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 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

ZWIN-YCO8 DUST ONLINE MONITOR

01

ZWIN-YC08 DUST ONLINE MONITOR is designed to inspect multi environmental factors, which includes PM2.5,PM10, 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-PM06 Sensor

02

ZWIN-PM06 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 PM2.5, PM1o and TSP.

ZWIN -YCM06 Portable Online Dust Detector

03

ZWIN-YCM06 Portable Dust Detector is our company's newly launched active particle detector, a highly integrated portable one. Its main characteristics are 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: PM2.5, PM10;   Detection range: 0~1000ug/m3.

ZWIN-BAM1006 Continuous Particulate Monitor

04

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	0-1,000ug/m3(10,000ug/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 O3, NO2, NOx, CO, SO2, PM2.5 and PM10. Other pollutants like VOCs, H2S and CO2, 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-AQMS06-M Mobile Air Quality Monitor

ZWIN-AQMS06-M Mobile Air Quality Monitor is designed specially for mobile gas detection. All monitoring parameters can be configured , including O3, NO2, SO2, CO, PM2.5 and PM10. Other pollutants like VOCs, H2S and CO2, 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 bilion) level, stable operation under high temperature conditions.

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

Based on B-ray attenuation method, the PM2.5/PM10 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 (PM2.5 or PM10) 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 (PM2.5 or PM10)outdoor, the atmospheric particulate matter PM10 (aerodynamic diameter≤10um) and PM2.5 (aerodynamic diameter≤2.5um) can be processed.
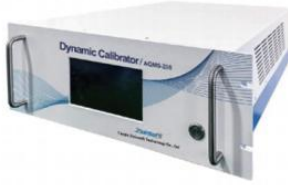
08 ZWIN-AQMS100 Zero Air Generator

ZWIN-AQMS100 Zero Air Generator is mainly used for zero point calibration of urban environmental air quality monitoring instruments and indoor environmental air quality monitoring instruments. This instrument has the advantages of stable zero gas flow rate output, low dew point, zero gas drying and cleaning, and simple operation.

ZWIN-AQMS200 Dynamic Calibrator

09

ZWIN-AQMS200 Dynamic Calibrator is a high-precision gas analyzer calibration instrument developed for online atmospheric monitoring and industrial control on-site analysis. It is a precision gas calibration instrument based on microprocessor control, mainly used for the calibration of environmental air quality continuous automatic online monitoring system analyzers, and can also be used for quality control in laboratory and gas analyzer production. It has the characteristics of high gas distribution accuracy, high reliability, fast response time, easy operation, and wide applicability.

ZWIN-AQMS-300 O3 Analyzer

10

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: 0~1,000ppb(extendable)

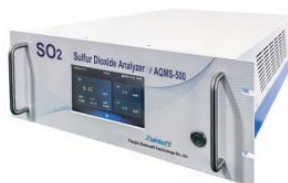Zero drift: +1ppb/24h

Response time: ≤120s

ZWIN-AQMS-400 CO Analyzer

11

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

ZWIN-AQMS-500 SO2 Analyzer

12

ZWIN-AQMS-500 SO2 analyzer adopts ultraviolet fiuorescence method and combines with advancedmicroprocessor technology. It provides accurate and reliable detection of SO2 at ppb~ppm levelwhich meets the requirements of ambient gas monitoring and online monitoring of pollution sourcewith dilution method.

ZWIN-AQMS-600 NOx Analyzer

13

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

ZWIN-AQMS550 H2S Analyzer

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ZWIN-AQMS550 H2S Analyzer has the characteristics of high measurement accuracy, good reliability, fast response time, easy operation and wide application range. The analyzer supports manual calibration and automatic calibration, the calibration program can be set by the user, and supports remote control and remote upload. Real-time measurement data and instrument status parameters can be automatically transmitted and queried, which can facilitate relevant departments to grasp the air quality status in a timely and accurate manner.

ZWIN-AQMS650 NH3 Analyzer

15

ZWIN-AQMS550 H2S Analyzer has the characteristics of high measurement accuracy, good reliability, fast response time, easy operation and wide application range. The analyzer supports manual calibration and automatic calibration, the calibration program can be set by the user, and supports remote control and remote upload. Real-time measurement data and instrument status parameters can be automatically transmitted and queried, which can facilitate relevant departments to grasp the air quality status in a timely and accurate manner.

ZWIN-AQMS700 CO2 Analyzer

16

ZWIN-AQMS700 CO2 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. This product is mainly based on Gas Filter Correlation (GFC) and Non-dispersive infrared (NDIR) to realize the measurement of carbon dioxide (CO_2) concentration. It has the characteristics of high precision, good stability and fast response time. It can be widely used in electric power, chemical industry, cement, steel, smelting and other scenes.

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ZWIN-AQMS30
Environmental automatic online monitoring system

The environmental automatic monitoring system adopts the national standard method, Composed of PM2.5/PM10 analyzer (β-ray attenuation method), SO2 analyzer (ultraviolet fluorescence method), NOx (chemical spectrometry), O3 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.

ZWiN-GasGuard06 Series fixed gas detector

18

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

ZWIN-Gasman08 Portable Gas Detector

19

ZWIN-Gasman08 Portable Gas Detector is a kind of fast response and high accuracy gas measurement device. With internal sampling pump, fast sampling speed and high flow rate, ensuring the response time of the detector. Unique design, small size and easy to carry with. Special high intensity engineering plastics housing, suitable for different kinds of situation and environment.

ZWIN-BC1006 Black Carbon Analyzer

20

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.

Measuring principle: multi-band optical attenuation method

Mining flow: 2L/min or 5L/min, adjustable   Measuring range: 0.01-1000ug/m3

The detection limit: <2ng/m3   Resolution: <2ng/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

ZWIN-AQA1006 Portable Compressed Air Analyzer

21

ZWIN-AQA1006 Portable Compressed Air Analyzer can measure, record and verify the quality parameters of the compressed air system, measure O2, CO2, 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 tradition-al methods, it is more accurate, faster and more convenient.

ZWIN-AQA1008
Portable Helium Oxygen Analyzer (Diving)

22

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-oper-ate 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.

ZWIN-YY08 Oil Fume Monitor

23

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 is 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.

ZWIN-PVOC06 Online Monitor

24

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 and pump-suction sampling method.

ZWIN-GasMan06 Series Portable VOC Gas Detector

25

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

26

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.

27

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 SO2, NOx, PM, temperature, pressure level and humidity.

28

ZWIN-NH306 Denitrification Ammonia Escape Online Analysis System

ZWIN-HH306 denitrification ammonia escape online analysis system is produced by our company. This system includes three parts: pre treatment 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.

29

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.

30

ZWIN-CONT1006 Terminal Controller

ZWIN-CONT1006 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.

ZWIN-COD1006

31

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 pre treatment, 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.

ZWIN-TSS1006
Digital Turbidity/Suspended Solids Sensor

32

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.

ZWIN-PH1006 Digital pH Sensor

33

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.

ZWIN-CON1006 Digital Conductivity Sensor

34

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; buit-in PT1000 temperature sensor and compensation algorithm, accuracy up to ±0.1°C: RS485 communication interface, standard Modbus protocol, easy to integrate.

ZWIN-SPE1006 Digital Spectral Sensor

35

ZWIN-SPE1006 Digital Spectral Sensor can simultaneously monitor various water quality parameters such as COD, TOC, BOD, TUR, temperature, and permanganate. The shell is made of 316L stainless steel/PEEK high-performance material, with a protection level of IP68, which can ensure that the sensor probe can sink into the water indefinitely and not be damaged due to immersion. The optical window is made of industrial sapphire, combined with anti pollution coating, which can maintain cleanliness for a long time and collect and analyze data in real time.

DEVELOPMENT HISTORY

2014
- Dust online monitoring solution is released
- Completed Development of Atmospheric Gridded Monitoring Platform

2015
- Dust online monitoring system is released
- Zwinsoft Dust Online monitoring solution is highly acclaimed

2016
- Co-constructed the Sensing Technology Research Center with the School of Electronic Information and Optical Engineering of Nankai University
- Oil fume online monitoring equipment is released
- Mini air quality monitoring products are released

2017
- Dust online monitoring technology is further improved
- Air quality monitoring system technology is further improved
- On-line monitors are released

2018
- Motor vehicle exhaust monitoring system began to develop
- The flue gas online monitoring system is released
- Online monitoring system for pollution sources is released
- VOCs online monitoring system is further improved

2019
- The flue gas online monitoring system is released
- Smart environmental protection management platform is released
- Motor vehicle exhaust monitoring system is released
- The flue gas online monitoring system is released
- Online monitoring system for pollution sources technology is further improved
- VOCs online monitoring system technology is further improved

2020
- Water quality monitoring products are released
- Environmental particulate matter automatic monitoring system was released
- Data acquisition instrument was released
- OBD monitoring system is released
- Working condition electricity monitoring system is released

2021
- Automatic online monitoring system for ambient air quality is released
- Small-scale ambient air quality online monitoring system is released
- Unorganized dynamic management and control integration platform technology is further improved
- On-line monitoring system for cooking fumes is released

2022
- Unorganized management and control integration platform technology is further improved
- Ecosystem, soil monitoring, carbon neutralizing, carbon peaking technologies was introduced

2023
- Integrated platform for unorganized management and control of steel, cement, and coking is released
- Collaborative management system for air, water and soil early warning in industrial parks was released
- Automatic Ambient Air Quality Monitoring System was introduced.
- Noise monitoring system was released
- Black Carbon Analyzer was released