



# R-461

## RoHS Testing Instrument

- Meets RoHS/ELV screening requirements
- Energy-dispersive X-ray fluorescence analysis device

## Application Fields

Elemental Analysis Range ▶ S~U

Detection Limit ▶ 1ppm

### Content

- ▶ Any number of selectable analysis and identification models
- PPM -99.99%
- Mutually independent matrix effect correction module
- Multivariate non-linear regression program
- Equipped with advanced original imported electrically refrigerated detector, energy resolution reaches  $144\pm 5\text{eV}$
- Latest 4096-channel digital multi-channel signal processor, achieving optimal peak-to-background ratio

- RoHS Testing
- Footwear Leather
- Automotive ELV
- Archaeological Analysis
- Jewelry
- Refractory Materials

- Food Safety
- Ore Analysis
- Metal Alloys
- Petrochemicals
- Coating Thickness Measurement
- Environmental Testing

## Instrument Features



- Non-destructive, fast, and accurate analysis of samples
- High precision, high resolution, high reliability
- User-friendly interface, convenient operation, high-definition camera



## Instrument Specifications

- Sample chamber size: 439\*300\*150mm
- Instrument dimensions: 550\*410\*320mm
- Instrument weight: 45kg

## Environmental Requirements



- Ambient temperature: 10~30°C
- Relative humidity: 35%~70%
- Power supply requirements: AC220V  $\pm 5\text{V}$  50/60HZ
- No nearby high-power electromagnetic and vibration interference sources
- Humidity conditions 40%~70% (non-condensing)
- Rated power: 100W

## Performance and Principle Features



- Analysis range: 1ppm ~ 100%
- Accuracy :  $\text{RSD} \leq 0.05\%$   $\text{Ag} \geq 90\%$
- Physical states of tested samples: solid, powder, liquid
- High-voltage power supply : 5~50KV
- Tube current :  $5\mu\text{A} \sim 1000\mu\text{A}$
- High-definition camera
- Collimator / filter automatic switching system
- Imported Amptek Si-pin detector from the United States
- Resolution:  $144\pm 5\text{eV}$
- 4096 channel multi-channel analyzer JPSpec-DPP
- Test time: 30~200s

X-ray Fluorescence Spectrometer analysis offers advantages such as simple sample preparation, rapid analysis, a wide range of analyte concentrations, good reproducibility, and high accuracy. With the continuous promotion of X-ray fluorescence spectroscopy analysis technology, the use of X-ray fluorescence spectrometers has become a primary means of quality control in many industries.

The rapid development of the high-tech industry has led to the production of numerous electronic products and other industrial goods, making life more convenient for people. However, once these products are discarded, the toxic substances they contain may pose a threat to the environment and human health. To address this challenge, various regions worldwide have enacted environmental regulations to restrict the use of hazardous substances in various products. Today, testing the environmental compliance of incoming materials and products is not only a responsibility for businesses towards the environment but also a pass for domestic and international trade. The R-350 provides an optimal solution for hazardous substance detection, contributing to the development of multiple fields.

