

EDXRF ANALYZER





FEATURES

- EDXRF is an X-ray fluorescence spectrometer (XRF) with fast analysis, accurate results and high cost performance. It can analyze the harmful substances in the electronic and electrical equipment: (Pb), (Hg), (Cd), (Cr), (PBB), (PBDE), (Br) + (Cl), eight heavy metals, halogens, and packaging instructions.
- Safety lock: compared with the previous generation of products, the safety lock function is added (Tianrui Instrument 1800B) to prevent unsafe touch or open the cover of radiation safety harm.
- Integrated design: the more reliable industrial computer machine integrated into the instrument, the industrial computer life is longer, export and operation is more convenient, without various external connections.
- Modular design: independent module design of core accessories, shielding and protection between each other, improve the electromagnetic interference performance of the whole machine, improve the detection limit of the instrument, and reduce the failure rate of the instrument.
- Wide voltage design: the whole machine is adapted to AC110-250V wide voltage design, to adapt to the factory
 unified distribution of different voltages, especially to adapt to the factory voltage in some areas.
- Various configurations: the collimator and filter adopt a combination of 5-9 sets of different specifications to meet the test requirements of various specifications, shapes and materials for sample detection.
- Detector protection: The detector window adopts a collimator closer to the crystal area, which can not only meet
 the test requirements, but also provide the protection of the detector beryllium window, reducing the unexpected
 cost of the use process.
- Test sound: The USB speaker module is integrated, and the sound is provided after the test is completed. The liberation tester can complete other work in the long waiting time, and hear the sound sound, change the sample to improve the efficiency.
- HD camera: 800 pixel camera collocation, convenient test sample positioning and movement.

TECHNICAL PARAMETERS

MODEL	EDX-R206	
Analysis range	S-U	
Surveillance project	1. ROHS command heavy metal elements: Pb, Cd, Hg, Br, Cr 2. Halogen instruction: Cl, Br 3. 8 Major heavy metal regulations: Pb, Cd, Hg, As, Cr, Sb, Se, Ba 4. The composition analysis of copper alloy, ferroalloy, tin alloy, etc 5. The thickness detection of the plating layer: Sn / Cu, Au / Ni / Cu, Zn / Fe, Cr / Fe, Ni / CuZn 6. Additional Ni, Sn and other elements of the Samsung system	
Sample type	Solid, liquid, and powder	
X-ray tube life	For 20,000 hours	
Prober	Electrocooled Si-PIN detector at 145 ± 5 eV	
Testing time	60s-300s (software auto-adjustment)	
Collimation system	Spot φ 0.3mm, 1mm, 3mm, 5mm, 6mm, 8mm (automatic automatic selection)	
Camera positioning	Eight million	
Weight	38kg	
Size	450mm 400mm 360mm (Sample cavity size: 450mm 380mm 85mm)	
Environmental field	Temperature: 15 C to 30 C Humidity: 75%	
Integrated with industrial computers	Intel (R) i5 cpu, memory 8G operating system Window10	
Display	Display device / Display: 22-inch display screen	
Data storage	250GB (enough to save billions of data)	
Radiation protection standard	Comply with the GB18871-2002 GBZ115-2002 standard	

Standard delivery	Qty
Sample cup / Sample cup	2
Test for thin / Testing film	A box
Reference block	Lot
Energy calibration sheet / Silver calibration sample	Lot
Certificate of qualification / Pass certificate	A part

Standard delivery	Qty
Instrument Manual / Operation manual	A copy
Factory Radiation Report / Radiation report	A part
Wireless mouse keyboard	1 Set
Indicator	1
Color inkjet printer	1

CORE COMPONENTS OF THE EDXRF ANALYZER

PART	DESCRIBE
Prober State of the control of the c	Detector: energy dispersion X fluorescence spectrometer- one of the main core accessories of XRF, which is imported from the United States. Function: detect the sample characteristic X-ray, process the collected signal for data, and transmit the processing results to the computer. Sipin detector, 1 mil thick beryllium window, 6-mm 2 crystal, resolution of 145ev
X light pipe	Each of these elements emits the secondary X-rays. Voltage: 0-50 kV Maximum current: 1.0 mA Maximum power: 50 W Target: Mo
High voltage source	Output voltage: 0-50KV & 1mA Maximum power: 50W Voltage adjustment rate: 0.01% (from empty load to full load) Current adjustment rate: 0.01% (from empty load to full load) Wripple voltage: under the condition of the output rated voltage, the peak ripple voltage is 0.25% of the maximum output voltage. 8-hour stability: 0.05%
Integrated with industrial computers	The instrument adopts the independent built-in integrated industrial computer, fully matching the core components (detector) communication protocol, one-to-one service 13 i 5 cpu, 13 8G memory The 256G SSD
Light path system	Collimated spot: 6 kinds (software custom settings Filter system: 6 (max. 8mm, minimum 0.3mm) Step accuracy: 0.18 degrees angular speed Control mode: program control

RESTRICTED CRITERIA FOR EACH ELEMENT

Regulatory elements	RoHS/ WEEE	Restricted instruction for the halogen
Cd	<100 ppm	1
Cr	Cr6+ <1000 ppm	\
Hg	<1000 ppm	\
Pb	<1000 ppm	\
РВВ	PBB PBDE <1000 ppm	<900 ppm
PBDE	<1000 ppm	<900 ppm
(Br) + (Cl)	1	<1500 ppm

^{**} Note: ppm=mg / kg (1th per million)