Winsen

One-Stop Sensor Solutions Provider

Leading the Industry, Innovative & Controllable Technology

Established in 2003 and originated in the 1990s, Zhengzhou Winsen Electronics Technology Co., Ltd. is a high-tech enterprise with integrated business of R&D, production, sales and solutions of sensing products, covering an area of 40000 ㎡.

In 2009, Winsen Electronics was listed in the Growth Enterprise Market (GEM) with comprehensive strength ranking top in the Chinese sensor industry. After more than 30 years development, Winsen has become a leader in Chinese gas sensor field and also grown to be one of the top sensor companies in global wide.

Winsen's sensor products cover total 7 categories and 200+ series capable to detect 300+ indicators, including gas sensor based on four principles of semiconductor, catalytic, electrochemical and infrared absorption, infrared detection sensor, MEMS sensor, pressure sensor, humidity sensor, flow sensor and water sensor, etc. The products are widely used in industrial safety, civil fire prevention, environmental protection, household appliances, automotive electronics, medical health, smart city. etc. Moreover, Winsen proceeds to make continuous innovation in new application directions.

7 Categories   **200+** Series   **300+** Detection Indicators

Winsen owns strong strength in R&D: excellent R&D team of more than 160 talents and professionals; more than 500 sets of equipment and devices for production and R&D.

The company has been certified with IS09001, ISO14001, ISO45001, andIATF16949 systems to regulate its management, and our products are certified with ROHS, CE, and UL to meet different customers' demands.

Winsen takes it a mission to " create value for customers, and create a win-win future with customers. Inspired by a pioneering and innovative spirit, Winsen will be dedicated to promoting the healthy development of sensing and IoT industries and using advanced technology to build a safe, green, healthy, and intelligent environment for production and living.

Ammonia nitrogen

PH

ORP

Residual chlorine

TDS

Conductivity

Dissolved oxygen

Turbidity

Water Quality Sensor Solutions

Product Information

Sensors		Modules		
		RS485 Output Module	TTL Output Module	0-5V Voltage Output Module
Detection Target	Model	Model	Model	Model
Dissolved oxygen	MW-O101	ZW-O101	ZW-O103	/
Polarographic oxygen	MW-O201	ZW-O102	/	/
PH	MW-PH101	ZW-PH101	/	ZW-PH102
	MW-PH201	/	/	
Residual chlorine	MW-RCL101	ZW-RCL101	/	/
ORP	MW-ORP101	ZW-ORP101	/	/
Ammonia nitrogen	MW-NH101	ZW-NH101	/	/
Conductivity	MW-C101	ZW-C101	/	/
Temperature	MW-WT101	ZW-WT101	/	/
TDS (online)	MW-TDS110	ZW-TDS102	ZW-TDS103	/
Temperature+TDS	/	ZW-TS101	ZW-TS102	/
Turbidity	/	/	/	/

Application Fields
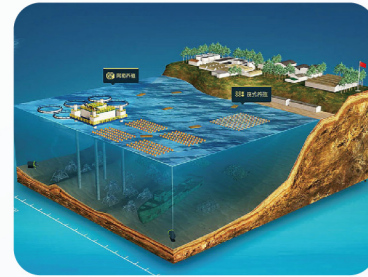
Aquaculture

Environmental Water Quality Monitoring, Water Treatment
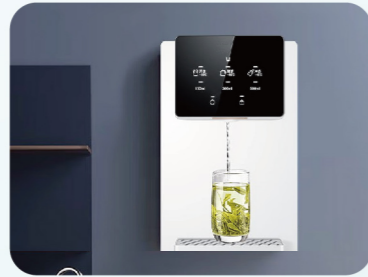
Water Plants, Swimming Pools

Laboratory Research

Environmental protection and Industrial Process Control (Chemical, Petrochemical, Chip Manufacturing...)

Food Fermentation, Pharmaceuticals

Water Purifier

Product Parameters

1. Dissolved Oxygen

Product Model	MW-O101	MW-O102	ZW-O101	ZW-O103	ZW-O102
Product Principle	Galvanic Cell Sensor	Polarographic Sensor	Galvanic Cell Module		Polarographic Module
Product picture					
Signal output	/	/	RS485(5V level)	TTL output (3V level)	RS485 (5V level)
Measurement range	0~20mg/L				
Resolution	0.01mg/L				
Work temperature	0~40℃	4~45℃	0~40℃		4~45℃
Wetted material	PP				
Installation method	Immersed installation				
Maintenance	/		/		Recommend replacing the electrolyte every 3 months
Response time	≤20S	< 30S	≤20S		

2. PH

Product Model	MW-PH101	MW-PH201	ZW-PH101	ZW-PH102
Product picture				
Signal output	/		RS485 output (5V level)	Analog voltage signal output (0-5V)
Measurement range	0~14			
Work temperature	0~50 ℃			
Resolution	/	/	0.02 PH	0.02 PH
Sensitivity	1.1~1.6mV / PH	1.1~1.6mV / PH	/	/

3. Temperature + TDS Module

Product Model	ZW-TS101	ZW-TS102
Product picture		
Signal output	RS485 (5V level)	TTL output
Measurement range	0~2000 ppm	
Resolution	0.1 μs/cm	
Work temperature	0 ~ 100 ℃	
Output linearity	Linear	

4. Temperature

Product Model	MW-WT101	ZW-WT101
Product picture		
Signal output	/	RS485 (5V level)
Measurement accuracy	±2%F.S.	
Measurement range	0~100℃	
Line length	58cm	

5. ORP

Product Model	MW-ORP101	ZW-ORP101
Product picture		
Signal output	/	RS 485 （5V leve）
Measurement range	-2000 mV~ 2000 mV	
Accuracy	1mV	
Response time	(T90)≤180s	
Material	ABS	
Work temperature	0~50 ℃	
Working voltage	12V(DC)	

6. TDS

Product Model	MW-TDS110	ZW-TDS102	ZW-TDS103
Product picture			
Signal output	/	RS485 (5V level)	TTL output
Measurement range	0~2000ppm		
Accuracy	±5% F.S.		
Resolution	0.1 μs/cm		

7. Ammonia Nitrogen

Product Model	MW-NH101	ZW-NH101
Product picture		
Signal output	/	Rs485(5V level)
Measurement range	0 ~ 1000mg/L	
Resolution	0.1mg/L	
Work temperature	0 ~ 50℃	
Working pressure	<0.1MPa	
Wetted material	PP	
Installation method	Sunken installation	
Maintenance	Recommend cleaning the electrode once a month make calibration every 3 months	

8. Residual Chlorine

Product Model	MW-RCL101	ZW-RCL101
Product picture		
Signal output	/	Rs 485 （5V 电平）
Measurement range	0 ~ 20mg / L	
Resolution	/	0.01 mg /L
Accuracy	±0.01 mg /L	/
Work temperature	0 ~ 60 ℃	
Installation method	Immersed installation/matching flow	
Maintenance	it is recommended to clean the electrode once a month and calibrate it every three months.	
Line length	1m or customized	

9. Turbidity

Product Model	ZW-TUR102
Product picture	
Signal output	Analog voltage signal (0~5V)
Measurement range	0~1000NTU
Work temperature	5~90℃
Sensor interface	XH2.54

10. Conductivity

Product model	ZW-C102
Product picture	
Signal output	0.8V-4V (linear output)
Measurement range	0 ~ 20 μS/cm
Resolution	0.01μS/cm
Accuracy	±1.5% F.S.
Work temperature	-40 ~ 100 ℃
Work pressure	< 0.6 MPa
Wetted material	SUS316L
Installation method	M22*1.5 / NPT 1/2 pipe thread
Protection level	IP68 / IP6K9K