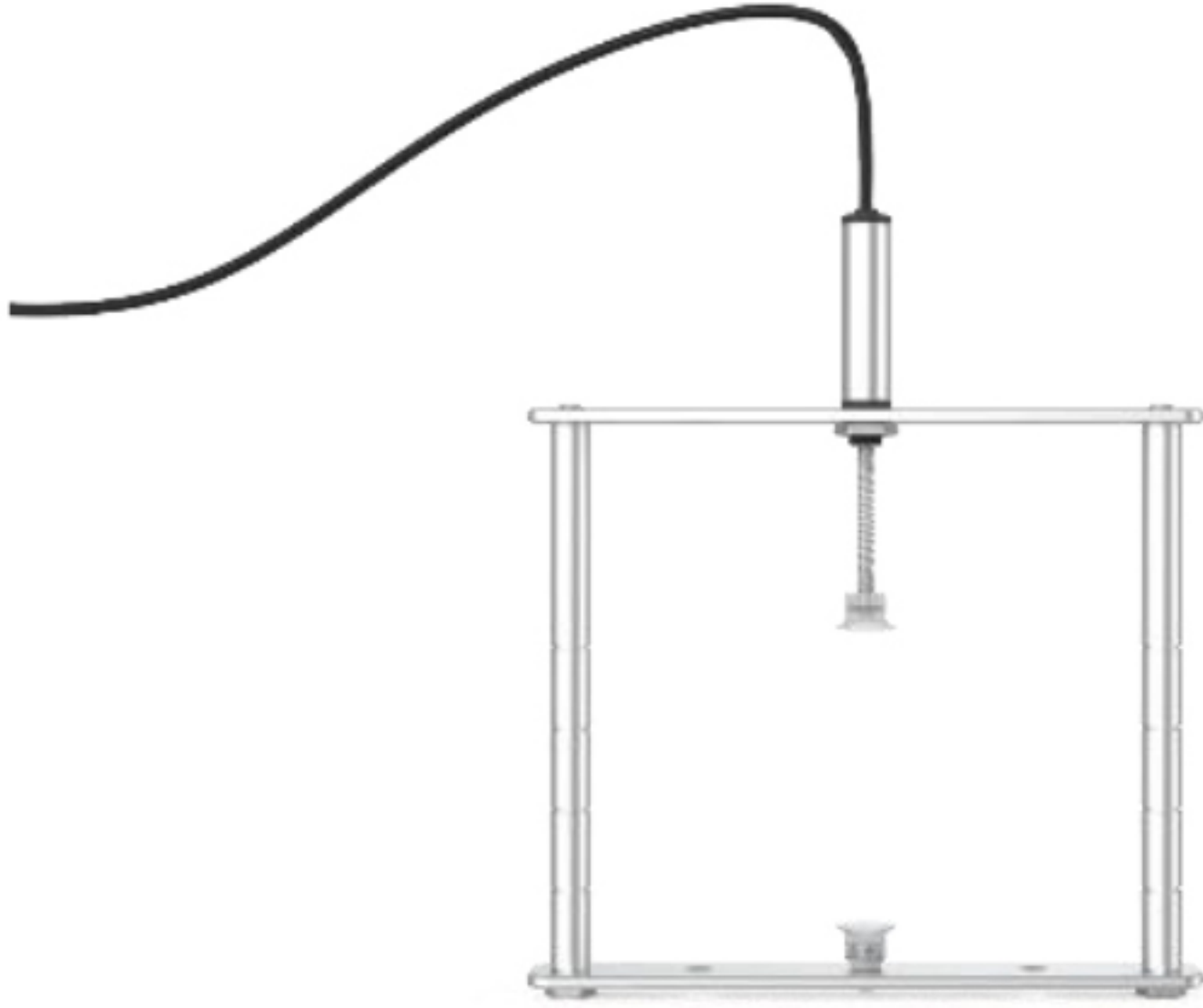


# WATER MONITORING SERIES



PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	T1 Water temperature sensor	Temperature of soil/air/solution/flame/boiler: Accuracy $\pm 0.2\text{ }^{\circ}\text{C}$
	Liquid level sensor	Liquid level: Range 0~1~200m
	Multi functional water quality rapid testing instrument	The multifunctional water quality rapid measuring instrument can quickly measure the pH value, liquid level, conductivity, and ORP of water bodies. The instrument has multiple functions, including storing, calculating average values, viewing historical data, and automatically recording and storing data from 1 minute to 23:59. And the data curve can be viewed on the upper computer, and the data can also be exported and stored as an Excel spreadsheet file.




# PLANT SENSORS

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Fruit growth sensor	<b>Fruit growth:</b> optional range from 0 to 20/100mm, measurement range diameter less than 123mm, resolution $\pm 0.001\text{mm}$
	Stem growth sensor	<b>Stem growth rate:</b> Range 0~20/50/100mm optional, measurement range diameter less than 126mm, resolution $\pm 0.001\text{mm}$
	Leaf temperature and humidity sensor	<b>Leaf surface temperature:</b> Range $-40\sim 80\text{ }^{\circ}\text{C}$ , accuracy $\pm 0.5\text{ }^{\circ}\text{C}$ <b>Leaf surface humidity:</b> Range 0~100% ( $\text{m}^3/\text{m}^3$ ), accuracy $\pm 5\%$




# GAS MONITORING SERIES



PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Ammonia sensor	Gas concentration: Range 0~10/20/50/100/200/500/1000/2000/5000ppm
	Hydrogen sulfide sensor	Gas concentration: Range 0~10/20/50/100/200/500/1000/2000/5000/10000 ppm
	Oxygen Sensor	Gas concentration: Range 1~25% Vol




# GAS MONITORING SERIES

PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Carbon monoxide sensor	Gas concentration: Range 0~20/50/100/200/500/1000/2000/ 3000/5000ppm
	Sulfur dioxide sensor	Gas concentration: Range 0~10/20/100/200/500/1000/2000/5000ppm
	Methane sensor	Gas concentration: Range 0~100% LEL



# GAS MONITORING SERIES



PRODUCT IMAGES	NAME	TECHNICAL PARAMETER
	Ethylene sensor	Gas concentration: Range 0~100/1000/2000/3000ppm