

YANG Portable single-wavelength XRF analyzer

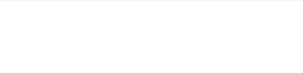
Product overview

YANG Portable Single Wavelength X-ray Fluorescence Spectrometer is a new generation of XRF analysis instrument introduced by LANScientific co., LTD.. The blend of the LANScientific XRF many years development, crystal grating spectrometer technology and high intelligent XRF analysis software, has a small, portable, simple operation, fast, accurate, safe and reliable, is food security, in areas such as enterprise products trade, processing, quality inspection, security audit, and recycling the ideal choice.



The product principle

X-ray tube exit spectrum consists of straight line and characteristic spectral lines, the focusing hyperboloid bent crystal diffraction X-ray tube light only exit X-ray spectrum of high strength characteristics, and X ray incidence to the sample has the very good monochromaticity, so sample from exit X-ray in addition to the elements in the samples are produced by fluorescence X-ray and monochrome outside of Rayleigh scattering and the Compton scattering of the incident ray scattering background, there is no continuous to ensure element under test characteristic line has very low background interference, are elements of the fluorescence X-ray detection with the detector, high resolution and high sensitivity test results are obtained.



Application range

- Analysis of the content of ultra-low heavy metal elements in soil
- Rapid measurement of heavy metals such as crops and polluted water
- Rapid safety detection of heavy metal content in food
- Identification of solid waste and hazardous waste toxic elements
- Cosmetics heavy metal content detection
- Exploration and mining, sediment, rock, Th, U and rare earth element analysis

Technical parameters and specifications

Size (mm)	418mm × 330mm × 173mm
Excitation source	High-power X-ray tube for cluster microfocal spot
X-ray tube target material	Cu target (standard), Co, Cr, Fe, Ni, Mo, Ag, W target (optional)
X-ray tube power	Power is 50 w
crystal	Hyperboloid curved crystal
The detector	2 stage Peltier refrigerated SDD detectors
Scope of element	Magnesium (Mg) to uranium (U)
The battery	Equipped with lithium battery, can continuously test the number of samples ≥50, can also be used in the laboratory environment through the adapter power supply.
Working temperature	- 20 °C to 50 °C
Working humidity	20%~90%RH
Data output	USB, Bluetooth, WiFi, GPS, 4G communication
Measuring time	30-600S
The resolution of the	The optimal 125 ev
The weight of the	12KG
Analytical system language	Chinese, English, etc
System processor	Based on an I.MX6 Quad quad-core Cortex-A9 processor, dedicated analytics operating system,80MHz ADC digital pulse processor,4096 MCA channel, 32GB of memory

Product detail

Product features

- Portable:** waterproof and dustproof box (IP65 waterproof and dustproof grade) all-in-one machine design, portable test platform, so that the field detection and laboratory analysis in one, one key test, simple operation, automatic detection, without correction, can freely carry out laboratory/field scientific research.
- Good environmental adaptability:** specially developed for quick field analysis, the instrument can be anti-fog, dust-proof, shock-proof, can adapt to the harsh environment.
- Heat dissipation:** the instrument is equipped with special two-way ventilated heat dissipation device to improve the heat dissipation performance of the instrument, without frequent waiting for the detector to cool down.
- Safety:** YANG has professional multi-protection radiation treatment (sample chamber radiation shielding measures, safety linkage lock device), the measurement instrument in all aspects without any radiation leakage.
- Cloud service:** the device is equipped with synchronously controlled mobile APP service, which can operate, transmit and manage data, labels and other information, and easily realize system data docking and sharing.
- Positioning system:** YANG can combine the built-in GPS longitude and latitude data and altitude data, and import the third-party GIS analysis software to construct the geographical three-dimensional distribution map of element content, so as to quickly evaluate the mineral reserves or geological environment disaster areas
- Data printing:** YANG is equipped with portable Bluetooth printer, and data can be output in Excel or PDF format. Users can create custom reports.

- Related video
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