

Handheld XRF Mineral Analyzer

K-600、K-7000

Features

- Smaller, quicker, more accurate and more durable. Can be applied where there are extremely harsh analytical requirements in harsh environments.
- Signal processing, providing accurate and repeatable results and thus allowing users to achieve higher productivity and get a quick return on investment.
- The mature X-ray tube analysis system has passed the field test, is free of radioactive isotope. It 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.



Applications

The handheld ore analyzer is used for quick analysis and determination of nonferrous elements in mining, geology, soil environment, sediment **and sediment**.

It is widely applied in detection and analysis of ores, as well as slag refining analysis and archaeological research. It is applicable to all natural ores from phosphorus to uranium, slag, rock, mud and slurry, including gold ore, silver ore, copper ore, iron ore, tin ore, zinc ore, nickel ore, molybdenum ore, iridium ore, arsenic ore, lead ore, titanium ore, antimony ore, manganese ore, vanadium ore, iodine ore, sulfur ore, potassium ore, phosphate ore, uranium ore, etc. Test samples include solid, liquid, dust, powder, solid, fragment, filtrate, film and other tangible objects.



With the digital multi-channel technology, K-600 brings lower detection limit, higher stability, better applicability and excellent performance comparable to desktop computers; In light and compact volume, the analyzer gives a full play in simpler and easier prospecting, exploration, and multi-element detection and analysis of various geological samples.

K-600 handheld ore analyzer can be used for field analysis of a variety of ores. The mature X-ray tube analysis system, which has passed the field test, is free of radioactive isotope. It 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.

Application strengths

Test elements: Detectable elements: more than 30 elements for standard configuration or more professional testing elements required by customers:

Expertise: special version of ore analysis software, using smart one-key testing.

1. Custom-tailored working mode

A variety of mineral sample modes for option and limited number modes for free addition along with customized working modes.



2. Optimized value of the mine

The high-definition camera can make more visualized observations over the detected ore veins or ore points, give accurate management and control of the mining process, and detect the ore grade at any time.



3. Accurate and rapid analysis of raw ores, concentrates and tailings in the beneficiation to provide a solid basis for the valuation of ore grade, mineral trade, processing and recovery.

4. Environmental monitoring

To monitor and detect the heavy metals in the soil around the mine, evaluate the restoration of the mine environment, and monitor the environment around the mine to the utmost extent.

Specifications

Main configuration	1. One ore analyzer host; 2. One standard sample; 3. Two original rechargeable lithium batteries; 4. Charger and power cord; 5. One USB flash disk (32G); 6. Five reinforced polypropylene films; One standard portable moisture-proof and shockproof box.
Standard mode	Ore mode
Self-diagnosis function	This product is able to automatically diagnose the hardware, software, network, and battery, and generate logs for quick troubleshooting.
Operating system	Secure Windows CE 6.0 operating system
Test method	Basic parameter method, supporting the empirical coefficient method to correct the point contact or trigger control of testing, without long-time triggering in the whole test process. Or, press and hold the trigger to test samples as requested by customers.
Filter	8 filters, for automatically switching based on test elements;
Excitation source	High-power micro straight X-ray tube, W target material, 4W high-power X-ray tube, tube voltage 50KV, current up to 100 μ A; higher X-ray count rate, ultra-low electronic noise. No external standard sample is required in each test. Energy is automatically calibrated and checked during testing.
Detector	Moxtek Si-pin (6mm ²) Amptek Si-pin (25mm ²) KETEK SDD detector (K-7000)
Test elements	The product can be used to analyze metal elements in ore , such as Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Hf, Ta, W, Hg, Se, Au, Br, Pb, Bi, Zr, Nb, Mo, Ag, Cd, Sn, Sb, Re, Ir, Pt, Hg, Ru, Rh, Pd, etc. (K-7000 with SDD can test 5 more elements including Mg, Al, Si, P, S)