

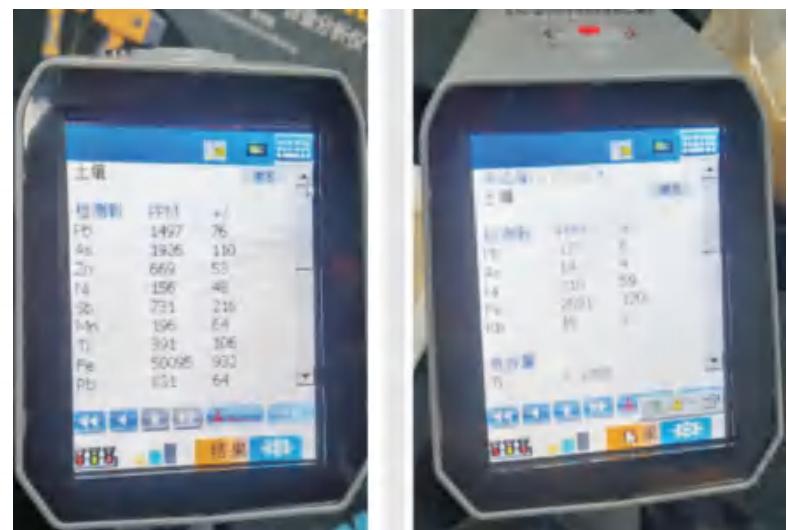
Handheld XRF Soil Heavy Metal Analyzer

K-500、K-5000

Features

- Smaller, faster, more accurate, and more portable.
- Integrates optoelectronics, microelectronics, semiconductors and computer technology as a new generation of handheld XRF with independent intellectual property rights.
- K-500 uses a new large-screen high-resolution LCD and a new digital multi-channel data processor for handheld analysis of heavy metal elements in the soil.
- K-500 gives in-situ testing of pollutants and soil restoration analysis, i.e. making effective testing of heavy metal elements, including mercury, cadmium, lead, arsenic, copper, zinc, nickel, cobalt, vanadium, chromium, manganese and others (K-5000 can test 5 more elements including Al,Mg,Si,S,P),or other elements as requested by customers.

With excellent performance comparable to PCs, it is good at testing heavy metals with low content in soil.



Applications

1. Soil pollution survey and environmental assessment
2. Emergency treatment of soil pollution • Soil remediation...



Application strengths

Expertise: Heavy metal analysis software to detect heavy metal elements, e.g. mercury, cadmium, lead, arsenic, copper, zinc, nickel, cobalt, vanadium, chromium, and manganese in contaminated soil or more elements required by customers through intelligent one-key testing and intelligent judgment.

* Soil heavy metal survey

With the built-in GPS, you can search for satellite signals in the field at any time, determine the geographic location of sampling points, fast survey a large scale of soil geological contaminated area, develop a pollution map, and monitor the pollution in each area in real time. You also can conduct environmental assessments on heavy metal pollution to various agricultural lands, residential lands, commercial lands, and industrial lands.

* Emergency treatment of soil with heavy metal pollution

It is generally used for emergency treatment after pollution, and is able to quickly track pollution abnormalities on site, effectively identify the "stained" areas and the boundaries of polluted areas, and conduct real-time surveys.

*** Assistance in soil remediation in contaminated areas**

It is used to classify the contaminated areas, delineate the key soil contaminated areas, optimize the priority according to the divided areas, improve the screening efficiency, and monitor the soil remediation in the contaminated areas in real time.



Specifications

Weight	Host: 1.50kg; with battery: 1.65kg
Dimension	250mmx75mmx270mm (length * width * height)
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)
Voltage	35KV-50KV voltage (changeable)
Filter	A variety of selectable filters, automatically adjusted according to different tested objects
Detector	K-500:High-resolution Si-PIN detector ; K-5000: optional SDD detector
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	2 lithium batteries (7.2v 6600mAh)
Processor	High-performance ARM pulse processor
Operating system	Windows CE6.0
Data transmission	USB flash disc with two-way interface (32G)
Standard mode	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-ray will automatically be turned off if there is no sample in front of the detection 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	Mercury, cadmium, lead, arsenic, copper, zinc, nickel, Cobalt, vanadium, chromium, manganese and other elements can be detected at the same time. In addition, other elements can be detected according to customers' requirements.

Safe Protection Box

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

