

AA XRF Handheld Portable Energy Dispersive X-ray Fluorescence Spectrometer



TEST AND MEASUREMENT INSTRUMENTS C.C.



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The AA Handheld XRF comes in various Models. it can be calibrated to work for various applications. Mineral Exploration and Surveying, Alloy Analysis, Precious Metals Analysis, ROHS/WEEE Analysis. For further information, please ask for details.

Performance Advantage

- Small, light and easy to carry
- High-speed processing chip, advanced algorithm and high-responsive software, resulting in even faster analysis
- High-performance X-ray Tube, Ultra-high Resolution Detector combined with Digital Multi-channel Processing Technology, yielding super-high detection resolution.
- Indicator lights flash on both sides for safety purposes during measurement, i.e., the built-in double beam technology will automatically sense whether there is a sample at the measurement window.
- Industrial resistive touch screen, superior to capacitor screen in back-light and clearer against sunlight in the field. At the same time, people don't need to take off gloves when they are operating machine in some particular environment.
- AA Handheld XRF utilizes anti-slip, abrasion resistance and streamlined design, which is light and easy to carry. It also integrates the new high speed digital multi-channel technology, the new library grade base identification system and the super-FP algorithm. These features allow it to measure elements faster, with higher accuracy and greater repeatability.
- Intelligent battery management exerts a real-time monitoring of the residual capacity of battery and backup battery through MSBUS bus.
- Automatic switch to standby mode when not used and recovery after the machine is picked up, which saves power and extends working time; moreover, AA Handheld XRF has a gravity sensing system which shuts down instrument automatically when it accidentally falls down, another safety consideration; AA Handheld XRF will also give out alarm when ambient temperature or humidity exceeds the scope of application.
- AA Handheld XRF adjusts air pressure factor automatically based on altitude it has detected. This function increases excitation effect of light elements by 40% and that of rare earth elements by 30%.
- AA Handheld XRF is built with double beam technology which can automatically sense whether there is a sample at the measurement window. This is also a safety and protection feature. The brightness of the display of AA Handheld XRF is automatically regulated according to environment brightness.
- AA Handheld XRF can build a three dimensional element content distribution graph allowing for a fast estimate of mineral reserves or the extent of geological disaster with the built-in GPS for latitude and longitude reading combined with a 3rd party GIS analysis software.
- new algorithm optimizes the spectral resolution, so lower detection limits can be achieved, which are comparable with even large-scale lab instruments.
- Environmental sensing system covering conditions such as temperature, dust humidity and others

Safety

- Radiation Safety Guarantee
- Low power (4W) X-ray tube, mini collimator reduces radiation quantity effectively
- X-ray tube radiation protection shield avoids X-ray escape
- The structure producing radiation is all in equipment interior, you don't need to align or calibrate X ray, then ensure not detect any measurable radiation in equipment operation process
- Independent safe circuit and Double Beam interlock tool can protect user safety effectively

Technical Performance and Specifications

Hardware Specifications	Detector	BOOST Si-PIN detector
	X-ray Tube	50KV/200µA -Ag anode window
	Tube voltage	40 kV continuously adjustable
	High Voltage	miniature X light tube High Voltage Power Supply
	Weight	1.6Kg with battery
	Size	254×280×79mm (L×H×W)
	Power Supply	Lithium Ion Battery (8 Hours Each Testing Time) with Intelligent battery management system
	Maximum Sample Size Dimensions	Any
	Service Life	Longer than 10,000 Testing Hours
	Cooling	T-shaped radiator
	Collimator and filter	Collimator- 4.0 or 2.0 diameter, automatic switch of 8 filters
	Detector resolution	Lowest resolution can be 139eV
	Screen	TFT-LCD touch screen, resolution 640x480
	Data transmission	Digital multi-channel technology, SPI data transmission, waterproof miniature USB for desktop computer connection.
function	All Applicable Software	
	PDA Controlled	
	GPS Location Tracking & Wi-Fi	
	Analytical Range of Elements – Magnesium to Uranium	
	Measurement Time – 5-30 Seconds	
	Precision – ppm-99.9%	
	Ambient Temperature Operation -20°C - 50°C	
	Humidity ≤ 90%	
		