RG1100 Personal Radiation Detector



Introduction：

RG1100 Personal Radiation Detector is a small and highly sensitive personal radiation dose alarm. The instrument uses G-M counter tube as detector, which has fast response speed; and adopts powerful single-chip microcomputer technology, which has strong anti-interference ability. It is mainly used to monitor X-rays and gamma rays. Within the measurement range, the alarm threshold can be set arbitrarily. When the alarm threshold is reached, an alarm is issued to remind the staff to pay attention to safety in time. The main technical indicators of the instrument meet national and international standards. It is a wearable pocket instrument with strong functions, small size and low power consumption among similar instruments in China.

Main Application：

RG1100 Personal Radiation Detector is widely used in radiation processing enterprises, health and epidemic prevention, radiotherapy, nuclear laboratories, nuclear power plants, import and export commodity inspection, building materials, petrochemical industry, geological survey, scrap steel, industrial non-destructive testing and other environments with ionizing radiation, for personal radiation dose supervision and protection.

Features：

1. Adopt energy compensation GM tube, accurate indication, fast response, at the leading level.
2. High-end OLED display, dose rate LED strobe indication, simple operation and clear indication.
3. Alarm functions such as dose rate, cumulative dose, blockage fault, etc., and any combination of sound, light and vibration alarm modes.
4. The alarm threshold can be set arbitrarily within the measuring range.

Specifications：

Detector:	Energy-compensated GM counter tube
Measurement range:	Dose equivalent rate: 0.01μ Sv/h～10mSv/h; cumulative dose equivalent: 0.00μ Sv～999.9Sv
Sensitivity:	>1.5CPS/uSv/h (relative to 137Cs)
Energy response:	48keV～3.0MeV
Relative error:	＜5%（under 1mSv/h）
Power consumption:	2 AA batteries
Temperature characteristics:	-10℃～+50℃≤±10%
Humidity characteristics:	0～95%RH（+35℃）≤±10%
Dimensions:	70*40*95（mm）（L*W*H）
Weight:	100g（batteries included）

RG1300 Personal Radiation Detector

Introduction：

RG1300 personal dose alarm is a small and highly sensitive personal dose alarm, mainly used to monitor X-rays and Y-rays. The instrument uses an energy-compensated GM counter tube as a detector and a powerful microprocessor, which has strong anti-interference ability: it provides a higher measurement range without losing sensitivity and supports stable overload indication.

Main Application：

RG1300 personal dose alarm is widely used in radiation processing enterprises, health and epidemic prevention, radiotherapy, nuclear laboratories, nuclear power plants, import and export commodity inspection, building materials, petrochemicals, geological surveys, scrap steel, industrial non-destructive testing and other environments with ionizing radiation, for personal radiation dose supervision and protection.

Features：

1. Using the mutation algorithm of radiation pulse counting and the fast smoothing method of pulse frequency, the range of GM counter tube is expanded with high linearity.
2. Improve the acquisition frequency and the radiation resistance of electronic devices to extend the service time.
3. Provide stable overload indication.
4. Real-time measurement of dose rate, and record the cumulative dose at the same time.
5. Automatic alarm when the dose rate and cumulative dose exceed the threshold.
6. Alarm functions such as dose rate, cumulative dose, and blocking fault.
7. Any combination of sound, flash, and vibration alarm modes to meet various alarm needs.
8. The alarm reading can be set arbitrarily within the range.
9. Built-in memory, the cumulative dose value, dose rate alarm reading and dose alarm threshold data will not be lost after power failure.
10. Continuous battery power monitoring, with low battery status prompt.
11. Chinese and English operation interface, easy to operate.



Specifications：

Detector: Energy-compensated GM counter tube:
Measurement range: 0.01uSv/h~1Sv/h;
Energy response: 48keV~3MeV;
Relative error: ≤±5% (at 1mSv/h);
Display unit: Dose rate: μSv/h, mSv/h, Sv/h, cumulative dose: μSv, mSv, Sv;
Temperature characteristics: -10℃～+50℃≤±10%;
Humidity characteristics: 0~95%RH (+35℃)≤± 10%.
Dimensions: 92*59*13mm;
Weight: about 93g (including back clip).

R-EGD Portable Radiation Detector



Introduction：

The R-EGD portable radiation detector is a portable radiation detection instrument used to measure x-rays and gamma rays. It uses a G-M counter tube as a detector, has a fast response speed, and has a wider dose rate measurement range than similar domestic instruments. In addition to measuring high-energy and low-energy gamma rays, the instrument can also accurately measure low-energy X-rays and has good energy response characteristics. The R-EGD portable radiation detector can be widely used in radiation protection monitoring in the fields of environmental monitoring, health and epidemic prevention, import and export commodity inspection, radiomedicine, building materials, petrochemicals, geological surveys, scrap steel, nuclear laboratories, and radioactive security inspections in airports, stations, and ports.

Features：

1. High sensitivity, wide measurement range, good energy response characteristics.
2. High-speed micro-power microprocessor unit.
3. Digital display of dose and dose rate.
4. Full Chinese menu operation interface.
5. LCD screen display, high-brightness backlight.
6. Alarm record query: built-in dose and dose rate data storage, can be viewed at any time, power off will not lose.
7. Customizable dose and dose rate alarm thresholds.
8. Real-time display of battery power and undervoltage alarm function.

Specifications：

1. Detector: G-M counter tube.
2. Measuring range: Dose rate: 0.01μSv/h～15mSv/h; Cumulative dose: 0.00μSv～9.99Sv
3. Measuring accuracy: 0.01～1000μSv/h≤±5%
4. Energy response: ≤±30% (48Kev～3.0Mev,137Cs)
5. Sensitivity: 35CPS/mR/h (relative to 60CO)
6. Angular response: The instrument does not exceed 25% of the response in the calibration direction at 0o～90o
7. Energy range: 35KeV～3.0MeV
8. Relative deviation: ≤± 5% (137Cs)
9. Alarm threshold: can be set
10. Alarm sound intensity: ＞80dB (within 50cm)
11. Display unit: dose rate: μSv/h, cumulative dose: μSv
12. Power supply: 3.7V lithium battery
13. Power consumption: whole machine power consumption ≤120mW (excluding display backlight power consumption)
14. Weight: 700.0g (including battery); size 20×10×3.5(cm)



RP6000 Intelligent x-γ radiation instrument



Introduction：

The RP6000 intelligent x-γ radiation meter uses highly sensitive scintillation crystals as detectors, with fast response speed. It is used to monitor high and low energy X-rays and γ-rays in various radioactive workplaces. It is a special instrument for radiation dose rate. The instrument uses a color LCD as the display screen, with an adjustable backlight brightness function. The instrument has an over-threshold alarm function, and the alarm threshold can be set arbitrarily within the measurement range. It has a timed measurement and recording function, and can realize the alarm record query function.

Main Application：

RP6000 intelligent x-γ radiation meter is widely used in medical treatment, disease control, environmental protection, metallurgy, petroleum, chemical industry, radioactive laboratory, industrial flaw detection, radiation processing, mining and other occasions where radiation environment and radiation protection detection are required.

Features：

1. High sensitivity, good energy response characteristics.
2. High-speed, low-power microprocessor unit.
3. Chinese and English operation interface, easy to operate.
4. Color LCD display, adjustable backlight brightness.
5. Both dose rate and cumulative dose can be measured.
6. Dose rate/cumulative dose over-threshold alarm, timed measurement and recording function.
7. Battery undervoltage, dose rate overload, detector failure alarm function.
8. Real-time display of battery power.
9. Dose rate/cumulative dose alarm record query function.
10. Aluminum alloy shell, suitable for field operations.

Specifications：

Detector:	φ 30×25mmNaI scintillation crystal
Measurement range:	Dose rate: 0.01～200.00μSv/h; cumulative dose: 0.00μSv～9.99Sv
Sensitivity:	≥350CPS/μ Sv/h
Energy range:	48Kev～3Mev
Relative error:	≤±8%（under 200.00μSv/h）
Measurement time:	5~120 seconds can be set
Alarm threshold:	Cumulative dose and dose rate thresholds can be set arbitrarily
Measurement method:	Real-time measurement and timed measurement
Display unit:	Equivalent dose rate μSv/h, absorbed dose rate μGy/h; cumulative dose μSv; count rate CPS
Power supply:	2 standard D-cell batteries
Power consumption:	The power consumption of the whole machine is ≤200mW (excluding the power consumption of the display backlight)
Weight:	1.30Kg(batteries included 池)
Dimensions:	420*180*88(mm)

RS1050 Portable multifunctional radiation survey instrument



Introduction

The RS1050 portable multifunctional radiation survey meter uses a 3-inch large flat spiral sensor with high sensitivity, which can quickly detect the intensity of α, β, γ and X-rays. With a correction factor function, customers can adjust the correction parameters by themselves; it provides an average time setting function to greatly improve the reaction sensitivity. The detector is ergonomic, the anti-saturation circuit can avoid interference from electromagnetic waves, and it has a safe calibration function to avoid radiation exposure for calibration personnel.

Main Application

RS1050 portable multi-function radiation survey instrument is widely used in environmental monitoring, radiation health monitoring, national security monitoring (entry and exit, customs), public safety monitoring, nuclear power plants, laboratories and nuclear technology applications, as well as nuclear emergency response, hospital X-ray rooms, customs inspections, environmental assessments and other on-site testing. It is also suitable for radioactive detection of scrap metals in the recycling industry and home decoration building materials testing.

Features

1. Types of measured rays: α, β, γ and X-rays;
2. Imported large end window mica Geiger tube detector;
3. With correction factor function, you can adjust the correction parameters by yourself; provide average time setting function, greatly improve the reaction sensitivity.
4. Storage function: can store 999 data, manual or automatic storage optional.
5. Large screen digital LCD with backlight function.
6. Self-protection function, over-threshold self-protection.

Specifications

Detector	End window mica Geiger tube detector
Detection area	Effective diameter 45mm;
Measurement range	Dose rate：0.01μ Sv/h-1mSv/h；0.01mR/h-100mR/h； Cumulative dose value：0.001uSv-9.99Sv；
Display unit	μ Sv/h、mSv/h、mR/h、cps、cpm、mSv
Measurement accuracy	±15%（relatively ^{137}CS）
Sensitivity	5800cpm/mR/h(relatively ^{60}Co)
Alarm items	Over-threshold alarm, detector failure alarm, low-power alarm, over-range alarm
Alarm mode	Sound and light alarm
Power supply	2 standard C-size batteries (AA)
Operating temperature	-40℃～75℃