skyray analytical instruments

SPECTROLAB

Energy Dispersive X–ray Fluorescence Spectrometer

Energy Dispersive X–ray Fluorescence Spectrometer

EDX600 Precious Metal Analyzer

Application fields:
- Content determination of precious metals such as Au, Pt, Ag, etc. and jewelries;
- Thickness measurement of metal plating, content testing of plating solution and plating;
- Precious metal and jewelry processing industries;
- Bank, jewelry sales, testing institution and electroplating industry.

Features:
- Specialized testing of precious metal and plating thickness;
- Built-in Signal to Noise Enhancer improves signal processing capacity up to 25 times;
- Intelligent analytical software for precious metal matches well with the hardware;
- Arbitrary optional analysis and identification models;
- Independent matrix effect correction models;
- Multi-variable non-linear regression procedure.

EDX880 Universal Precious Metal Analyzer

Application fields
- Precious metal testing of jewelries;
- Measurement of precious metals and plating, etc.;
- Fields of X-ray Fluorescence analysis of precious metals.

Features:
- Large power X-ray tube;
- Super large window proportional counter;
- Large sample chamber, easy to operate and test large samples;
- Multiple gripping styles of samples (universal clamping kits, sample plate, plasticene), offering common tests, inner wall tests and irregular samples tests;
- Small collimator is suitable for testing minor area;
- Laser and camera positioning can locate testing spot visually and accurately. The laser shuts off automatically when testing starts, helping taking clearer pictures.

EDX 2800B RoHS Specialist

Application fields:
- ROHS test and Free halogeen testing
- Content determination of precious metals and jewelries
- Thickness measurement of metal plating, content determination of plating solution and plating;
- RoHS Directive industries, precious metal and jewelry processing industries;
- Bank, jewelry sales, testing institution and electroplating industry.

Features:
- Auto-switch of collimators and filters;
- Specialized RoHS test;
- Built-in Signal to Noise Enhancer improves signal processing capacity up to 25 times;
- Intelligent RoHS analytical software is specially developed, matching well with the hardware;
- Arbitrary optional analysis and identification models;
- Multi-variable non-linear regression procedure.

EDX3000 Precious Metal Analyzer

Application fields:
- Au, Ag, Pt, Pd, Cu, Zn, Ni, etc.

Features:
- Signal to Noise Enhancer improves testing stability and accuracy;
- In-built high resolution camera, convenient for users to analyze samples at any time;
- Digital pulse processor handles data processing rapidly and accurately;
- Multi-variable non-linear regression procedure;
- Independent matrix effect correction models;
- Accurate measurement without standard sample;
- Real-time display of high definition graphs, care-free measurement.

Intelligent Precious Metal Analyzer–Smart 100 Plus

Application fields:
- Content testing in jewelry processing industry, jewelry stores, precious metal metallurgical plant, quality inspection authorities, analysis and test center, pawnshop, precious metal recovery, RoHS testing and plating thickness testing.

Features:
- The most advanced detection technology– X–Silicon Drift Detector（X–SDD）, with resolution as low as 125eV.
- The most advanced digital multi channel technology.
- Large power X ray tube and sophisticated collimation filter system.
- 2D movable sample platform–supports image coordinated control, multi–point continuous test.

EDX3600H Universal Testing

Application fields:
- Rohs and free halogen testing, metal alloy analysis, mineral and precious metal testing

Features:
- US halogen test highly efficient X-ray tube;
- Specially-developed accessory for halogen element testing (especially chlorine);
- S100 detector: good energy linearity, energy resolution and energy spectrum characteristics, high P/B ratio;
- Low-energy X-ray excitation sample, good excitation effect on Cl, Br and other light elements;
- Intelligent vacuum pumping system shields the influence of air and extends the testing range greatly;
- Automatic spectrum stabilizer ensures working consistency of the instrument.

EDX6000B Full–element Tester of Multiple Samples

Application fields:

- Cement testing, steel and nonferrous metal testing, mineral aggregate analysis and RoHS test

Features:

- Thermoelectric-cooling UHRD detector instead of liquid nitrogen cooling detector;
- Built-in Signal to Noise Enhancer improves signal processing capacity up to 25 times;
- Vacuum pumping system improves the analysis of low-content light element;
- Auto-switch of collimators and filters for different samples;
- Arbitrary optional analysis and identification models;
- Independent matrix effect correction models;
- Multi-variable non-linear regression procedure.

EDX 9000 XRF Spectrometer

Application fields:

- Rohs and free halogen testing

Features:

- The most advanced detection technology —— Silicon Drift Detector(SDD), with resolution as low as 125eV;
- The most advanced digital multichannel technology effectively improves output efficiency, realizes ultra high count rate, and guarantees the maximum effective counting rate reaches 30 kcps;
- Large power X ray tube and sophisticated collimation filter system provide higher excitation efficiency;
- Optical shutter system. no need to close high voltage when replacing sample; improves test efficiency and accuracy;
- 2D movable sample platform – supports image coordinated control and multi-point continuous test;
- Tiny sample detection – minimum 0.2mm.

EXPLORER XRF Series handheld XRF Spectrometer

Explorer 3000   Handheld Harmful Elements Analyzer
Explorer 5000   Handheld   Alloy Analyzer
Explorer 7000   Handheld   Ore   Analyzer
Explorer 9000   Handheld   Analyzer for Soil Heavy Metals

Application fields:

- In-field online analysis of various elements during raw material inspection process control and finished product inspection, the identification of metallic materials reliability and alloy number, on-site detection of   heavy metals in soil , in-situ multi-element analysis in the wild, etc.

Features:

- Small, easy to carry, it supports handheld test
- It provides rapid and nondestructive detection , delivering results within seconds.
- Introduction digital multi-channel technology to small X-ray spectrometer to provide better detection limit, higher stability and wider application

Genius XRF Series Handheld XRF Spectrometer

Genius 1000 XRF Handheld Precious Metal Analyzer
Genius 3000 XRF Handheld Hazardous Elements Analyzer
Genius 5000 XRF Handheld Alloy & Stainless Steel Analyzer
Genius 5000L XRF Handheld Alloy Analyzer - Light Element Reinforced
Genius 7000E XRF Economical Handheld Mineral Analyzer
Genius 7000 XRF Standard Handheld Mineral Analyzer
Genius 7000L XRF Handheld Mineral Analyzer - Light Element Reinforced
Genius 9000 XRF Handheld Soil Heavy Metal Analyzer

Application fields:

- In-field online analyses of various elements during raw material inspection, process control and finished product inspection, the identification of metallic materials reliability and alloy number, on-site detection of heavy metals in soil, in-situ multi-element analyses in the wild, etc.

Features:

- Small, easy to carry, it supports handheld test;
- It provides rapid and nondestructive detection, delivering results within seconds;
- Introducing digital multi-channel technology to small X-ray spectrometer to provide better detection limit, higher stability and wider application.

Cube 100 Portable Precious Metal Tester

Application fields:

- Element analysis of gold, platinum, silver and other precious metals in various kinds of ornaments.

Features:

- Easy to carry：
  The compact and ingenious design of Cube 100 makes it easy to carry with a handle and 5kg in net weight only.
- Universal testing stand：
  The unique testing stand design makes the testing of content of the inner wall of jewelry and widget samples, mixed metal accessories easily.
- Built-in camera：
  The built-in camera positions testing spot precisely. The sample testing spot can be saved in testing report.
- Collimator combination：
  The combination of three different sizes of collimators including 1mm, 2mm and 4mm and big testing chamber caters to the needs of different spot size testing requests.
- FP software for outstanding analytical flexibility：
  Auto match of different working curves under FP mode supports one key intelligent testing.

Thick 8000 Plating Thickness Analyzer

Application fields:
- Metal plating thickness and content analysis (electroplating industry, precious metal industry, PCB industry etc.)

Features:
- Excellent sample observation system;
- Advanced image identification;
- Easy detection of sample with deep groove;
- Four micro-focus collimators allowing automatic switch;
- Double safeguard procedures to realize seamless anticollision;
- Large area high resolution detector, effectively reducing detection limit and improving test accuracy;
- Automatic intelligent control mode, one-click operation;
- Automatic self-check and reset when starting up.

Thick 800A Plating Thickness Analyzer

Application fields:
- Measurement of plating thickness, element composition of plating and solutions.

Features:
- 0.1 micro collimator can test the point;
- High-accuracy movable platform can precisely locate the test point with repeated accuracy less than 0.01 μm;
- Height positioning laser can auto locate the height;
- Positioning laser can precisely locate the facula to ensure the test point aligns to it;
- The mouse can control the movable platform; the mouse clicking position is the test point;
- High-resolution detector can improve the analysis accuracy;
- Excellent ray shielding;
- The test interface is protected by high sensitivity sensor.

EDX3200S PLUS Sulfur Analyzer

Application fields:
- Petrochemical industry, crude oil extraction and the analysis of solids and liquids.

Features:
- Small and Elegant in appearance, it can conduct test in vehicle or laboratory;
- Side window W target X-ray tube with high excitation efficiency; large area SDD detector is of good heat dissipation which ensures the stability and efficiency of test;
- Tiny sealed helium charging sample chamber, saving gas consumption and reducing cost;
- Standard design of sample cup allows simple sampling and eliminates sample preparation; it can be used repeatedly, which minimizes cup consumption;
- Bottom lighting design avoids the test errors caused by sample volatilization and change of test distance, which greatly increases test accuracy;
- Multiple X-ray shielding design ensures the safety of operators;
- One-key operation provides precise test results, which is convenient and rapid.

EDX 3200S PLUS Food Heavy−Metal Quick Analyzer

Application fields:
- This product is applied for rapid non−destructive detection of cadmium（Cd）, lead（Pb）, mercury（Hg）, arsenic（As）, selenium（Se）in rice, wheat, corn, tobacco, noodle, pasta and other crops.

Features:
- Fast SDD detector can achieve the fast detection of trace heavy−metal elements in food, crops.
- Detection limit of 0.04ppm, 2~3 min rapid−screening, 25 min accurate measurement.
- Unique X−ray excitation source improves testing accuracy greatly.

WDX200 Classic Multi–channel X–ray Fluorescence Spectrometer

Application fields:
- X-ray Fluorescence technology is rapid, accurate and non-destructive. X-ray Fluorescence Analytical Instrument can be applied in such fields as (composition analysis of elements from Na to U and compounds): electronic appliances (RoHS test), jewelries, precious metal and plating, toy security (EN71-3), building materials (cement, glass, ceramic), metallurgy (steel, non-ferrous metals), petroleum (trace elements S, Pb, etc.), chemical industry, geology and mining, commodity inspection, quality control and human trace element detection, etc. WDX200 is widely applied for macro analysis and micro analysis in colleges and research institutes.

WDX–400 Wavelength Dispersive X–ray Fluorescence Spectrometer

Application fields:
- Building material（cement，glass，ceramic，etc），steel, nonferrous metal, mining industry, geology, chemical industry, petroleum, quality inspection.

Features:
- Rapid and non-destructive analysis of powder sample and lump samples
- Fast analyzer of compact powder, fused beads and lump material
- Multi-channel digital MCA has greatly improved the measurement efficiency, which benefits not only the instrument debugging and failure diagnosis but also enhances the measurement accuracy and stability.

WDX 4000 Sequential wavelength–dispersive X–ray fluorescence spectrometer

Application fields:
- It can be used in fields of mineral, cement, steel and environmental protection.

Features:
- Unique Goniometer design
- Innovative and igneous steel-belt-drive system. This patented design provides no friction, no backlash, stable motion which guarantee the most accuracy angular positioning.
- θ/2θ spindle has independent drive system with servo motor and optical encoder feedback.
- Permanent magnet synchronous motor(PMSM) provides the fast and smooth motion.
- Optical encoder's 0.0002°resolution and 0.0006°accuracy ensures that the integrated system has excellent performance.
- Multi-channel Analyzer
- 12bits, 80Msps, the most powerful AD sampling system, records signal completely and accurately.
- 4096 (12bit) channels analyzer based on high speed FPGA architecture and robust DSP algorithm is able to discriminate proper X-ray from stray X-ray.
- Energy-dispersive function is additional.

ICP 2060T Inductively Coupled Plasma Emission Spectrometer

Application fields
- Rare earth, geological, metallurgic, chemical, environmental, petrochemical industries, clinical medicine, semi-conductor, food, biological sample, criminal science, agricultural research etc.

Features:
- Over 70 elements can be measured;
- Fast analysis, analyzing 5-8 elements per minute;
- Simultaneous analyses of multiple elements;
- Excellent detection limits, at ppb level for most elements, and even 0.7ppb for Ba.

Inductively Coupled Plasma – ICP3000

Application fields
- Silicon Industrial: magnetic materials
- Metallurgical: analyze As, Bi, Pb, Sb, Sn and other impurity elements, which effect greatly the metallic materials quality
- Water analysis: analyze 8 heavy metal elements
- Geological, minera: analyze Ca, Mg, Na, Fe, Cu, Mn, Zn, Co, Ni, Au, Ag and other elements in the rock samples
- Petrochemical and Industrial: Analyze over 30 elements in crude oil, mainly Fe, Na, Mg, Ni, V, Ca, Pb, Mo, Mn, Cr, Co, Ba, As, etc.
- Pharmaceutical, health, agricultural and environmental and Food safety

Features:
- Fast, accurate auto-matching
- The load terminals employs the full-automatic matching technology developed by Jiangsu Skyray Instrument Co., Ltd., features fast matching, high precision, etc., which could achieve maximum output power, enhance power efficiency, ensure the stability of the instrument whilst facilitating ignition.
- Ultra-fast analysis speed
- The analyst can set any suitable integration time for all the analytical lines in one exposure to achieve optimal measurement, or acquire the intensity integral value in the end of the exposure to enable the analysis faster, or specify any one or several specific line（s）to read-out（the readout time＜2ms）.

On–stream Slurry Analyzer

OSA100 On–stream Slurry Analyzer

Application fields
- Nonferrous metal, metallurgy and mineral processing industries, etc.

Features:
- Automatic mineral processing: stable production, reduced production cost, increased recovery percent of mineral processing, improved on-site management, maximizing the economic value of the ore;
- The system applies modular design with integrated functions and compact structure. Wide extended range of the flow pass can meet the demand of mines of different scale, and perform process automation control;
- Real-time monitoring of key sections during production provides the latest data and variation trend of metal grade for operators, further guiding the production;
- Typical and new samples help fast and accurate analysis;
- Safe and radiation-free;
- Easy to operate and maintain.

Optical Emission Spectrometer

Metals Analyzer
Optical Emission Spectrometer

OES 6000
OES 8000

Application fields:
- Skyray Optical Emission Spectrometer is widely used in the element analysis of ferrous and non–ferrous metal. The instrument can simultaneously analyze dozens of elements with a fast, accurate and stable performance, meeting the requirements in industrial development, process control, incoming inspection, product sorting, etc.

Features:
- Thanks to the Multi–CCD detector and total spctrum technology, it is easier to install and add the matrix, channels and analytical program in Skyray or customers' laboratory
- No vaccum design eliminate the pollution of oil from the vaccum pump
- Work for 24/7 to serve your business with high stability and reliability
- Fast way to analyze and demonstrate the results within 35 seconds
- The operation and maintenance are simple and convenient for operators
- All of the typical analytical programs are calibrated in Skyray, which are more accurate and test more types of metal grades
- Easy to calibrate the instrument with the standardization samples
- Without chemical reagents, the analysis process is safe and eco–friendly.

Liquid Chromatograph

LC–310E Liquid Chromatograph

Application fields:
- Medicine analysis, food safety
- Environmental protection, industrial manufacturing
- Quality supervision, etc.

Features
- The reliable and stable infusion and detection system and high performance reciprocating parallel pumps achieve excellent qualitative and quantitative repeatable indexes
- The double parallel taper hole-designed flow cell, combined with high performance imported deuterium lamp, makes the baseline more stable and provides the highest sensitivity.
- The precision positioning structure and heat shield installation techniques give the optical system high precision, small offset and a short settling time.
- The intelligent control system provides professional chromatography programs which are required by GMP and 21CFR FDA certifications and integrate instrument control, data acquisition and data processing modules together.

High–frequency Infrared Carbon–Sulfur Analyzer

CS–188 High–frequency Infrared Carbon–Sulfur Analyzer

Application fields:
- Steel, ferroalloy, ferrosilicon, ore, rare earth, coke, etc.

Features:
- Separated structure design of high frequency combustion part and infrared testing part;
- Gas control system adopts standard metal connected clips with simple gas circuit and perfect sealing performance, which can continually analyze 100,000 samples without error;
- Specified back flushing design reduces the need to clean burner;
- High precision gas mass flow controller (MFC), free from the impact of external factors like temperature and pressure;
- Infrared testing equipment adopts our unique integral electro-optical design. With structural ingenuity and durability, its reliability and stability reach J level(military) standard.

AFS200T Atomic Fluorescence Spectrometer

Application fields:
- Geology, environment, metallurgy, food, biology, medicine, agriculture and plants, light industry and cosmetics, etc.

Features:
- Analysis range of element: As, Sb, Bi, Hg, Se, Te, Pb, Sn, Ge, Zn, Cd, etc.;
- Detection limit: As, Sb, Bi≤0.01ng/mL, Hg≤0.001ng/mL;
- Accuracy:≤1%, linear range: more than 3 orders of magnitude;
- Non-dispersive optical system: simple structure, simultaneous measurement of two elements at most;
- Automatic control of lamp current, negative high voltage and rpm of peristaltic pump.

AAS6000 Flame AAS

Application fields:
- Geology, minerals, metallurgy, steel, non-ferrous metals;
- Environmental analysis: air, water quality, soil and solid wastes;
- Petrochemical industry and light industrial products, crude oil and additional products;
- Food, biomedicine and health products;
- Building materials (glass, ceramic, paints, etc.).

Features:
- C_2H_2 analysis and flame measurement: full reflection, corrected aberration;
- Highly automated and full automatic operation;
- 8 element lamps, shortened lamp switching time;
- Safety protection of gas circuit guarantees safer operation;
- 230nm grating blazed wavelength, enhanced sensitivity of ultra-violet zone;
- 1800g/mm grating density, optimized resolution.

AAS9000 Intergrated AAS

Application fields:
- Geology, minerals, metallurgy, steel, non-ferrous metals;
- Environmental analysis: air, water quality, soil and solid wastes;
- Petrochemical industry and light industrial products, crude oil and additional products;
- Food, biomedicine and health products;
- Building materials (glass, ceramic, paints, etc.).

Features:
- C_2H_2 analysis and flame measurement: full reflection, corrected aberration;
- Highly automated and full automatic operation;
- 8 element lamps, shortened lamp switching time;
- Safety protection of gas circuit guarantees safer operation;
- 230nm grating blazed wavelength, enhanced sensitivity of ultra-violet zone;
- 1800g/mm grating density, optimized resolution.

ICP–MS 2000 Inductively Coupled Plasma Mass Spectrometer

Application fields:
- Environment field: drinking water, seawater, water resource, food, hygiene and disease control, good inspection, etc.
- Semiconductor field: high pure metal, high pure reagent, ultratrace impurity of Si chip, photoresists;
- Pharmaceutical and physiological analysis field: medical research on hair, blood, serum, urine sample, biological tissues, e.g., testing Pb in whole blood;
- Nuclear industry: nuclear fuel radioisotope, pollution of primary cooling water, etc.
- Other filed: such as chemical industry, petrochemical, geology, etc.

Features:
- Quick analysis, simple operation, high sensitivity, low background noise, good interference shielding effect, easy to maintenance;
- One-buttom plasma setting makes plasma optimization more convenient with excellent reproducibility;
- Advanced plasma shielding technology greatly improves sensitivity and reduces the detection limit of elements with low mass number, reaching ppt level;
- It has special mobile connector structure, which enables to replace, install and dismantle sampling cone and skimmer cone under vacuum condition. It's convenient for daily maintenance;
- The new hexapole collision cell improves efficiency of ion transmission and eliminates the interference of polyatomic ion;
  No need to switch between digital and analogue mode; it is computer controlled, with dynamic linearity range reaching 9 orders of magnitude;
- The new type vacuum chamber structure has no wire connection;
- Each module applies dissymmetric and plug-in installation.

LC–MS 1000 Liquid Chromatograph Mass Spectrometer

Application fields:
- LC-MS is a necessary analytical tool for organism analysis lab, drug and food laboratory, production process control, quality control department, etc.

Features:
- Quick scan speed (maximum 10000 amu/s, bar chart);
- Wide scan range (10-1100amu);
- Provide positive and negative mode switch;
- High detection sensitivity (10 pg reserpine, S/N≥50:1);
- High software integration (LC high pressure pump, auto sampler, thermostat, UV detector, mass spectrum control and data process integrated in the software);
- Powerful auto calibration and tuning function;
- Dual-language interface (Chinese and English).

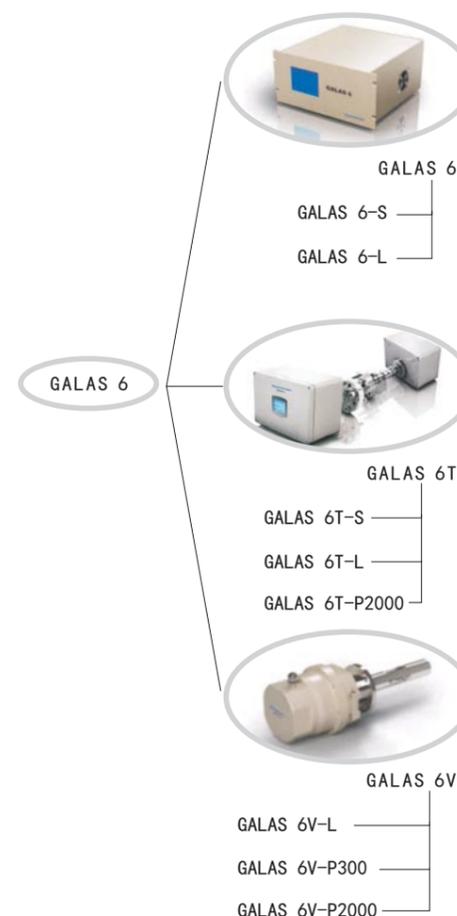## GC–MS 6800 Gas Chromatograph Mass Spectrometer

Application fields
- Industry: textile, electricity&electronics, plastics, cosmetics.
- Food safety: pesticide residue, fragrance, additive, food packaging
- Environmental protection: air, water, soil, solid waste.
- Pharmaceutical industry: pharmaceutical factory, drug test.
- Petrochemical industry: refinery, chemical plant.
- Public security organ: explosives, drug analysis, physical evidence.

Features:
- GC system equipped with electronic pressure/flow control system (EFC/EPC); High efficient EI filament provides high electron emission efficiency;
- Quadrupole quality analyzer with pre-filter reduces quadrupole pollution; high energy dynode electron multiplier ensures good sensibility;
- Vacuum system composed of imported mechanical and turbo molecular pump guarantees system's stability and reliability;
- Full scale vacuum gauge monitors vacuum state in real time; self protection system guarantees the safety of operator and key parts under urgent conditions; RF power digital compensation technology ensures better sensitivity and resolution in full mass range;
- The software "ChemAnalyst" controls auto sampler, GC and MS; data acquisition and transmission are realized by high-speed network card; full scan (SCAN) and selective ion monitoring (SIM) modes are available; support manual and automatic tuning; quick display of total ion current(TIC) and mass spectrogram;
- Skyray Instrument is the only legal distributor authorized by NIST in China Mainland, which guarantees the latest version of NIST spectrum database and free online upgrade;
- Data process software searches target compound in NIST2011 spectrum database based on the mass spectrogram of sample and displays searching results which includes retention times, structural formula and standard mass chromatograms and confirms the standard and real abundance of ions. Users can make accurate qualitative and quantitative analysis.

GALAS 6 Laser Gas Online Analyzer

GALAS 6

GALAS 6
- GALAS 6-S
- GALAS 6-L

GALAS 6T
- GALAS 6T-S
- GALAS 6T-L
- GALAS 6T-P2000

GALAS 6V
- GALAS 6V-L
- GALAS 6V-P300
- GALAS 6V-P2000

Application fields:
- Exhaust gas emission monitoring, like HF, HCL, NH_3 in electrolytic aluminium plant;
- NH_3 gas escape monitoring in flue gas denitrification process of coal-fired power plant;
- CO, CO_2, O_2 monitoring in converter, blast furnace, coal injection of steel industry;
- Monitoring corrosive gas like HF, H_2S and trace H_2O in petrochemical, chemical industry;
- HF, HCL, CO, CO_2 in waste incineration;
- H_2S, NH_3 monitoring in landfill;
- CO, CO_2 monitoring in tobacco processing;
- H_2S monitoring in effluent treatment;
- H_2S, NH_3, CO, CO_2 monitoring in ambient air;
- H_2O, CO_2, O_2 monitoring in industrial technological process.

Features:
- No cross interference. Specific gas can only absorb laser light at specific wavelength;
- The unique optical design can effectively eliminate the impact of vibration on absorption measurement;
- Flexible measurement mode. It can conduct in-situ measurement under 1000℃, or analyze and monitor gas in combination with bypass sampling system;
- Light intensity compensation algorithm ensures instrument deliver accurate results under the condition of excessive dust and particulate matter;
- Multiple analysis modes, including direct absorption, 1f, 2f, etc. In combination with professional spectrum analysis method, it guarantees the sensitivity of measurement results and linearity range;
- Temperature and pressure compensation with internal/external temperature and pressure sensor, in combination with optimized algorithm, improves measurement accuracy;
- Distributive micro-processing technology is specially designed for fast analysis with response time ≤1s.

GALAS 6-S, GALAS 6-L
- Fiber laser technology enables multi-point monitoring.
- Internal calibration unit conducts peak locking and calibration automatically.

GALAS 6T-S, GALAS 6T-L
- Core analyzer integrated with transmission unit, plus receiving unit, meet most application requirements.
- No consumables, low operation cost.

GALAS 6T-P2000, GALAS 6V-P2000
- Reflective optics design, integrated instrument offer easy installation and service.
- Particular permeation tube is utilized for high dust condition as high as 50g/m³.
- Probe can withstand 400℃ high temperature, suitable for denitration process.
- Specialized protection sleeve protects probe from poor conditions to prolong its service life.

GALAS 6V-P300
- Compact reflective optics design, highly integrated analyzer and optional secondary meter, take the place of traditional instrument, and make things smaller, more cost-effective, and easier to use.
- Mainly used for measurement of gas at temperature less than 60℃.

Portable Water Quality Analyzer Series

HM-5000P Multifunctional Portable Heavy Metal Analyzer
HM-7000P Portable Food Quality Analyzer -Heavy Metal

Application fields
- On-site application in urgent cases (for instance, on-site testing of water pollution);
- Precise heavy metals detection in labs;
- Water quality monitoring of surface water, underground water, seawater, industrial wastewater, drinking water and other water;
- Heavy metals testing in soil, food, and other waste solids.

Features:
- The detection method of HM-3000P is anodic stripping voltammetry
- The detection method of HM-5000P is the combination of stripping voltammetry and colorimetric method;
- Rapid testing: 30s to 5min;
- Wide testing range: typical measuring ions include Cu, Cd, Pb, Zn, Hg, As, Cr, Ni, Mn, Tl, etc.
- High precision: at ppb level, detection limits less than 0.5ppb;
  Ip67 dust&waterproof design makes it work properly under severe environment;
- High-capacity lithium battery ensures over 100 times continuous measurement;
- The half-transflective technology applied in LCD makes it properly work even in the open field;
- It supports wireless printing, to print the history measurement results on-site (Bluetooth printer is optional).

BIO-3000 Comprehensive Toxicity Analyzer of Water Quality

Application fields:
- Environmental monitoring department and centers for disease control and prevention
- Experimental study on bio-toxicity in universities
- Monitoring on surface water, drinking water and the source of drinking water
- Anti-terrorism and security assurance on big public events
- Quick screening and toxicity monitoring on sources of pollution from turnover water of sewage treatment works, food processing water, percolate of landfill and industry cooling water

Features:
- In accordance with national standard（GB/T15441 1995）and（ISO 11348-3）;
- Wide testing range and sensitive to many metals and chemical substances like organic matter;
- Compatible with ATP, multifunctional
- Exquisite, portable and convenient
- Huge HD display screen makes more convenient
- Professional APP, simple
- Many interfaces such as bluetooth, USB and WIFI, makes easy data reading
- Pollution map function for quick positioning polluted site
- Huge electric quantity, easy for charge

Online Water Quality Analyzer Series

WAOL2000-COD$_{cr}$	Online Water Quality Analyzer - COD$_{cr}$
WAOL2000-NH$_3$N	Online Water Quality Analyzer - NH$_3$N
WAOL2000-TP	Online Water Quality Analyzer - TP
WAOL2000-TN	Online Water Quality Analyzer - TN
WAOL2000-Cr^{6+}	Online Water Quality Analyzer - Cr^{6+}
WAOL 2000-Cr	Online Water Quality Analyzer - Cr
WAOL2000-Cu	Online Water Quality Analyzer - CU
WAOL2000-Ni	Online Water Quality Analyzer - Ni
WAOL2000-Pb	Online Water Quality Analyzer - Pb
WAOL2000-Zn	Online Water Quality Analyzer - Zn
WAOL2000-Fe	Online Water Quality Analyzer - Fe
WAOL2000-Mn	Online Water Quality Analyzer - Mn

Application fields:
- It can be widely used in water pollution monitoring of automatic water monitoring station, waterworks, regional water boundary, water analysis laboratory and all level of other environmental monitoring departments.

Features:
- Automatic and manual calibration; automatic electricity recovery after blackout; automatic alarm and protection in the following situations: malfunction, no reagent, no water sample and value over-standard;
- Control the water sampling of all kinds of pumps;
- Measurement method can be set as interval measurement or consecutive measurement;
- Simple visual interface and rich multimedia pictures; it displays the whole measuring process with animations, which is convenient for the customer to know the measuring process;
- All functions can be realized through the friendly intelligent interface on the touch screen. Calibration, parameter recording, setting analysis time and alarm value can be done through remote control. Diagnosis of malfunction and the modification of procedures can also be finished through remote terminal.
- Operation data of over a year can be stored in instrument.
  Imported electrical elements and maintenance-free sampling system guarantee the long-term stable operation of instrument.

WAOL 3000–HM Water Quality Online Automatic Analyzer

Application fields:

- It can be widely used in water pollution monitoring of automatic water monitoring station, waterworks, regional water boundary, water analysis laboratory and all level of other environmental monitoring departments.

Features:

- It combines two methods: anodic stripping voltammetry and colorimetric method;
- Analytical elements: simultaneous detection of Cu, Cd, Pb, Hg, As, Ni, Cr^{6+} (other elements can be added like Mn, Fe, Co, Zn, Ti);
- The detection limit under ASV is 0.1ug/L , and that of colorimetric method is 1 ug/L;
- Automatic high-precise diluting and sampling enlarges the measurement range;
- Repeatability: RSD ≤5%;
- Strong anti-interference: advanced fluid path ensures zero-cross contamination; Skyray's self-developed technology has solved the problem of mutual interference when Cu, Zn coexist;
- Measuring mode can be set based on demands. The minimal measuring time is 25min;
- Innovative liquid flow path design and modular design guarantee system stability;
- Efficient and durable: the instrument is of simple structure, low maintenance cost, long service life and low failure rate;
- Rapid and effective HTHP digestion module can effectively eliminate the interference caused by organics in water. Efficient circulating water is used for cooling to shorten the pretreating time of water sample.

Environmental Heavy Metal Analyzer

EHM-X100
EHM-X200

Application fields:

- Air quality monitoring;
- Feature analysis of air particles;
- Atmospheric background measurement;
- Environment appraisal and permission;
- Positioning and tracing of pollution source;
- Pollution forecast and early warning.

Features:

- Perfect combination of the advanced X-ray Fluorescent (XRF) non-destructive testing technology and atmosphere automatic deposit technology, complying with USA EPA Method IO-3.3.
- Optionally equipped with various particulate matter cutters, realizing measurements of heavy metal particles with different aerodynamic sizes.
- Precise concentration detection of up to 30 heavy metals such as Pb, Cd, Cr, As etc., with detection sensitivity unit in pg/m3; the measurable heavy metal range can be expanded.
- The core analyzer utilizes international standard 19" cabinet which can be installed either on mobile monitoring vehicle or on the stand rack of atmosphere auto-monitoring station.
- With 20 years accumulation of XRF technology, industrial grade electrical design and lightning protection, the analyzer is of high operational reliability and stability, supports failure-free operation in 24 hours for 365 days, and also has functions of intelligent fault diagnosis and self-troubleshooting.
- Low background detecting with stray light-free design and automatically changeable filters;
- In-built calibration module calibrates wavelength and intensity automatically, with calibration frequency can be set arbitrarily.
- Internal standard calibration source for Pb, Cd, Cr, As, Mn, etc.(customized) can realize automatic quality control and alarm.
- Mass flow controller and multi-dimensional temperature sensor precisely control the sampling flow rate; automatic standard flow meter is equipped to realize flow self-calibration.
- It supports various data transmission modes like RS232/485, USB, GPRS, ADSL, Ethernet etc., realizing remote transmission, control and inspection of operation parameters, status and data;
- With application of the advanced hierarchical modular design, the system possesses functions like data setting, calibration, saving, display, query, analysis and communication.
- Professional anti-radiation treatment guarantees no radiation leakage during measurement, which has passed the inspection and certification of relevant national departments.

CEMS–X100 Online Emission Monitoring System for Heavy Metals in Flue Gas

Application fields:
- It can make automatic continuous monitoring for the concentration and the total emission of lead, mercury, cadmium, chromium, arsenic and other heavy metals in flue gas.

Features:
- The product can simultaneously detect more than 20 heavy metal elements as well as customized elements.
- Generally, you can get results in 15 minutes.
- Non-destructive detection and sample-archiving function for subsequent laboratory quality control analysis.
- Automatic quality control. The internal standard elements can automatically check the system to maintain the long-term stability.
- Professional radiation protective treatment gives you comprehensive protection.
- Compared with the reference method, it has a higher detection accuracy.

SPECTROLAB

Oxford House,
20 Oxford St.
Newbury,
Berkshire.
RG14 1JB UK.

Offices in UK, EU, Dubai

sales@spectrolab.eu   sales@spectrolab.co.uk
www.spectrolab.co.uk