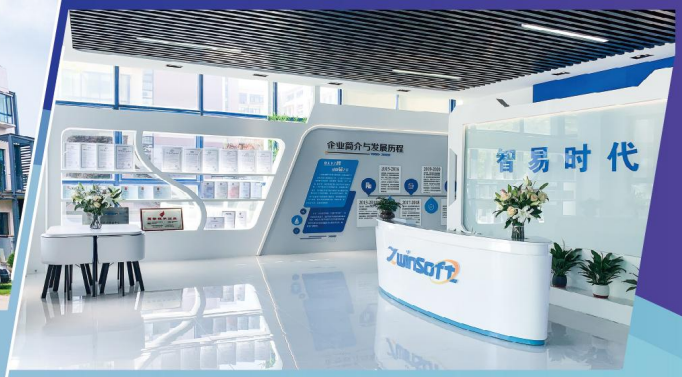
Tianjin Zwinsoft Technology Co., Ltd

COMPANYPROFILE

Tianjin Zwinsoft Technology Co., Ltd. is a high-tech company founded by a doctor from Nankai University.ZWINSOFT is committed to online monitoring of various environmental elements and online services product suppliers. Zwinsoft's products are positioned in the mid-to-high-end market, quickly responds to customer needs, and timely launch products and solutions that meet practical applications. It has successively obtained national high-tech enterprise certification, technology-based enterprise certification, software enterprise certification,AAA credit rating certification. The company has a high-level R&D team, professional development capabilities, focuses on the key needs of environmental monitoring and pollution prevention, accelerates the independent research and development of core technologies and the transformation of achievements, and has successively obtained software copyrights, software product certificates and patents， hundreds of intellectual property rights such as patent certificates. At the same time, it cooperates closely with Nankai University, Tianjin University and other universities and research institutes such as the Green Intelligence Research Institute of the Chinese Academy of Sciences to improve the high-level level of environmental online monitoring technology.



The company's products are based on a smart and environmentally friendly big data cloud platform, equipped with online monitoring equipment such as air quality, dust, noise, cooking fumes, volatile organic compounds, motor vehicle exhaust, pollution sources, etc., forming a "one platform, multiple applications" 1+N Monitor the network system. The products have obtained dozens of environmental protection product certifications, measuring instrument certifications, and testing reports from authoritative organizations, and are sold well all over the country and some overseas markets.

PRODUCT SPECIFICATION

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01

ZWIN-YC08 DUST ONLINE MONITOR

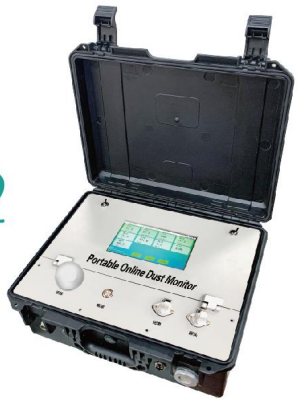
ZWIN-YC08 DUST ONLINE MONITOR is designed to inspect multi environmental factors, which includes $PM_{2.5}$,PM_{10}, noise, temperature, humidity, light, wind speed and wind direction. With data collection &transmission and video monitoring module, its easy to realize real-time data and video display.

- Continuous 24 hours online monitoring
- Rugged dust-proof, rust-proof and moisture-proof shell, IP65 grade
- Quick set up and easy operation

ZWIN-PMS06 Sensor

ZWIN-PMS06 Sensor is one of the Atmospheric aerosol Sensors that independently developed by our company. It adopts the principle of laser scattering and can accurately detect and calculate the concentration of suspended particles in the per unit volume air with different particle sizes. It can realize the real-time output of the mass concentration value of $PM_{2.5}$, PM_{10} and TSP .

02



ZWIN -YCM06 Portable Online Dust Detector

ZWIN-YCM06 Portable Dust Detector is our company's newly launched active particle detector, a highly integrated portable one. Its main characteristics as follows: highly accurate, small in size, light weight, easy to use and adaptable for long -time outdoor operation， also can be used in indoor public places dust detection.

Detection principle: light scattering method ; Resolution ratio :0.1ug/m³;

Particular size channel:$PM_{2.5}$,PM_{10}; Detection range :0~1000ug/m³;

ZWIN-BC1006 Black Carbon Analyzer

The ZWIN-BC1006 black carbon analyzer adopts the multi-band optical attenuation method to conduct online continuous monitoring and traceability analysis of the black carbon concentration in the ambient atmosphere. It can not only provide the basic data of the black carbon aerosol concentration , but also monitor the observation points affected by local air mass pollution.

03

Measuring principle	multi-band optical attenuation method
Mining flow	2L/min or 5L/min， can adjust
Measuring range	0.01-1000ug/m³
The detection limit	<2ng/m³
resolution	0.1 ng/m³
Power supply	(220+10%) V/AC，(50+1) Hz
Operating temperature	5-40°
Operating humidity	(0%~95%) RH (no condensation)
Measurement wavelength	370nm、470nm、520nm、590nm、660nm、880nm、950nm
instrument display	7" high resolution color screen

04

ZWIN-BAM1006 Continuous Particulate Monitor

BAM1006 CONTINUOUS PARTICULATE MONITOR adopts the principle of β ray attenuation to measure the particle concentration. The result is accurate and reliable.

It consists of three basic components: the instrument host, the cutting head, and sampling system.

Concentration Range:（0-1000）μg/m³ （0-10000）μg/m³;

Accuracy:±2%;

Operating Environment : temperature:20℃～50℃ humidity:≤ 80%

Air pressure:86kPa～106kPa; Power supply： AC220V±22V, frequency 50Hz±1Hz

05

ZWIN-AQMS06 Air Quality Monitor

ZWIN-AQMS06 Mini Air Quality Monitor is designed specially for gas detection. All monitoring parameters can be configured , which include O_3, NO_2,NOx,CO,SO_2, $PM_{2.5}$ and PM_{10}. Other pollutants like VOCs, H_2S and CO_2, noise and meteorological factors can be configured according to your requirements.

with high-sensitivity sensor, fast response, high resolution, good linearity, and the lowest limit of detection is up to ppb (part per billion) level, stable operation under high temperature conditions.

06

ZWIN-PE600 Integrated Photovoltaic Environment Monitor

ZWIN-PE600 is the latest integrated environmental monitor . The device adopts a new integrated structure design with high measurement accuracy, easy installation and use, and can collect various elements: including solar radiation (horizontal/slope), temperature, Humidity, wind speed, wind direction, atmospheric pressure, soil temperature, gas and other elements can be customized as needed. In particular, a high-stability total solar radiation sensor is used, which has perfect cosine characteristics, fast response, zero offset and wide temperature response performance, and is very suitable for the radiation monitoring needs of the solar industry.

07

ZWIN-AQMS30
Environmental automatic online monitoring system

The environmental automatic monitoring system adopts the national standard method,Composed of $PM_{2.5}$/PM_{10} analyzer (β-ray attenuation method), SO_2 analyzer (ultraviolet fluorescence method), NOx (chemical spectrometry), O_3 analyzer (ultraviolet absorption method), CO analyzer (correlated infrared absorption method), zero Gas generator, dynamic calibrator, sampling system, meteorological monitoring, calibration system, urban imaging and other hardware, data acquisition and transmission system, monitoring station and other auxiliary materials, to achieve accurate monitoring of regional ambient air quality, can be used as a new national control system Stations, quality control stations, township stations or regional air quality monitoring stations.

08

PM2.5/PM10 analyzer (β-ray attenuation method)

Based on β-ray attenuation method, the $PM_{2.5}$/PM_{10} particulate matter monitor is an automatic PM analysis instrument commonly used at home and abroad. It is a special instrument that can measure the concentration of inhalable lung particulate matter ($PM_{2.5}$ or PM_{10}) in the atmosphere. The main unit of the instrument is installed in the cabinet ,through the connection of the sealed pipe and the cutting head ($PM_{2.5}$ or PM_{10})outdoor , the atmospheric particulate matterPM_{10} (aerodynamic diameter ≤ 10um) and PM2.5 (aerodynamic diameter ≤ 2.5um)can be processed.

09

ZWIN-AQMS-300 O_3 analyzer

ZWIN-AQMS-300 Ozone (O3) analyzer measures ambient O3 concentration in ppb level by utilizing UV photometric absorption technology. Multi-tasking software allows viewing test variables while operating.

Measuring range:0～1000ppb(extendable)

Zero drift:±1ppb/24h

Response time:≤120s

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ZWIN-AQMS-400 CO Analyzer

ZWIN-AQMS-400 CO analyzer adopts non-dispersive infrared spectrum technology combines with advanced microprocessor technology.It provides accurate and reliable detection of CO at ppm level to meet the requirement of ambient gas monitoring.

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ZWIN-AQMS-500 SO_2 analyzer

ZWIN-AQMS-500 SO_2 analyzer adopts ultraviolet fluorescence method and combines with advanced microprocessor technology. It provides accurate and reliable detection of SO_2 at ppb~ppm level which meets the requirements of ambient gas monitoring and online monitoring of pollution source with dilution method.

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ZWIN-AQMS-600 NOx analyzer

ZWIN-AQMS-600 NOx analyzer adopts chemiluminescence method and combines with advanced microprocessor technology. It provides accurate and reliable detection of NOx at ppb~ppm level which meets the requirements of ambient gas monitoring and online monitoring of pollution source with dilution method.

Measuring range:0-500ppb-1000ppb(0-20ppm extendable)

Zero drift:±1ppb/24h

Response time:≤120s

Interface:RS485,4-20mA,0-1V/2V/5V/10V

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ZWIN-HGA-1008 Carbon DioxideCO2 analyzer

HGA-1008 Carbon Dioxide (CO_2) analyzer is an online gas analysis instrument suitable for domestic environmental protection, greenhouse gas monitoring, carbon emission control, etc. It is mainly composed of infrared sensors (light source, gas absorption pool, detector), data acquisition unit, signal Interface board, control circuit, power supply and other parts.

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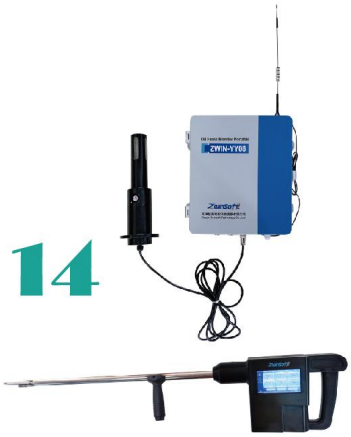

ZWIN-YY08 Oil Fume Monitor

ZWIN-YY08 online smoke monitor adopts new technology to directly monitor the concentration of oil smoke so as to truly achieve the purpose of online monitoring of oil fume,PM in catering industry. It can realize real-time display of test data . it small size,light weight,easy to carry.The instrument Integrated design for sampling,analysis control,sampling pump display screen,multi-parameter intuitive display on one screen widely used in catering industry oil fume and smoke detection.

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ZWIN-PVOC06 Online Monitor

ZWIN-PVOC06 Online Monitor is a product suitable for monitoring at factory boundaries and fixed sources volatile organic compounds（VOC）. It adopts the principle of PID photoionization, a pump-suction sampling method.

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ZWIN-GasMan06 Series Portable VOC Gas Detector

ZWIN-GasMan06 series portable VOC gas detector, is a portable handheld volatile organic compound (VOC) for indoor and outdoor air quality (IAQ) monitoring applications.

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ZWIN-FVOCs06
INDUSTRIAL VOC MONITORING SYSTEM (FID METHOD)

ZWIN-FVOCs06 INDUSTRIAL VOC MONITORING SYSTEM (FID METHOD): consists of three basic parts: volatile organic compound monitoring system， gas parameter monitoring system，control and data acquisition system can monitor methane total hydrocarbons,non-methane total hydrocarbons,benzene series and partially halogenated hydrocarbon gas organic pollutants in exhaust gas.

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ZWIN-CEMS06
Continuous Emission Monitoring System(CEMS)

Continuous Emission Monitoring System(CEMS)is composed by four basic parts: particulate matter monitoring subsystem, gaseous pollutant monitoring subsystem,flue gas parameter monitoring subsystem, sub system of system control and data collection & processing.It is capable of monitoring SO_2 ,NOx , PM， temperature, pressure level and humidity.

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ZWIN-NH3O6
Denitrification ammonia escape online analysis system

ZWIN-HH3O6 denitrification ammonia escape online analysis system is produced by our company. This system includes three parts: pretreatment system, gas analyzer, data processing and display. The sampling method of this system is in-situ high temperature tracing extraction. The basic principle of this system is based on Tunable Semiconductor Laser Absorption Spectroscopy (TDLAS) technology.

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ZWIN-NS06 Noise detector

Measuring range:30-130dB Output:RS485

Accuracy:23±5℃ Frequency range:31.5Hzto 8kHZ

Time response:fast response:T=200ms.Enclosure: IP65

Size:404mm *367mm *669mm

Intelligent voice prompt for excessive noise

LED display Real-time monitoring,4G/5G Wireless transmmission

over-standard linkage capture

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ZWIN-SKY3000 Portable gas detector

ZWIN-SKY3000 series is a high-performance portable gas detector that can detect multiple gases (Oxygen compounds VOC, combustible gas and toxic gas) at the same time and has man down alarm function.The device has humanized operation functions such as one -key security detection, one-key storage, automatic image flipping, as well as the man down alarm function; With optional Bluetooth transmission function,allowing safety personnel to obtain real-time data and the alarm status.

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ZWIN-GasGuard06 Series fixed gas detector

ZWIN-GasGuard06 series fixed gas detector is used to monitoring gas concentration in different kinds of situations or pipelines. it is 24h continuously wall mounted type gas detector.

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ZWIN-MiniMeta Single gas detector

ZWIN-MiniMeta is a maintenance-free single gas detector the most reliable,user-friendly, cost-effective detection solution for worker safety and operational compliance .It offers up to 2 ears of protection-with no need for calibration, sensor replacement, battery replacement or battery charging.

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ZWIN-COD1006

ZWIN-COD1006 is a COD digital sensor with RS485 communication interface and standard Modbus protocol. Corrosion-resistant shell, IP68 protection level, self-contained cleaning brush to regularly clean the measurement interface, suitable for various harsh working environments; based on coherent detection technology, it has high precision, good stability, no pretreatment, no reagent loss, measurement Fast and other advantages; dual-beam measurement, effectively reducing turbidity and chromaticity interference; RS485 communication interface, standard Modbus protocol, easy to integrate.

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ZWIN-AQA1006 Portable Compressed Air Analyzer

ZWIN-AQA1006 Portable Compressed Air Analyzer can measure, record and verify the quality parameters of the compressed air system, measure O_2, CO_2, CO, dew point, oil vapor and pressure as defined in the breathing air purity standard.
The product ensures reliable and fast measurement through robust design, fast sensor response time, and user-friendly interface, thus maximizing the protection of people using air for breathing applications. Compared with traditional methods, it is more accurate, faster and more convenient.

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ZWIN-AQA1008 Portable helium oxygen Analyzer (Diving)

ZWIN-AQA1008 Portable helium oxygen Analyzer (Diving) is a portable three-mix analyzer designed to ensure the correct mixture of helium, oxygen and nitrogen, which is an easy-to-operate diving gas analysis instrument that can analyze gas mixtures, Automatically corrects for environmental conditions and eliminates the risk of manual calculation errors. It has a large back panel LCD that is easy to read even in low light conditions and provides additional information.

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ZWIN-WAC1006 Terminal Controller

ZWIN-WAC1006 terminal controller can support most of digital water quality analysis probes of our company, and has a perfect external interface, which can conveniently realize sensor probe networking, remote control, fault diagnosis and other work.

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ZWIN-TSS1006 Digital Turbidity/Suspended Solids Sensor

ZWIN-TSS1006 sensor is a turbidity/suspended solids digital sensor with RS485 communication interface and standard Modbus protocol. Corrosion-resistant shell, IP68 protection level, suitable for various harsh working environments; It adopts infrared LED as light source, not affected by the chromaticity of water samples; digital modulation and filtering technology, eliminating the influence of ambient light; long-life infrared LED light source, up to More than 10 years; RS485 communication interface, standard Modbus protocol, easy to integrate.

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ZWIN-PH1006 Digital pH Sensor

ZWIN-PH1006 sensor is a pH digital sensor with RS485 communication interface and standard Modbus protocol. It adopts corrosion-resistant housing, IP68 protection level, suitable for various harsh working environments; industrial-grade composite electrodes, reference electrode double-salt bridge design, long electrode life; built-in PT1000 temperature sensor and compensation algorithm, the accuracy can reach ±0.1 ℃; RS485 communication interface, standard Modbus protocol, easy to integrate.

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ZWIN-CON1006 Digital Conductivity Sensor

ZWIN-CON1006 sensor is a conductivity digital sensor with RS485 communication interface and standard Modbus protocol. It adopts corrosion-resistant shell, IP68 protection grade, suitable for various harsh working environments; industrial-grade graphite material quadrupole electrode is selected, suitable for the measurement of full-scale conductivity; the electrode constant is very stable, not affected by polarization; automatic compensation Surface contact resistance, not affected by pollution; built-in PT1000 temperature sensor and compensation algorithm, accuracy up to ±0.1°C; RS485 communication interface, standard Modbus protocol, easy to integrate.