

# HD-2005

x-γ 剂量率仪  
x-γ Dose Rate Meter



## 应用领域

主要用于环境辐射x-γ空气吸收剂量率的测量，辐射监测，x-γ辐射源及x光机等工作场所的剂量监测，各种建筑材料、核电、地质矿山及医疗卫生等部门的辐射监测等领域。

符合行业标准EJ/T 984-95《环境监测用x、γ辐射测量仪 第一部分 剂量率仪型》仪器特点要求。

## Application Fields

Mainly used for x-γ air absorb dose rate measurement, radioactive monitoring, dose monitoring in x-γ source workplace and around x-ray machine, radioactive monitor in all kinds of building materials, nuclear power station, geological mining, medical health sector, etc.

The instrument meets the requirements of EJ/T 984-95 x-γ radiation meter for environmental monitoring - Part 1 dose rate meter.



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型式批准证书号：2015A174-11

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

# HD-2005

x- $\gamma$  剂量率仪  
x- $\gamma$  Dose Rate Meter



## 仪器特点

- 采用复合体闪烁探测器 ( $\Phi 75 \times 82$ ) mm, 灵敏度高, 能量 (宇宙射线) 响应及角响应好
- 功耗低、体积小、重量轻、结构新颖、携带方便
- 数字化电路设计, 测量精度高, 具有整机自检功能, 性能可靠
- 采用宽视角数字率表LCD, 利于室外强光线下数据的读取
- 测量结果由数字和实时监测辐射强度的计数率表同时显示
- 仪器测量过程报警值可设定, 具有音响和屏幕双报警功能
- 校准因子和参数设置可置入机内, 直接给出测量结果
- 标准USB接口, 蓝牙打印, 锂电池和干电池两用

## 技术指标

1. 能量响应: (25 keV ~ 3 MeV) 变化的限值  $\pm 15\%$  ( $^{137}\text{Cs}$ )
2. 宇宙射线响应: 变化的限值  $\pm 15\%$  ( $^{137}\text{Cs}$ )
3. 量程范围:  $(1 \sim 50000) \times 10^{-8}$  Gy/h
4. 准确度: 最大允许误差  $\pm 10\%$
5. 角响应:  $\leq 15\%$  ( $^{137}\text{Cs}$  源  $0 \sim 120^\circ$  相对于最大响应数值)
6. 稳定性: 相对误差  $\leq 5\%$  (8h)
7. 存储容量: 256个记录页, 6370组测量数据
8. 使用环境  
温度:  $(-10 \sim +50)^\circ\text{C}$   
相对湿度:  $\leq 90\%$  ( $40^\circ\text{C}$ )
9. 功耗:  
约300 mW  
7Ah Li充电电池供电, 可以连续工作50h
10. 外形尺寸和重量  
探测器: ( $\Phi 90 \times 300$ ) mm 1.5 kg  
操作台: ( $180 \times 95 \times 145$ ) mm 1.2 kg

## 仪器认证

中国计量科学研究院检定并出具检定证书

## Instrument Characteristics

- The probe is made of a large plastic scintillation, having high sensitivity, good energy (cosmic rays) response and angle response.
- Low power consumption, small volume, light weight, novel structure, easy to carry.
- Digital circuit design, high accuracy, with self-check function, reliable performance.
- With a wide angle digital rate meter LCD, beneficial to data reading in the outdoor light.
- Digital and digital rate meter which monitoring real-time radiation intensity simultaneous display the measuring results.
- Alarm threshold can be set during measuring, with sound and display dual-alarm functions.
- Calibration factors and parameters can be set into machine, give the measurement results directly.
- Standard USB interface, Print by Bluetooth, Lithium battery and dry battery dual-use.

## Technical Index

1. Energy Response: (25 keV ~ 3 MeV)  
The limit of change is  $\pm 15\%$  ( $^{137}\text{Cs}$ )
2. Cosmic Rays Response:  
The limit of change is  $\pm 15\%$  ( $^{137}\text{Cs}$ )
3. Measuring Range:  $(1 \sim 50000) \times 10^{-8}$  Gy/h
4. Accuracy: MPE  $\pm 10\%$
5. Angle Response:  $\leq 15\%$  ( $^{137}\text{Cs}$ ,  $0 \sim 120^\circ$ )
6. Stability: RE  $\leq 5\%$  (8h)
7. Storage Capacity: 256 record pages, 6370 sets of measuring data
8. Operating Environment  
Temperature:  $(-10 \sim +50)^\circ\text{C}$   
Relative Humidity:  $\leq 90\%$  ( $40^\circ\text{C}$ )
9. Power:  
Using 7Ah Lithium-ion battery, continuous work 50h  
Power Consumption: about 300 mW
10. Dimensions and Weight  
Detector: ( $\Phi 90 \times 300$ ) mm 1.5 kg  
Console: ( $180 \times 95 \times 145$ ) mm 1.2 kg

## Instrument Certification

Verified and certified by National Institute of Metrology (NIM)



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