Handheld XRF Machine

Nanoris

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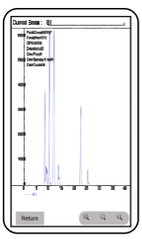
Graph

Minerals Mining

Inbuilt Camera

Usage advantages

Portability
The instrument has a smaller volume and lighter weight, making it convenient for real-time on-site testing and can easily handle samples of various shapes.

NDT
Quickly and accurately analyze the plating thickness and sample element content of the plating sample without damaging the test object。

Heat dissipation
The temperature of the detector is set to ≥ -3 ℃, and the heat production is much lower than that of similar products, so there is no need to wait for the detector to cool frequently.

High quality imported detectors
The instrument adopts imported detectors suitable for analyzing multi-element coatings, with low noise and flexible response to coating structure.

Accurate and reliable qualitative and quantitative methods
Adopting advanced intelligent FP algorithm, the instrument not only has faster measurement speed, higher measurement accuracy, and stronger measurement consistency。

Application :


Quick survey of mining areas


Quickly analyze the chemical composition of various metal ores


Rapid analysis of ore


Rapid investigation and determination of pollution boundaries


Analysis of residual ore elements in slag tailings


Conduct real-time exploration

Handheld XRF Machine

Nanoris

Minerals
Mining

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Ca(20)-U(92)
Measurement accuracy	（RSD） <1%	（RSD） <2%
Detection thickness range	0.01μm-60μm	0.05μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coefficents method + FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃ — 40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm (L) X91mm (W) X319mm (H)	
Appearance material	Alloy, polycarbonate	
Weight	≤1.75KG （Including battery）	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

Aczet Pvt. Ltd.

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Handheld XRF Machine

Nanoris

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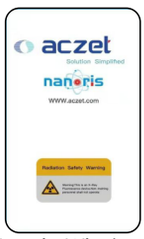

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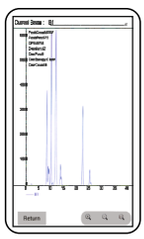


Metal Graph

RoHs

Inbuilt Camera

The RoHS directive issued by the European Union clearly stipulates the maximum limit values for six harmful sub stances, mainly used to regulate the material and process standards of electronic and electrical products, making them more conducive to human health and environmental protection. RoHs is a hand held analyzer designed specifically for RoHS (Restriction of Hazardous Substances). Its non-destructive and rapid testing provides convenience for manufacturers with quality control needs . RoHS lists a total of six harmful substance, including lead PB, cadmium Cd, mercury Hg, hexa valentchromium Cr6 +, polybrominated dipheny lether PBDE, and poly brominated biphenyly PBB.

Wide detection range
Mainly targeting six regulatory elements: lead Pb, cadmium Cd, mercury Hg, hexavalent chromium Cr6+, polybrominated diphenyl ether PBDE, and polybrominated biphenyl PBB, it can simultaneously detect more than 50 elements.

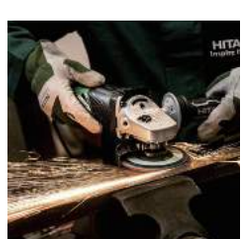
Software
The instrument comes with an Android ANDROID6 based main control system and also has compatible computer and mobile software.

Computer software : ACZET remote control system, C # data synchronization control system based on Windows system; Both computer and mobile software can operate instruments and synchronize data through software.

Application :

Toy production

Professional testing institutions



Mechanical Manufacturing and Processing

Superior Configuration

- Comfortable feel: lightweight, small in size, ergonomic handle design, easier to grip.
- Long endurance: One battery has an ultra long standby time of 12 hours and a continuous testing time of over 6 hours; The battery has a hot swappable function.
- High precision positioning: GPS intelligent positioning, which can locate the testing area during on-site use.
- The instrument has material sensing function and intelligent status display light, and has a safety linkage device.

Intelligent FP algorithm

Obtaining high-quality results with low detection limits and a world leading level of repeatability accuracy.

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	Si-PIN
Measurement element range	Na (11) - U (92)	S(16)-U(92)
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Measurement accuracy	≧0.001%	≧0.05%
Data transmission	E-Mail	WiFi
Network connection method	4G	
Software	ACZET remote control system, PC based on Windows system/Android based system Mobile devices can operate instruments through software (ACZET) to achieve data from multiple platforms (instruments) Device (PC, mobile, cloud) synchronization, software with data analysis, spectrum display, and report printing Printing and other functions, the instrument has the function of sending analysis reports via email	
Analytical methods	empirical coefficients method + FP	
Brand recognition function	correct	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃ — 40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm (L) X91mm (W) X319mm (H)	
Appearance material	Alloy polycarbonate	
Weight	1.75Kg(Including battery)	
Detection head protection cover (patent protection)	Probe protection, on-site calibration, radiation protection	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

Specifications are subject to change without prior notice.
Images shown are for illustration purpose only.

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Handheld XRF Machine

Nanoris

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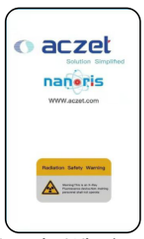

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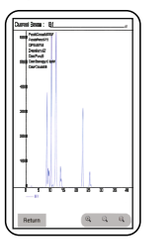
Graph

Coating & Composition Analyzer

Inbuilt Camera

Advantages of Use

Portability
The instrument has a smaller volume and lighter weight, making it convenient for real-time on-site testing and can easily handle samples of various shapes.

NDT
Quickly and accurately analyze the plating thickness and sample element content of the plating sample without damaging the test object。

Heat dissipation
The temperature of the detector is set to ≥ -3 ℃, and the heat production is much lower than that of similar products, so there is no need to wait for the detector to cool frequently.

High quality imported detectors
The instrument adopts imported detectors suitable for analyzing multi-element coatings, with low noise and flexible response to coating structure.

Accurate and reliable qualitative and quantitative methods
Adopting advanced intelligent FP algorithm, the instrument not only has faster measurement speed, higher measurement accuracy, and stronger measurement consistency。

Application :


PCB industry


Hardware and building materials industry


Jewelry and Watch Industry


Precision electronics 5G industry


The automotive and decoration industry


Metal content in electroplating bath solution and electroplating wastewater

Handheld XRF Machine

Nanoris

Coating & Composition Analyzer

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Ca(20)-U(92)
Measurement accuracy	（RSD） ＜1%	（RSD） ＜2%
Detection thickness range	0.01μm-60μm	0.05μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coeficents method+FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃—40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm（L）X91mm（W）X319mm（H）	
Appearance material	Alloy, polycarbonate	
Weight	≤1.75KG（Including battery）	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

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Handheld XRF Machine

Nanoris

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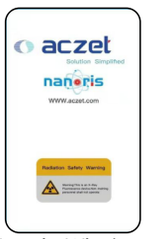

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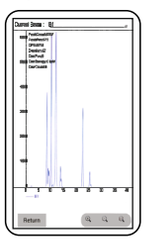

Graph

Catalyst

Inbuilt Camera

Application Area :

Environmental protection industry

In the field of environmental protection, the Tektronix spectrometer can also monitor pollution sources and evaluate emission standards in the field of ternary catalysis. It can detect the types and concentrations of pollutants in the environment, providing data support for formulating environmental policies and management.

Automobile Industry :

In the automotive industry, the Tektronix spectrometer is used in the field of ternary catalysis to evaluate whether automobile exhaust emissions meet standards. It can detect harmful gases and particulate matter in car exhaust, as well as their concentration and composition, providing data support for formulating car emission standards.

Machinery :

In the mechanical industry, Tektronix spectrometer is used in the field of ternary catalysis to evaluate whether the emissions of mechanical equipment meet the standards. It can detect harmful gases and particulate matter emitted by mechanical equipment, as well as their concentration and composition, providing data support for the formulation of mechanical equipment emission standards.

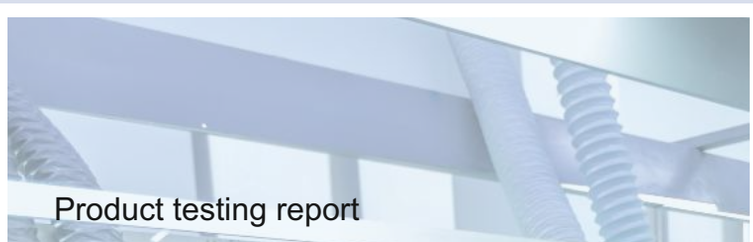
Industrial process control :

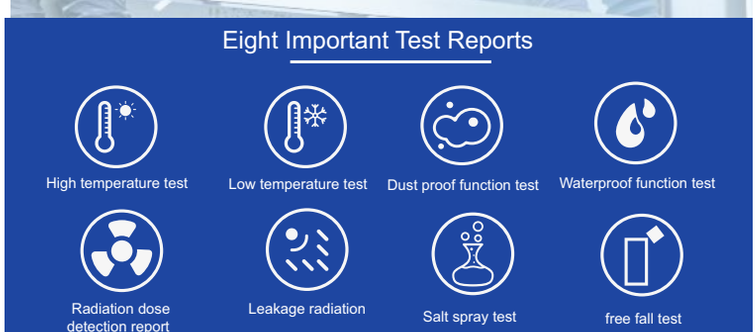
The Tektronix spectrometer can be used for quality control and process control in industrial production processes in the field of ternary catalysis.

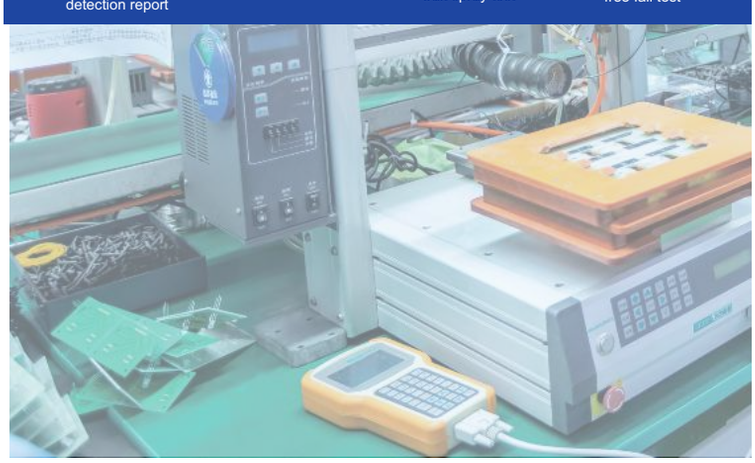
For example, in the process of chemical reactions, it can monitor the concentration changes of reactants and products in real time, thereby controlling reaction conditions and improving product quality and yield.

Metal recycling :

The Tektronix spectrometer can also be applied in the field of ternary catalysis to recover metals from automotive catalysts. Through fast and simple detection methods, it can provide information on precious metals The presence or absence of information helps to facilitate a more efficient recycling process.







Handheld XRF Machine

Nanoris

Catalyst

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Mg(14)-U(92)
Measurement accuracy	(RSD) <1%	(RSD) <2%
Detection thickness range	0.01μm-60μm	0.05μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coeficents method+FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃—40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm (L) X91mm (W) X319mm (H)	
Appearance material	Alloy, polycarbonate	
Weight	≤1.75KG (Including battery)	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

Aczet Pvt. Ltd.

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Handheld XRF Machine

Nanoris

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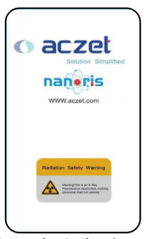

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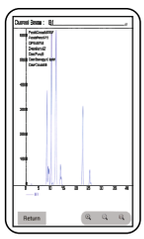

Graph

Alloys

Inbuilt Camera

Handheld Analzyer

By using X-ray fluorescence analysis technology, multiple materials can be analyzed quickly, accurately, and without damage. With excellent metal recognition ability, it can recognize metal and alloy grades within 1-2 seconds, and can detect up to 11 types of alloy.

Why to Choose

- Wide Detection Range
- High cost performance Ratio
- Easy to Operate
- Reduce testing costs
- Security
- Intelligent FP method
- Comfortable Feel
- Data Management

Handheld XRF Machine

Nanoris

Alloys

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Mg(20)-U(92)
Measurement accuracy	(RSD) <1%	(RSD) <2%
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coeficents method+FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃—40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
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Weight	≤1.75KG (Including battery)	

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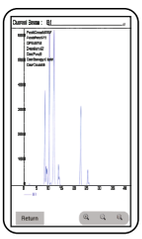

Metal Graph

Precious Metal

Inbuilt Camera

XRF Precious Metal Analyzer XRF Precious Metal Purity Tester Precious Metal Testing Instrument Testing Scope :

1.Measurement Accuracy : RSD < 1%
2.Rapid quantitative analysis
3.Test content range0.01-99.99%
4.Using high-resolution detectors to achieve adulteration identification in gold and platinum.
5.The detection of the content of dozens of elements such as gold, silver, and platinum group metals (ruthenium, rhodium, palladium, osmium, iridium, platinum) from K to U shows that the content can be both% and K gold.

Easy customization
On the basis of testing, various custom settings are provided, and the testing conditions can be changed according to the testing needs. The threshold can also be changed according to the screening needs, achieving personalized screening for different materials and elements.

Comprehensive safety protection
During the measurement process, multiple safety measures are taken, such as the automatic breathing and flashing of radiation indicator lights on both sides of the instrument, and the built-in intelligent automatic sensing test window to completely avoid radiation damage to the human body caused by X-rays.

Application :

Recycling of waste precious metals

Detection of recycled components in gold products

Purity of gold and silver jewelry

Analysis of Precious Metals in the New Materials Industry

Handheld XRF Machine

Nanoris

Precious Metal

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Ca(20)-U(92)
Measurement accuracy	（RSD） ＜1%	（RSD） ＜2%
Detection thickness range	0.01μm-60μm	0.05μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coefficents method+FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃—40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm（L）X91mm（W）X319mm（H）	
Appearance material	Alloy, polycarbonate	
Weight	≤1.75KG（Including battery）	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

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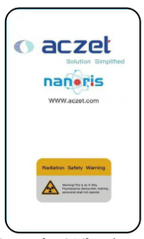

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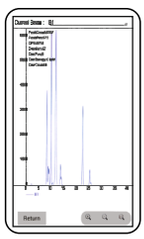

Metal Graph

XRF Analyzer Light Alloys

Inbuilt Camera

Characteristics of aluminum alloy

Aluminum alloy is a lightweight metal material composed of aluminum as the base with a certain amount of other alloying elements added. In addition to the general properties of aluminum, aluminum alloys exhibit specific characteristics due to the types and quantities of alloying elements added. The density of aluminum alloys ranges from 2.63 to 2.85g/cm3, with high strength (b ranging from 110 to 650MPa), comparable strength to high-alloy steel, higher stiffness than steel, good casting performance, plastic processing performance, excellent electrical and thermal conductivity, corrosion resistance, and weldability.

Three Advantages

Fast Analysis Speed

Flexible one-click analysis operation

Intelligent FP algorithm

Application :

Aerospace Aluminum Alloys

Analyzing Aluminum Alloy Materials

Chemical Industry

Various Metal components in Metal Packaging

Handheld XRF Machine

Nanoris

XRF Analyzer
Light Alloys

Model	Nanoris-SDD
Detector	SDD
Measurement element range	Mg(12)-U(92)
Measurement accuracy	(RSD) <1%
Detection thickness range	0.01μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G
Data transmission	E-Mail
Network connection method	4G
Camera	500W high-definition camera
Detection head protection cover	Probe protection, on-site calibration, radiation protection
Analytical methods	Empirical Coefficents method+FP
Simultaneously detecting elements	Customizable according to customer requirements
Excitation source	50kV/200μA X-ray fluorescence
Cooling method	Two-stage thermoelectric refrigeration
Operation temperature	0℃—40℃
Working humidity	≤90%
Safety	Multiple safety protection: with object sensing function and intelligent status display light
Overall dimensions	254mm (L) X91mm (W) X319mm (H)
Appearance material	Alloy, polycarbonate
Weight	≤1.75KG (Including battery)

Accessories

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Handheld XRF Machine

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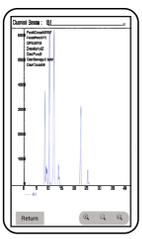


Metal Graph

Alloy Field waste recyling (Scrap)

Inbuilt Camera

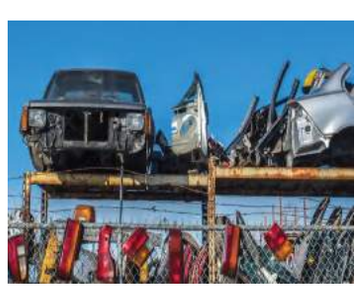
For the scrap metal recycling industry, an accurate and portable handheld spectrometer can help identify alloys and analyze material chemical composition, while the Aczet handheld spectrometer can provide fast and accurate elemental analysis for scrap metal recycling. Relying on Aczet digital and intelligent industry solutions, Aczet's handheld spectral analyzer can measure element content as low as several parts per million.

ACZET handheld alloy analyzer can demonstrate the advantages of fast analysis speed and high accuracy in alloy material identification. Its touch screen is sensitive and easy to operate, and the measurement results will be directly displayed on the screen, including the brand, percentage content of metal components, and can provide clear and vivid images in most light conditions, with continuous readability.

The ACZET handheld spectral analyzer emits X-rays, causing the detected element to emit fluorescence. The X-ray detector then performs mathematical calculations on this to obtain the detection result. The entire process takes only 3-10 seconds, and the handheld spectral analyzer can be applied to almost any object for metal composition detection and obtain accurate results.

The Aczet handheld spectral analyzer is also very easy to operate. The interface is intuitive, easy to operate, and easy to carry, which is very in line with the working properties of metals that need to be detected at all times in the scrap metal recycling industry. In addition, Aczet's handheld spectral analyzer meets the IP55 rating standard and has also passed authoritative drop tests. Durable and sturdy, with low maintenance costs.

Application :



Handheld XRF Machine

Nanoris

Alloy Field waste recycling (Scrap)

Model	Nanoris-SDD	Nanoris-Si-PIN
Detector	SDD	SIPIN
Measurement element range	Mg(12)-U(92)	Ca(20)-U(92)
Measurement accuracy	（RSD） <1%	（RSD） <2%
Detection thickness range	0.01μm-60μm	0.05μm-60μm
Main control system	Customized industrial level master control system CPU: 2.4GHz; Running memory: 2G; Body storage: 4G, Scalable support for 32G	Customized industrial leve master control system CPU: 2.4GHz; Running memory: 1G; Body storage: 4G
Data transmission	E-Mail	WiFi、Bluetooth
Network connection method	4G	
Camera	500W high-definition camera	
Detection head protection cover	Probe protection, on-site calibration, radiation protection	
Analytical methods	Empirical Coefficents method+FP	
Simultaneously detecting elements	Customizable according to customer requirements	
Excitation source	50kV/200μA X-ray fluorescence	
Cooling method	Two-stage thermoelectric refrigeration	
Operation temperature	0℃—40℃	
Working humidity	≤90%	
Safety	Multiple safety protection: with object sensing function and intelligent status display light	
Overall dimensions	254mm (L) X91mm (W) X319mm (H)	
Appearance material	Alloy, polycarbonate	
Weight	≤1.75KG（Including battery）	

Accessories

Three prevention protection box

Charger

High capacity lithium battery

Aczet Pvt. Ltd.

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