

MINIATURE ON-LINE ATMOSPHERIC HEAVY METAL MONITOR



The Miniature On-line Atmospheric Heavy Metal Monitor, this innovative device combines X-ray fluorescence nondestructive testing technology with automatic air particulate enrichment technology. It's the result of independent research and development, focused on miniaturization, offering advantages such as small size, low detection limits, precise measurements, and high temporal resolution.

Miniature On-line Atmospheric Heavy Metal Monitor compact design and advanced technology make it suitable for various applications, including urban atmospheric environment monitoring, surveillance of unregulated emissions in industrial zones, monitoring of traffic-related air pollution, and facilitating emergency response efforts.

APPLICATIONS

Miniature On-line Atmospheric Heavy Metal Monitor - Solid waste detection

Online heavy metal detection after solid waste or garbage incineration

Miniature On-line Atmospheric Heavy Metal Monitor - Automobile exhaust detection

Rapid detection of heavy metals in automobile exhaust

Miniature On-line Atmospheric Heavy Metal Monitor - Pollution traceability

Location of pollution sources, prediction and early warning of pollution traceability

Miniature On-line Atmospheric Heavy Metal Monitor - Field experiment law enforcement

Other field experiment detection law enforcement

FEATURES

Intelligent

The Miniature On-line Atmospheric Heavy Metal Monitor is compact and portable with a sturdy structure, facilitating easy maintenance. It provides accurate and reliable monitoring data at a construction cost significantly lower than standard stations. This makes it ideal for large-scale deployment in fine or grid monitoring layouts.

Low detection limit

The Miniature On-line Atmospheric Heavy Metal Monitor ensures precise measurement of heavy metals such as arsenic, cadmium, chromium, antimony, mercury, and many others. It features a low detection limit of elements down to 0.01 ng/m³ and can be customized to meet specific user requirements for other elements.

Automatic calibration

Miniature On-line Atmospheric Heavy Metal Monitor featuring a built-in calibration module, the analyzer automatically calibrates both horizontal and vertical coordinates of XRF spectra simultaneously. Users have the flexibility to set calibration frequencies as needed. Additionally, it includes a built-in specific metal internal standard source for automatic quality control.

Cloud platform

The Miniature On-line Atmospheric Heavy Metal Monitor utilizes wireless communication technology, enabling secure and confidential communication with the server. It gathers environmental big data into the "cloud platform" for centralized storage and analysis.

Data transmission

The monitoring data adheres to the Data Transmission Standard of the Online Automatic Monitoring System for Pollution Sources (HJ/T 212-2005). Additionally, users have the flexibility to customize corresponding functions according to their specific requirements with ease.

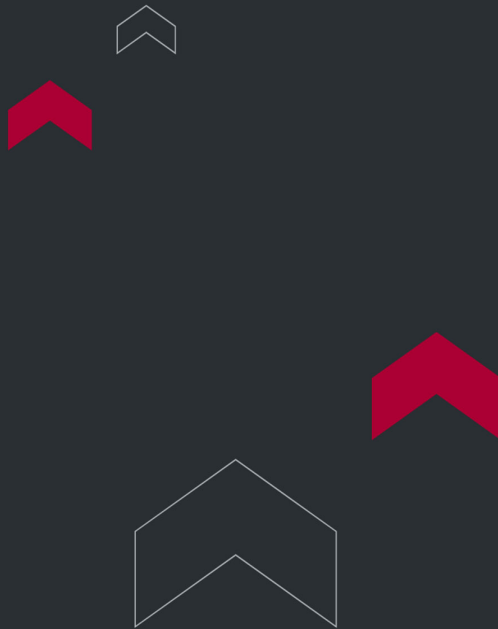
Safety

The Miniature On-line Atmospheric Heavy Metal Monitor undergoes professional anti-radiation treatment to ensure there is no radiation leakage in any direction during measurements, guaranteeing safety standards are upheld.

TECHNICAL SPECIFICATIONS

Working power supply	220VAC±10% 50Hz±1Hz (110V also available)
Measuring ambient temperature	-40 50℃
Measuring ambient Humidity	0%RH 90%RH
Operating temperature of the Main Unit	0℃ 40℃
Humidity of the Main Unit operating environment	30%RH 60%RH
Size	300×192×706mm L×W×H

Weight	13.5KG
Linear demand	□ 0.99
Way to work	Continuous automatic monitoring; One year of trouble-free operation and self-recovery function
Installation	Use the bracket to run outdoors for a long time, or fixed in the station room operation
Monitoring project	Monitor Pb , Cd, Hg , As, Cr, Cu , Zn , Ni and other 30 elements (other elements can be expanded according to the subsequent needs of users)
Repetitive	HM□ RSD<0.5% (Pb standard sample)
Measuring range	HM□ 0-100μg/m ³
Minimum detection limit	HM□ Ng /m ³ (sampling time 1H, flow rate 16.7L/min), the increase of sampling time can reach pg level
Precision	HM□□ 15% (Pb, Cd, As sampling time 4H)
Applicable standards	HM□ US EPA IO-3.3 standard method “Detection of Heavy Metals in Environmental Particulate Matter by X-ray Fluorescence Spectrometry”



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