

HST-DF2000A Hand-held XRF Spectrometer



(Picture just for reference)

Introduction

HST-DF2000A handheld XRF spectrometer is widely used in quality control, alloy identification, exploration, ore mining, mineral grade control and other fields. It has the advantages of small size, light weight, long standby time, non-destructive testing, fast analysis speed, high accuracy, good stability, wide application range, and high cost performance. It has low requirements on sample form, solid, powder, and liquid samples can be directly detected, and the content of multiple elements can be determined at one time, which is convenient and quick.

Main application examples: recycling of scrap metal, identification of grades of alloy materials, detection of precious metals (such as identification and analysis of stainless steel, medium and low alloy steel, copper alloy, titanium alloy, aluminum alloy, tantalum alloy, etc.), prospecting detection, grade control, environmental analysis Field (can detect more than 40 elements in ore such as: P, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Zr, etc.), raw ore, concentrate, Tailings, slag and other mineral analysis fields, providing reliable judgment value for the analysis of various materials.

Testing Range

Theoretically, if HST-DF2000A is equipped with SDD detector, it can detect all elements between Mg(12)-U(92).

The range of element content is wide, and it can be detected from ppm content to 99.9. The specific detection limit depends on the analysis material.

Configuration and parameters

Light source part			
X-ray tube brand	Amptek	X-ray tube input	9-11VDC, 0.5A
X-ray tube target	Rhodium target	X-ray tube output	50KV, 200μA
X-ray tube power	4W	Collimator Material	copper, silver
X-ray tube stability	0.2% 8h		
Detector			
detector type		SDD	
Detector brand		Amptek	
typical resolution		123ev	
output count rate		100Kcps	
peak-to-background ratio		>8200	

Other parameters

(1) Display system: 3.5-inch high-definition display with touch screen, support spectrum display and result display mode

(2) A8 main control board, high performance, low power consumption

(3) Data processing system: 16-bit A/D converter, Atom Z510 1.1GHz processor, 1G memory, 8G industrial grade (PQI) CF card

- (4) Operating software: Linux operating system, with virus immune function
- (5) Safety protection: the light pipe has automatic opening and closing functions to protect the safety of the operator to the greatest extent
- (6) Power supply mode: support direct charge power supply and battery pack power supply, the battery pack uses a polymer lithium-ion battery, which can be used continuously for 6 hours
- (7) Optional function: 3 million pixel high-definition camera, convenient to record samples at any time
- (8) Specifications: length*width*height 260mm*95mm*280mm; weight about 1.8kg
- (9) Working environment: temperature range -10℃~40℃; relative humidity: ≤80%

HST-DF2000A Matrix analysis

Analysis procedures: iron-based, copper-based, cobalt-based, nickel-based, titanium-based, zinc-based, aluminum-based, etc.

Configuration

- (1) One HST-DF2000A handheld fluorescence spectrometer, equipped with a portable instrument case
- (2) One Li-ion battery pack
- (3) One U disk
- (4) One USB transfer cable
- (5) One seat charger
- (6) One operating manual
- (7) One piece of standard sample