

HD-2000

智能化 γ 辐射仪(建材检测专用)
Intelligent Gamma-ray Radiometer



应用领域

- 现场快速无损检测石材、瓷砖等建材产品的 γ 辐射总量，判断石材、瓷砖等建材产品放射性类别
- 地质找矿，放射性环评，环保卫生监测，建筑监理等领域
- 室内环境放射性快速评价

符合国标GB/T 4835.1-2012《辐射防护仪器 β 、 X 和 γ 辐射周围和/或定向剂量当量(率)仪和/或监测仪 第1部分：便携式工作场所和环境测量仪与监测仪》的要求。

Application Fields

- Rapid non-destructive testing the total gamma-ray radiation of stone, tiles and other building materials in situ, determine the radioactive levels of building stone and tiles, etc.
- Geological prospecting, radioactive environmental impact assessment, environmental protection and health monitoring, construction supervision and other applications.
- Rapid assessment of indoor environmental radioactivity.

The instrument meets the requirements of GB/T 4835.1-2012 *Radiation protection instrumentation-Ambient and/or directional dose equivalent (rate) meters and/or monitors for beta, X and gamma radiation - Part 1: Portable workplace and environmental meters and monitors*.



核工业北京地质研究院仪器开发研究所
北京核地科技发展有限公司

总机: 010-86467260 网址: www.bjhdkj.com
业务部: 010-64953684 64980736 18911586039
售后: 010-64986980 传真: 010-64944429



型式批准证书号: 2011A182-11



仪器特点

灵敏度高，能量响应范围宽，功耗低，稳定性好，操作方便，中文显示被测石材的A、B、C类别，亦可显示计数率和吸收剂量率。

技术指标

1. 测量模式
常规测量：每3s测量一次，显示每秒的平均值；
定时方式：可自行选择10s、30s、60s、300s、600s中的任一档测量，仪器显示每秒钟的平均值
2. 测量范围：(0.01 ~ 100) $\mu\text{Gy/h}$
3. 能量阈：40 keV
4. 测量线性：
放射性强度 γ 与计数率CPS的相关系数 ≥ 0.999
5. 稳定性：相对误差 $\leq 6\%$ (8h)
6. 准确度：最大允许误差 $\pm 20\%$
7. 灵敏度：350 $\text{s}^{-1}/[\mu\text{Gy/h}]$
8. 电源：3节1号电池
9. 功耗： $\leq 100 \text{ mW}$
10. 使用环境
温度：(0 ~ 40) $^{\circ}\text{C}$
相对湿度： $\leq 90\%$ (40 $^{\circ}\text{C}$)
11. 外形尺寸和重量 (含包装箱)
(350 \times 200 \times 250) mm 6 kg

仪器认证

北京市计量科学研究院检定并出具检定证书

Instrument Characteristics

- High sensitivity
- Wide range of energy response
- Low power consumption
- Good stability
- Easy operating
- Shown the A, B, C types of measured stone in Chinese directly, the count rate and absorbed dose rate of measurement results.

Technical Index

1. Measuring Mode
Conventional Measuring: Measure one time every 3s, and display the average value per second
Timing Measuring: Users can choose any stick to measure: 10s, 30s, 60s, 300s and 600s, the instrument displays the average value per second
2. Measuring Rang: (0.01 – 100) $\mu\text{Gy/h}$
3. Energy Threshold: 40 keV
4. Linearity: The correlation coefficient between γ radioactive intensity and count rate is greater than 0.999
5. Stability: RE $\leq 6\%$ (8h)
6. Accuracy: MPE $\pm 20\%$
7. Sensitivity: 350 $\text{s}^{-1}/[\mu\text{Gy/h}]$
8. Power: Use three AA batteries
9. Power Consumption: $\leq 100 \text{ mW}$
10. Operating Environment
Temperature: (0 – 40) $^{\circ}\text{C}$
Relative Humidity: $\leq 90\%$ (40 $^{\circ}\text{C}$)
11. Dimensions and Weight
(350 \times 200 \times 250) mm 6 kg

Instrument Certification

Verified by Beijing Institute of Metrology and issued the verification certificate.



核工业北京地质研究院仪器开发研究所
北京核地科技发展有限公司

总机：010-86467260 网址：www.bjhdkj.com
业务部：010-64953684 64980736 18911586039
售后：010-64986980 传真：010-64944429



型式批准证书号：2011A182-11