Handheld alloy analyzer

XRFA1629/XRFA1634(Handheld gold analyzer XRF8Gold)

The XRFA16 analyses common alloys in a second or less. It is small, responsive and highly accurate. The device uses patented technology (mirror system design). Temporary files generated while the system is running are automatically deleted after the unit is rebooted, allowing it to run as smoothly as a new unit for up to 10 years. One-button system testing, from start-up to testing in one step. Designed for NDT and PMI users, it detects inaccessible areas and welds. It has excellent analytical performance for low Tiv contents.

Features:

1. The instrument is smaller in size and lighter in weight, which is convenient to carry.
2. High-speed processing chip, advanced algorithms and efficient software to match, making the instrument analysis faster.
3. The selection of imported high-performance X-ray tube and ultra-high resolution detector, combined with digital multi-channel processing technology, making INNOVA handheld X-ray fluorescence spectrometer with ultra-high analytical accuracy.
4. In the measurement process, the instrument up and down on both sides of the green radiation indicator flashes, built-in technology to automatically sense the presence of samples in front of the instrument, to improve the safety and protection level of the ray.
5. Industrial resistance touch screen, compared with capacitive screen has more excellent backlight performance, in the field under the bright light is still clearly visible, while exempting the special environment of the field off the glove operation of the dangers.
6. The body of the non-slip wear-resistant streamlined design, very light, easy to carry and transport, the new high-speed digital multi-channel technology, a new brand-name library identification system, INNOVA algorithm, so that the instrument is not only faster, more accurate measurements, measurement consistency is stronger.
7. Intelligent battery with INNOVA bus, real-time monitoring of the battery, spare battery can directly view the remaining capacity of the battery.
8. The instrument does not work standby, pick up the recovery, reduce power consumption, extend the working time of the instrument.

Protection Safe Box

The device is protected by a protection safe box for waterproof, dustproof, and drop-proof. The box meets the requirement in ASTM 05276-1998 (2009) and is tested in the cargo container drop method.

Specification:

Weight	Device: 1.50kg, 1.65kg With Battery
Dimension	250mm x 75mm x 270mm (L*W*H)
Excitation source	High-power high-performance X-ray microtube
Target	5 available targets for ray tubes are: gold (Au), silver (Ag),tungsten (W), tantalum (Ta), palladium (Pd)--XRF8Gold
Voltage	35kV-50kV Voltage (Changeable)
Filter	A variety of selectable filters, automatically adjusted according to different tested objects
Detector	SI PIN detector for XRFA1629 SDD detector for XRFA1634
Detector refrigeration temperature	Peltier effect semiconductor refrigeration system
Standard film	316 external standard films/window protection cover (internal plus version standard films available)
Power supply	1 lithium battery (7.2v\6600mAh)
Processor	High-performance ARM pulse processor
Operating system	Windows CE6.0
Data transmission	Hotspot sharing via Bluetooth and Wifi
Standard mode	INNOVA Alloy Plus 6.0
Data processing	32G large-capacity data storage card: ≥80,000 sets of data and spectrograms
Display screen	High-resolution TFT industrial-grade colored high-definition touch screen, it is ergonomic, sturdy, dust-proof, and waterproof, clearly visible under any light conditions.
Outline design	The integrated designed body is sturdy, waterproof, dustproof, antifreeze, shockproof, and can be used normally in harsh environments.
Safe operation	"One key" detection, auto-lock, detection auto-stop functions. The X-raywill automatically be turned off if there is no sample in front of thedetection window for 2 seconds. 3/2 of the shell of the device is covered with a 6061 aluminum alloy frame design, with better X-ray blockage.
Detection report	Customized detection report available as per the customers' demands
Element analysis	Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hf, Ta, W, Pb, Bi, Zr, Nb, Mo, Cd, Sn, Sb, Re, In, Au, Ag, Pt, Pd, Ru, Rh, Ir,Totaling 29 elements.--XRFA1629/ XRF8Gold Mg, Al, Si, S ,P, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hf, Ta, W, Pb, Bi, Zr, Nb, Mo, Cd, Sn, Sb, Re, In, Au, Ag, Pt, Pd, Ru, Rh, Ir,Totaling 34 elements.--XRFA1634

XRFA16Mate/Pro

Application fields:

1. Nondestructive, rapid and accurate analysis of alloy elements and alloy grade identification on the site.
2. Metal identification /scrap metal sorting.
3. QA/QC management in metal production, processing, casting, etc.
4. Medicine and biological medicine.
5. Identification of positive materials, oil refining and petrochemical industry Thermal power plant, hydroelectric power station, nuclear power plant.
6. Accurate element analysis of raw material and PMl identification so as to meetproduction needs and ensure security of equipment and materials used in the process.

Features:

1. Small,light and easy to carry.
2. High-speed processing chip, advanced algorithm and high-responsive software, resulting in even faster analysis.
3. High-performance X-ray tube, ultra-high resolution detector combined with digital multi-channel processing technology, yielding super-high detection resolution.
4. Industrial resistive touch screen, superior to capacitor screen in back-light and clearer against sunlight in the field.At the same time, people don't need to take off gloves when they are opreating machine in some particular environment.
5. Intelligent battery management exerts a real-time monitoring of the residual capacity of battery and backup battery through MSBUS bus.
6. Automatic switch to standby mode when not used and recovery after the machine is picked up, which saves power and extends working time; XRF1688Mate/Pro will also give out alarm when ambient temperature or humidity exceeds the scope of application.
7. On XRF1688Mate/Pro, users can customize the reports by adding their company logos, addresses, test results, spectrum and others (such as product description, origin of products and batch number).
8. XRF1688Mate/Pro is built with double beam technology which can automatically sense whether there is a sample at the measurement window. This is also a safety and protection feature. The brightness of the display of XRF1688Mate/Pro is automatically regulated according to environment brightness.

9. XRF1688Mate/Pro can be configured and maintained in a remote way via Internet.
10. XRF1688Mate/Pro's new algorithm optimizes the spectral resolution, so lower detection limits can be achieved, which are comparable with even large-scale lab instruments.
11. XRF1688Mate/Pro Ultra-short optical™ path design can significantly improve light element excitation effects, without the fall/fill condition.
12. XRF1688Mate/Pro has a built-in environmental sensing system covering conditions such as temperature, dust humidity and others.

Specification:

Weight	1.6Kg（With Battery）
Dimension	254 x 79 x 280 mm （L x W x H）
Excitation source	Up to 50KV/200µA, tube pressure and tube flow can be adjusted freely, Target Ag (standard), Au(optional), W(optional), Rh(optional).
Detector	BOOST Si-PIN detector for XRFA16Mate .
	SDD detector for XRFA16Pro .
Range of detection	All elements between Mg and U.
Display system	Industrial resistive touch screen with screen size of 4.3".
	Professional operating system and software.
	Multiple languages including English and Chinese.
	And it automatically adjusts display brightness according to the environment brightness.
Data processing	32GB memory.
	USB, Bluetooth, wifi can connect the device to the Internet, repair and setup can be done remotely. Data can be exported as EXCEL or PDF. Users can customize the reports by adding their company logos, addresses, test results, spectrum and others (such as product description, origin and batch number).
Heat dissipation	Equipped with a dedicated T-shaped radiator to dissipate the heat；no need to wait for cooling of detector.
Safety	Built-in double beam technology can automatically sense whether there is a sample at the measurement window. This is also a safety and protection feature.
	Waterproof, dust-proof and shockproof suitcase.
	Safety Band.
Power supply system	Intelligent battery with MSBUS bus, real-time monitoring battery, spare battery can directly check the remaining capacity of the battery, the battery complies with air dangerous goods transport regulations. A single battery can work for about 8 hours..

Handheld gold analyzer

XRF8Gold

See more details in XRF8Gold

XRF8GoldMate

Application fields:

1. Nondestructive, rapid and accurate analysis of precious metals(such as gold, carat gold, platinum, silver, etc).
2. Precious metals grade identification.
3. Precious metals elements and contents analyze.
4. Mixed metal or other alloy metal.

Usage:

1. karat value, percentage content for gold:Wide karat value for gold display from 9K to 24K and %percentage content.
2. PT value, percentage content for platinum:Wide PT value for platinum display from PT600 to PT1000 and
3. S value, percentage content for silver:Wide S value for silver display from S600 to S1000 and %percentage content.
4. Percentage content for other alloy.

Elements To Be Analyzed And Test Modes:

Test Modes Of XRF8GoldMate And Elements Covered	
Analysis mode	Scope of elements in standard test mode can be extended if there is such a need.
XRF8GoldMate	can analyze Fe,Co,Ni,Cu,Zn,Re,Ru,Rh,Pd,Ag,Cd,In,Ir,Pt,Au,Pb

Features:

1. Small,light and easy to carry.
2. High-speed processing chip, advanced algorithm and high-responsive software, resulting in even faster analysis.
3. High-performance X-ray Tube, Ultra-high Resolution Detector combined with Digital Multi-channel Processing Technology,
4. Industrial resistive touch screen, superior to capacitor screen in back-light and clearer against sunlight in the field. At the same time, people don't need to take off gloves when they are opreating machine in some particular environment.
5. Intelligent battery management exerts a real-time monitoring of the residual capacity of battery and backup battery through MSBUS bus.
6. Automatic switch to standby mode when not used and recovery after the machine is picked up, which saves power and extends working time; moreover, XRF has a gravity sensing system which shuts down instrument automatically when it accidentally fallsdown, another safety consideration; XRF will also give out alarm when ambient temperature or humidity exceeds the scope of application.
7. On XRF, users can customize the reports by adding their company logos, addresses, test results, spectrum and others (such as product description, origin of products and batch number).
8. XRF is built with double beam technology which can automatically sense whether there is a sample at the measurement window. This is also a safety and protection feature. The brightness of the display of XRF is automatically regulated according to environment brightness.
9. XRF can be configured and maintained in a remote way via Internet.
10. XRF's new algorithm optimizes the spectral resolution, so lower detection limits can be achieved, which are comparable with even large-scale lab instruments.
11. XRF Ultra-short optical™ path design can significantly improve light element excitation effects, without the fall/ fill condition.
12. XRF has a built-in environmental sensing system covering conditions such as temperature, dust humidity and others.

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Heat dissipation	Equipped with a dedicated T-shaped radiator to dissipate the heat；no need to wait for cooling of detector.
Safety	Built-in double beam technology can automatically sense whether there is a sample at the measurement window. This is also a safety and protection feature.
	Waterproof, dust-proof and shockproof suitcase.
	Safety Band.
Power supply system	Intelligent battery with MSBUS bus, real-time monitoring battery, spare battery can directly check the remaining capacity of the battery, the battery complies with air dangerous goods transport regulations. A single battery can work for about 8 hours..

Handheld Mineral analyzer

XRFM629/XRFM634

INNOVA handheld XRFM6 analyzer is suitable for field multi-element analysis of ores. lt can be used for quick and comprehensive ore study during field analysis. It has low sample requirements, but provides accurate test results. It is capable of accurately analyzing high concentration samples, thus avoiding verification tests in the laboratory. ln light and compact volume, the analyzer gives a full play in simpler andeasier prospecting, exploration, and multi-element detection and analysis of various geological samples.

Features:

1. **X-ray tube light source, multi-beam filtration technology:** HP's Personal Digital Assistant (HP Palmtop) for the excellent detection range, speed and accuracy as well as upgrade potential.
2. **Advanced and versatile X-ray data modes:** Using the Compton normalization method, "internal standards" can be used for quantitative analysis without special correction.
3. **Basic parameter analysis:** The semi-quantitative analysis mode is suitable for testing samples composed of various elements and with uneven structural density.
4. **Experimental correction method:** Use the "calibration curve" for correction to generate a new calibration curve.
5. **Use the high-level spectrum recognition software:** The spectrum can be displayed on the screen.
6. **Conduct spectrum comparison and analysis based on internal standards.**