DRAWELL
Artist of Science

Handheld XRF Mineral Analyzer DW-EX7000

DW-EX7000 adopts newer digital multi-channel technology, lower detection limits, better stability, and wider applied range. It has comparable performance with bench top. Its small and convertible size makes the works of geological ore prospecting, multi elemental detection exploration analysis, refining slag more simply and easier.

Features

- **Personalized customization work mode**

  Selections of various Ore -sample—models and free to add unlimited-number - models, the work model can be customized by customer's demand.

- **The accurate definition of mining boundary**

  The built-in GPS function helps to receive signals from satellite anytime at anywhere, and can record the measurements of altitude, latitude and longitude during anytime of testing period, which determine the geographic location information of sampling points, and save as test reports automatically.

  It can draw the ore distribution pictures by obtained coordinate analytical data, screen large area range rapidly and grasp the lode mine accurately, then define the mining boundary, in order to prior to find rich mining area to improve the production efficiency.

  A built in Bluetooth function, which can recognize the key mining areas on site when the instrument collocates with a Bluetooth printer.

- **Environmental monitoring**

  To monitor and detect the heavy metals in the soil around the mines, to evaluate mine repair environments, in order to maximize the monitoring the surrounding environment of good mines

- **Discover the mines' full- value**

  HD camera function, observes the detected vein and point position more intuitive, manages and controls the process of mining exploitation better, detects the grade of ore at any time.

  During ore dressing, the quick and accurate analysis of raw ore, concentrate and tailings , provides the value judgment basis for the determination of ore grade, mineral trade, processing and recycling.

Features

- **Easier Operating**

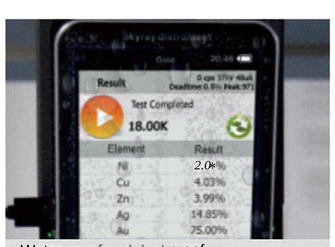
  Light & small, ergonomic handle design, equipped with a special instrument case, easier to grasp and more convenient to use in the field.

  5 inch high-definition screen with 360 degree rotation, multiple points operating, can display clearly at any lights.

  Integrated design of Seal type, with waterproof and dustproof function, can be used continuously in harsh environments.

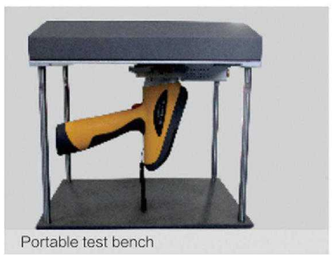
  Directly measure and analyse the surface of samples and goods. Can do a quick measurement by its handheld benefit and accurately test samples for a long time by its test block.

Exclusive instrument bumper



Water proof and dust proof

360° rotatable high-definition screen

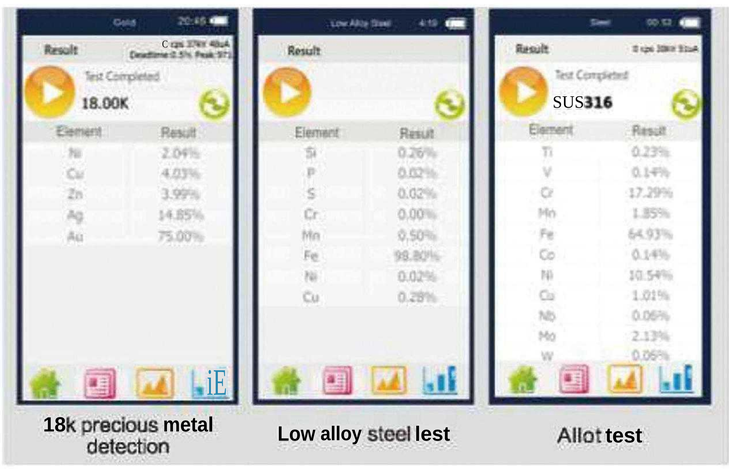

Portable test bench

- **Better Performance**

  Rapid nondestructive detection and quick measurement by aiming, report results within one second. Comparable to the bench-top XRF, fast and accurate.

  Simultaneous detection 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, and can add more elements for customer’ s needs.

  Instrument can run without helium by the ultra near optical path design, and can detect the light elements from the beginning of Mg that fully meets the needs of specific users.



18k precious metal detection　　Low alloy steel lest　　Allot test

◆ **Strong Battery**

Large lithium battery at 27000mAh could be as a selected configuration; the battery duration working time is up to three days, and it equipped with communicator and car charger to ensure power supply.

A Built-in memory battery can continue replace the battery power.

◆ **More intelligent software**

DW-EX7000 ore analyzer is equipped with professional application software, specifically for ore industry; the feature is intelligent, high sensitivity, fast testing time, and easy operation.

Brand new knowledge ware is one key operation with dual mode design

a.User mode uses for recognizing categories of sample by one key operation;

b.Expert mode uses for increasing the elements and increasing the specific in-depth analysis of the operation curve.

Internal intensity correction method can correct deviation caused by uneven sample of different geometries, densities and structures.

◆ **Higher Configuration**

Four core parts which are Miniature X-ray tube, Fast-SDD detector (the world's best detector), digital signal processor and micro multichannel intelligent analysis module, can achieve the accuracy as good as bench- top's.

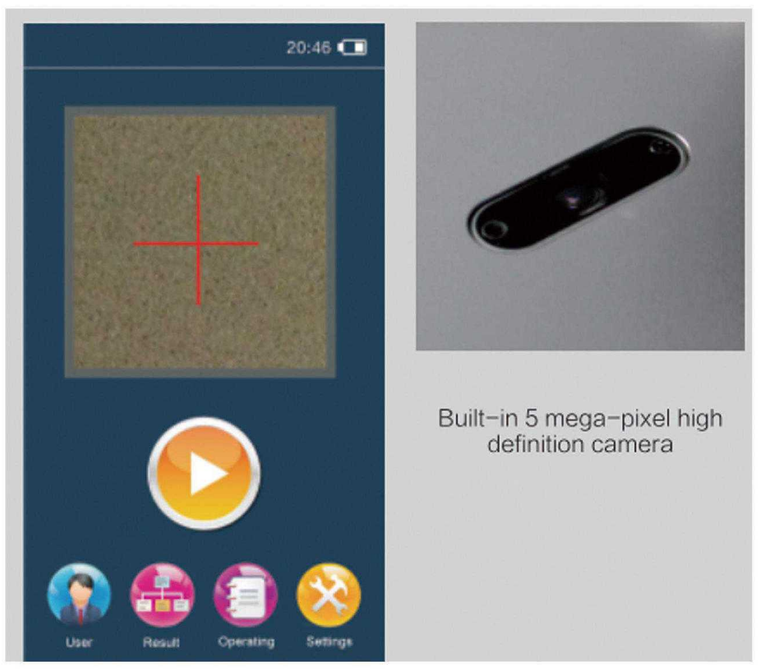
Large data storage is by ultra-high frequency memory and mass storage space.

Our newindependent research and development Digital multi

channel technology ensure effectivemining spectral counts per second is up to 500K cps.

Collimation filter system, its combination can reach to the limit of 12 groups, to meet the testing requirements of different customers.

A built-in 500W pixels high definition camera, can observe sample's testing position at any time that makes the measurement more accurate.



◆ **Safer Protection**

Intelligent-tricolor-early-warning-system:

360 degrees without dead angle display by LED three-color lamp design. Instrument status shown in different colors: Green light means power on; Red flushing means testing; Yellow flushing means fault.

Triple safety protection function:

a: Automatic induction, instrument does not work without sample, no leakage radiation.

b: Thicken - preventing - testing - wall can effectively prevent the scattering.

c: Safety - protection - cover can prevent the surrounding light matrix scattering.

Security-linkage-locking device protects your security; it can guard the final checkpoint if the software is unable to control the instrument turn off.

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Parameters

Analytical Method	Energy dispersive X ray fluorescence analytical Method
Elements Measuring Range	Atomic number from 12 to 92 [elements from magnesium (Mg) to uranium (U)] can be measured
Simultaneous detector elements	Simultaneous analyze 40 elements
Microcomputer system	Customized system; CPU: 1G ; System memory: 1G ; extended stored maximum support 32G ; standard 4G for mass storage data
The content range	ppm ~ 99.99%
The detection time	1 ～60 seconds (one second report results)
A built-in system	GPS, WIFI, Bluetooth
Power Supply	Rechargeable lithium battery, standard is 9000mAh, sustainable work up to 12 hours; optional is 27000mAh superbattery with wide voltage 110V ~ 220V universal adapter for recharging power supply
Detection Objective	Solid, liquid, powder
Detector	SDD detector or Fast-SDD detector (optional)
Detector resolution	Minimum can reach 128eV
The 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 kinds of filters with automatic switching functions
Video system	500W pixel high resolution camera
Display screen	Brand new 5 inch semi-reflecting and semi-transmitting LCD touch screen, its resolution is 1080*720.
Detection limit	The minimum detection limits at 1 ~ 500 ppm
Safety	Multiple safety protection, no tests, no radiation, radiation levels at work are far below the international safety standards, and has no sample telemetry, automatic -turn -off X-Ray tube function. Standard radiation shields, thickened instrument's alloy testing wally test instrument
Specialty	Special edition of ore’s analytical software, and intellectualized one- key- testing.
Convenience of application	No need to select curves, intellectualized one- key-selecting will select the best matching curve
Data transmission	Digital multi-channel technology, SPI data transmission, quick analysis, the high count rate; waterproof mini USB, and can be connected with a desktop computer
Operating ambient humidity	≤90%
Operating environmental temperature	-20°C~+50°C
Instrument dimension	244mm (Length) x 90mm (Width) x330mm (Height)
Instrument weight	1.7Kg
Intelligent warning signalslndicator system	Green light means power on, red flushing means testing and yellow flushing means the errors
Accessories	Three-military-protection-box is compression, waterproof and shock absorption.
	Universal charger and car charger, 4G SD memory card and card reader
	Two lithium battery and charger, PDA accessories, radiation shield.
Optional accessories	the large battery, seat type test support, Bluetooth printer, mill, manual pressure machine, and different meshes of sieves

Exclusive accessories