

## Energy Dispersive X-Ray Fluorescence Spectrometer

## ATX3800

### Features

- Elegant and beautiful, sturdy and durable, multiple safety protection modes.
- Collimator + multi-combination filters, automatic switching by software, meeting various testing applications.
- The self-developed SES signal processing system (digital multi-channel) is adopted to effectively improve the peak-to-background ratio and make the measurement more accurate.
- Optimize the integrated heat dissipation design to further improve the heat dissipation performance of the entire machine and ensure the safe operation of the x-ray source.
- Multiple anti-radiation leakage design, the radiation protection level is the highest among similar products.
- Select a vacuum system to optimize the test environment, improve the analysis accuracy of light elements such as magnesium, aluminum, silicon, phosphorus and sulfur.
- Unique movement temperature monitoring technology ensures the safe and reliable operation of the radiation source, effectively extending its service life and reducing usage costs.

### Application

- Nonferrous metals
- Black metal
- Ore dressing and smelting
- Geological industry
- Hazardous element detection (ROHS, halogen)

### Description

ATX3800 is a vacuum energy scattering X-ray fluorescence spectrometer that uses X-ray fluorescence spectroscopy technology.

With the continuous promotion of X-ray fluorescence spectrometry analysis technology, the use of X-ray fluorescence spectrometer analysis and detection has become the main means of quality control in many industries.

ATX3800 vacuum energy scattering X-ray fluorescence spectrometer has the advantages of simple sample preparation, fast analysis speed, wide analysis content range, good reproducibility and high accuracy.

This product is elegant and beautiful in appearance, sturdy and durable, and has multiple safety protection modes. There are up to 40 combinations of 8 collimators and 5 filters to meet more testing needs. At the same time, we use self-developed SES signal processing systems, collimators and filters automatically switching technology, integrated vacuum system, integrated cooling system, radiation safety system and other technologies ensure the safety, stability and accuracy of the product.

The ATX3800 software is specially developed for the detection of elemental components of metal materials (including vacuum control function). It processes and calculates the collected spectral signals and reports and displays the measurement results. The instrument is automatically calibrated. It comes with qualitative analysis of sample material and prevents manual user from selecting wrong curves. Multiple spectra can be displayed at the same time and multiple report forms can be printed.



## 1. Technical parameters

<b>ATX3800 vacuum energy dispersive X-ray fluorescence spectrometer</b>	
Measuring element range	From Sodium (Na) to Uranium (U)
Analysis range	1ppm ~99.99% (different elements have different analysis ranges)
Analysis time	100-300 seconds (adjustable)
Resolution	129eV±5eV
Detector	SDD Electrically cooled detector
Refrigeration method	Electric refrigeration, no consumables required
Analysis accuracy	0.05%
Sample	Silver calibration film
X-ray excitation device	Maximum filament current output: 1mA; service life greater than 5000 hours
Signal processor	Adopts imported signal processor, adapts to high resolution and high counting rate, and self-adjusting amplification factor
Sample compartment size	400*340*80 mm
Safety device	Multiple anti-leakage design, radiation protection level is the highest among similar products
Integrated vacuum system	Vacuum pump system with excellent performance such as low vibration, low noise, self-protection and fast pumping speed Geometric pumping speed: 60 L/min (50Hz); ultimate pressure: $6.7 \times 10^{-2}$ Pa
Temperature	15°C ~ 35°C
Humidity	≤80% (no condensation)
Weight	56Kg
Dimensions	700*510*336 mm