Skyray Instruments

New Generation
Explorer Handheld XRF

EXPLORER 7000 Mineral Ore Analyzer

Rapid | Accurate | Non-destructive

EXPLORER 7000 Mineral Ore XRF

Based on ten-year research and development experience in Handheld X-Ray Fluorescense, Skyray Instruments 5th generation EXPLORER handheld XRF adopts photoelectron, microelectronics and semiconductor technology to deliver results in less then 2 seconds. EXPLORER 5000 handheld mineral analyzer is the first to use large high-resolution LCD and the new digital signal processor. The minimum detection limits make its performance equal to Desktop XRF. Small and lightweight , EXPLORER can analyze any sample large or small, in the lab or in the field.

» the lab is in your hands with instant on-site results

built-in GPS records test location
with altitute, latitude and longitude

EXPLORER 7000 Handheld Ore Analyzer

Make accurate and non-destructive analysis anywhere on a variety of minerals and raw ore with the new EXPLORER 7000. Reliable and Effortless Geological mine prospecting while obtaining results as fast as two seconds. Monitor the mines surroundings for heavy metals in the soil to evaluate mine environment and potensial.

- quickly and accurately identify the location of ore deposits
- analyze for light elements without any helium

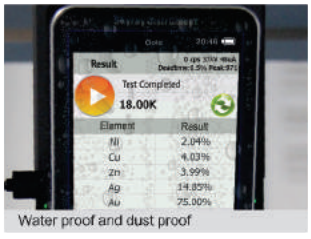
multiple calibration modes for different mining environments

EXPLORER 7000 Handheld Mineral Ore Analyzer

Advantages

Easy Operation


Exclusive instrument bumper



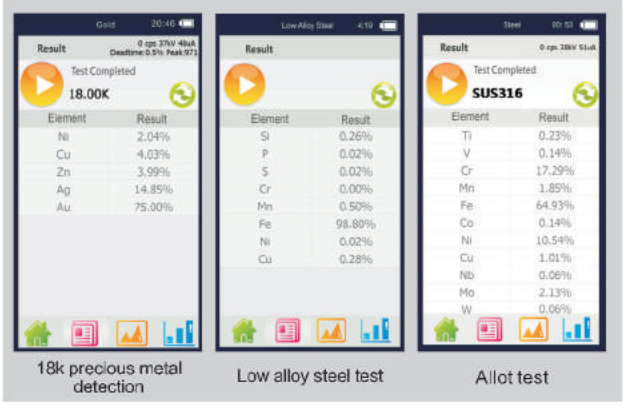
Water proof and dust proof


360° rotatable high-definition screen


Portable test bench

- Lightweight and ergonomic design is more convenient to use in the field, heavy duty travel case ensures safe transportation of the instrument
- 5 inch high-definition screen with 360 degree rotation displays results clearly at low visibility conditions
- Waterproof and dustproof design, Explorer XRF can be used in harsh environments.
- Avoid sample preparation and directly measure raw materials in the field or in the lab with Portable table stand.

Best Performance



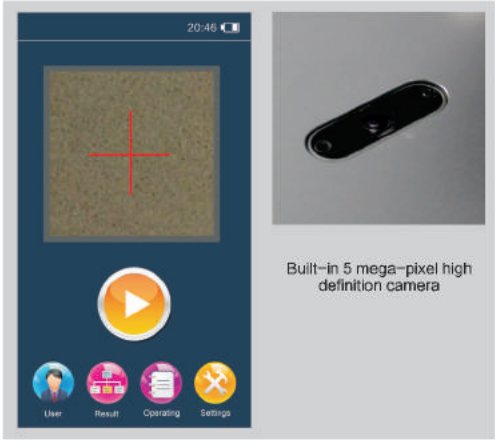
18k precious metal detection | Low alloy steel test | Allot test

- Rapid nondestructive detection and quick measurement with results within two seconds. With performance similar to most benchtop XRF Models, Explorer XRF sets a new standard for Handheld XRF Analyzers
- Fast analysis of Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, Zr, Nb, Mo, Ru, Rh, Pd, Ag, In, Sn, Sb, Hf, Ta, W, Re, Pt, Au, Pb, Bi, Mg, Al, Si, P, S. Other elements can be easily added as per customers application
- Detect the light elements without helium gas

Extended Battery Life

- Rechargeble 9000mAh lithium battery with up to 12 hours work time on a single charge
- Optional 27000mAh lithium battery with up to 3 days work time on a single charge

Higher Configuration



- Benchtop XRF acuracy is possible thanks to four core components: Miniature X-ray tube, SDD or optional Fast-SDD detector, digital signal processor and multichannel intelligent analysis module
- Skyray patented digital multi-channel technology features up to 500K CPS(spectral counts per second)
- Automatic collimators and filters make Explorer able to analyze different applications and ensure Explorer can meet many testing requirements
- Users can observe samples position at any time thanks to built-in 5 mega-pixels HD camera

User Protection

- Multi-color warning system lets the user know the status of the instrument: Green light for power on/stand by, red flushing LED while testing, yellow flushing in case of malfunction
- Multiple safety protection features:
  a: X-Ray tube shuts off automatically without sample
  b: Thick Steel Structure with heavy Lead coating prevents any X-Ray leaking
  c: Rubber Shield prevents X-Ray scattering
- Manual Security Interlock blocks software control of the instrument

Intelligent Software

- EXPLORER XRF analyzer comes with our newest software which simplifies user training and operation. Unlike other Handheld XRF Spectrometers , Explorers easy-to-use interface allows anyone to operate the instrument
- The software features two user modes:
  Operator mode-simplifies operation with one step testing for quick day-to-day testing by inexperienced staff.
  Expert mode – for experienced users looking for in-depth analysis and advanced features

Accessories

Heavy Duty Travelling Case

2700mAh Battery

Portable Bluetooth Printer

Car Charger

Optional Table Stand

Technical Specifications

Analytical Method	Energy dispersive X ray fluorescence analytical Method
Elemental Range	Atomic number from 12 to 92 [elements from magnesium(Mg) to uranium (U)] can be measured
Simultaneous elements	Simultaneous analysis 40 elements
Microcomputer	CPU: 1G ; system memory: 1G ; maximum support 32G
Content range	ppm ~ 99.99%
Detection time	1 ~ 60 seconds
PDA	GPS, WIFI, Bluetooth
Power supply	Rechargeable lithium battery, standard 9000mAh, optional 27000mAh 110V ~ 220V universal adapter for recharging
Detection range	Solid, liquid, powder
Detector	SDD detector or Fast-SDD detector (optional)
Detector resolution	128eV
Excitation source	50KV/200uA- silver target end window integrated miniature X ray tube and high voltage power supply
Collimator and filter	Collimator diameters are 4.0mm and 2.0mm, 6 filters with automatic switching function
Video system	500W pixel high resolution camera
Display screen	5 inch transflective LCD touch screen
Detection limit	The minimum detection limits ~ 5 ppm
Convenience of application	Intelligent curve matching
Data transmission	Digital multi-channel technology, SPI data transmission, waterproof mini USB
Operating ambient humidity	≤90%
Operating environmental temperature	-20℃ ~ +50℃
Dimensions	244mm (Length) x 90mm (Width) x 330mm (Height)
Instrument weight	1.7Kg