

## Hand-held XRF Alloy Analyzer X-Ray Fluorescence Spectroscop



### PRODUCT DESCRIPTION

The portable alloy analyzer uses today's most advanced XRF technology to analyze low-alloy, stainless steel, nickel, titanium, cobalt, copper alloys, and other alloys and jewelry; Nonferrous metal, rare metal detection and analysis.

#### **DESIGN FEATURES**

- 1. The light weight, small size and pointed mouth are designed in accordance with human engineering
- 2. Excellent performance, on-site nondestructive testing, automatic compensation for irregular or small sample tests
- 3. One-key button design, simple operation
- 4. 1/3 body aluminum alloy structure, good heat dissipation effect, stable work
- 5. 10 seconds fast startup is better than similar instruments; the test is fast and can accurately analyze the metals involved in the RERA and the preferred control contaminating metals in seconds
- 6. Solid structure, sealed large screen color TFT display, no LCD plateau reaction, moisture and dust proof
- 7. Stable and advanced operating system, advanced I-Smart software, guick response
- 8. Massive storage and long standby time
- 9. Flexible and universal communication functions

#### TECHNICAL PARAMETERS

[Weight] Basic weight: 1.4kg, 1.5kg after loading the battery

[Dimension (height x width x length)] 300mm x 90mm x 220mm

[Excitation source] Five kinds of target materials can be selected: gold (Au), silver (Ag), tungsten (W), tantalum (Ta), palladium (Pb).

[Voltage, current and power] High-power micro X-ray tube 50KV, 100MA, 5W

[Filter] Six optional filters are automatically adjusted according to different physical objects

[Detector] High-performance high-resolution SI-PIN X-ray detector

[Refrigeration temperature of detector] Peltier effect semiconductor refrigeration, refrigeration temperature -35 [Standard sheet] External 316 standard sheet;

—Cualquier duda o aclaración favor de llamarnos, estamos para SERVIRLE







## Hand-held XRF Alloy Analyzer X-Ray Fluorescence Spectroscop

[Resolution] & LT;180

[Power supply] 8 hours /2 blocks of lithium power supply and AC power supply

[Processor] Intel 400MHz Strong-arm processor

[Operating system] Mobile Windows CE system

[Software Standard Mode] Alloy

[Data processing] 8G large-capacity data memory card: ≥40, 000 groups of data and spectrograms, which can be viewed at any time through the instrument's touch screen computer or exported to personal PC.

[Data analysis] Multiple analysis modes, including basic parameters, Compton normalization, empirical calibration mode, spectral color matching

[Data display] focuses on PPM with percentage (%) display, spectral or peak intensity (counting rate) or user-defined units [Data transmission] RS232 serial cable, Bluetooth, TXT file, EXCEL grid output.

[Display screen] Color, high resolution 3.5-inch TFT industrial-grade touch screen, large icon graphical interface, clearly visible under any light conditions;

[Appearance design] Integrated fuselage design, solid, waterproof, dustproof, anti-freeze, effective anti-vibration, suitable for outdoor, wet or low temperature environment.

[Safety operation] One-touch "trigger", the software automatically timing lock the trigger or automatically stop the test protection function; Determine that there is no sample in the test window and the X - ray will be automatically turned off within 2 seconds

[Analysis elements] Cr, Mn, Fe, Ni, Cu, Zn, Hg, As, Pb, Se, Rb, Sr, Zr, Co, V, Mo, Ag, Cd, Sn, Sb, Ba, K, Ca, Ti and Th have no less than 25 elements;

[Test environmental conditions] Temperature -20 ~ +50 , humidity < 80%RH.

[Boot time] The device will not be powered on for more than 15 seconds before entering the test interface

[Calibration] The instrument has been calibrated before leaving the factory; however, the instrument still has the function of establishing a targeted correction curve, which is suitable for the precise test of specific samples

[Result Report] Equipped with standard USB interface, Bluetooth wireless transmission and built-in WiFi, the instrument can directly transmit data to computers or network storage devices, and directly download measurement data and X-ray spectra in customized report format and EXCEL format. User permissions can be set, custom reports can be generated and analysis reports can be printed.

### TECHNICAL PARAMETERS AND SPECIFICATIONS

Handheld elements Analyzer Technical Parameter		
1	Weight	1.4Kg
2	Measurement	300mm x 90mm x 220mm
3	<b>Environmental Temperature</b>	-20°C∼+ 50°C
4	Display	Rotatable VGA colorful Touch screen Monitor with high resolution and English operation interface.
5	Configuration Design	Ergonomically designed configuration, Integrated Design of processor and instrument, water-proof and dust-proof
6	Excitation Source	X-Ray Tube, Au (Ag、W、Ta、Pb) target, Maximum Voltage 50kv, Maximum Current 40uA.
7	Detector	High-Performance, High-Sensitivity, High-Resolution Si - Pin X-ray detector







# Hand-held XRF Alloy Analyzer X-Ray Fluorescence Spectroscop

8	Analysis Range	Plastic Mode (optional): Cd, Pb, Hg, Cr, Br, Cl, Ba, Sb, Sn, Bi, Pb, Br, Se, As, Hg, Au, Zn, Cu, Ni, Fe, Cr, V, Ti.  Electronic metal mode: Ba, Sb, Sn, In, Cd, Pd, Ag, Mo, Nb, Zr, Bi, Pb, Hg, Br,
		Se, Au, W, Pt, Zn, Cu, Ta, Hf, Ni, Co, Fe, Mn, Cr, V, Ti
9	Detection Algorithm	Fundamental Parameter (FP) method: The analysis ranges for all elements vary from Limit of Detection to 100%.  1. Easy to use. 2. Avoidance of wrong judgment. 3. Wide adaptability for all kinds of samples.
10	Operation System	Mobile Windows CE system
11	Filters	Six Filters are installed in the instrument which can be selected automatically according to the testing modes.
12	Cooling Mode	Peltier Semiconductor Cooling the refrigeration temperature - 35
13	Electric Source	Two rechargeable Lithium Batteries, can be used continuously for 6-8 hours. Power supply from rechargeable Lithium battery or alternating current adapter 110V-240V/ AC,50/60Hz. Battery charger 110V-240V/ AC,50/60Hz.
14	System Electronic Component	Intel 400MHz Strong Arm
15	Operation	Controlled by Analysis trigger.     Customer can set analysis time freely.
16	Instrument Extending	Customer can set up testing curve by themselves
17	Testing and Display	Qualitative and Quantitative analysis of the components and Result Display.  Spectrogram Display.  Automatic display for double sigma error of the Testing Data.
18	Data Storage	8 G high-capacity data storage card, Storage up to more than 40000 Testing Data and Spectrogram. May at any time through the instrument touch-screen computer or export to personal PC.
19	Date Transfer Testing Report	Bluetooth wireless, USD, and RS-232 serial communications interfaces are included in every analyzer. Advanced Data Transfer PC software lets you set user permissions, print certificates of analysis to document results, or operate the analyzer right from your PC.
20	The Convenience On-site	No requirement for the shape of materials. Space measurement is available for the tested surface.
21	Safety	A touch of "trigger" software automatic timing trigger lock or automatic stop testing protective function; Sample window without judgment test automatically closed X-ray after 2 seconds
22	Accessories	Instrument, Two Rechargeable Batteries, Battery Charger, Data Download Cable, Wireless Bluetooth, User's Guide in English Version, Two Window Prolenes, Application Software, Instrument Case, Lock Case, Standard Samples.







## Hand-held XRF Alloy Analyzer X-Ray Fluorescence Spectroscop

#### **AFTER SERVICET**

### 1. Quality warranty:

CMS commits that HXRF-120DP handheld spectrometer is fabricated with fine grade materials and top notch workmanship. It is brand new, never used, and in full compliance with the quality provision of this Contract. HXRF-120DP warranty is 12 months starting from the date of final acceptance of the goods/commissioning of machine.

#### 2. Technical training:

Operating Manual of HXRF-120DP Handheld X-Ray fluorescence spetroscopy Maintenance Manual of HXRF-120DP Handheld X-Ray fluorescence spetroscopy

#### 3. After-sale service

Over the years, CMS has sold XRF instruments to many global users. In order to provide better technical support and service, it shall be committed to.

- 1. services including
- a) CMS shall provide after-sales service to all products it has sold worldwide.
- b) CMS shall provide a one-year warranty for the spectrometer it has sold worldwide.
- c) CMS shall provide one-year warranty for X-ray Tube (X-ray tube) and Detector (Detector).
- d) CMS shall provide one-year renewal warranty for the replaced components in case there is any replacement of them during repair of machine.
- 2. The following physical damage is not covered by warranty.
- a) instrument is impacted by great force that the internal impact sensor changes from white to red;
- b) Detector is broken
- c) PDA is broken;
- d) Instrument body is broken;
- e) Loss of accessories
- f) Loss of components
- g) Water coming into instrument



