






8.Button description

icon	Function	Explanation
	Up	Switch menu options and increase the value.
	Down	Switch menu options and decrease the value.
	Right/Setting	Enter the setting menu and switch the setting position.
	Cancel	select key, exit, return.
	Confirm/Power	select key, save, power switch.

9.Operating instructions

a).Power On

Short press the "Power" button to turn on it.

b).Main interface

1.The main interface is opened by default at the first power on. The main interface includes: real-

time dose rate, cumulative dose, and system time.

2.In other interfaces, press the "Cancel" key, and it will eventually return to the main interface.

c).Eliminate the alarm state

When the instrument alarms, short press any button to turn off the alarm sound.

d).Eliminate the alarm state

1.In the main interface, press the "up" or "down" key to enter the alarm threshold display interface.

2.The alarm threshold display interface includes: dose rate alarm threshold, cumulative dose alarm threshold, cumulative dose start date, and system time.

3.Press "up", "down" and "exit" on the alarm threshold display interface to return to the main interface.

e).Setting menu interface

1.Press the "Setting" key on the main interface or alarm threshold display interface to enter the setting menu interface.

2.In the menu setting interface, press the "up" and "down" keys to switch and select menu items.

3.In the menu setting interface, press the "Enter" key to enter the currently selected menu item.

4.In the menu setting interface, press the "Cancel" key to return to the interface before entering the setting menu.

f).Alarm threshold setting

1.Enter the dose rate alarm threshold setting interface (or dose alarm threshold setting interface). Press the "right" key to switch the blinking digit, and press the "up" and "down" keys to change the value of the current blinking digit.

2.After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the "Cancel" key to exit directly.

g).Remove dose settings

1.After entering the remove dose setting interface, the current cumulative dose is displayed in the center of the screen, and exit

and clearance are displayed on the right, corresponding to the "Cancel" and "Confirm" keys.

2.Press the "Enter" key to remove the accumulated dose and exit.

3.Press the "Cancel" button to exit directly.

h).Calibration coefficient setting

1.Enter the calibration coefficient setting interface. Press the "right" key to switch the blinking digit, and press the "up" and "down" keys to change the value of the current blinking digit.

2.After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the "Cancel" key to exit directly.

i).Time and Date setting

1.After entering the time and date setting interface, press the "right" key to switch the blinking digit, and press the "up" and "down" keys to change the current blinking digit value.

2.After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the

"Cancel" key to exit directly.

j).Language setting

1.After entering the language setting interface, there is a triangle selection indicator icon on the right. Press the "up" and "down" keys to change its position, and select the "Chinese" and "English" language types to be selected.

2. After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the "Cancel" key to exit directly.

k).Curve display

1.After entering the curve display interface, the displayed curve points are 50 times magnified of the real-time value information (for example: the vertical line at a certain moment on the screen shows 10 points, and the real-time value is 0.2 μ Sv/h), and the display time It is the numerical curve in the last 200 seconds, the maximum displayed value is 0.6 μ Sv/h, and the refresh line moves one grid to the right every 2 seconds.

2.You can press "Cancel" to exit directly.

l).Backlight setting

1.After entering the backlight setting interface, there is a triangular selection indicator icon on the right. Press the "up" and "down" keys to change its position, and select the "on" and "off" states that need to be selected.

2.After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the "Cancel" key to exit directly.

m).Particle sound setting

1.After entering the particle sound setting interface, there is a triangular selection indicator icon on the right. Press the "up" and "down" keys to change its position, and select the "on" and "off" states that need to be selected.

2.After the setting is completed, press the "OK" key to save the current setting and exit.

3.Without saving the settings, you can press the "Cancel" key to exit directly.

n).Shut down

Press and hold the "Power" button for 3 seconds to shut down.

Radiation Detector

Operation Manual



Attentions

1. If the instrument is dropped accidentally, please confirm whether the radiation dose indication is normal and whether it will be updated. If abnormalities are found, do not apply the instrument to places with high-intensity radiation.
2. If the instrument shows the sensor is invalid, do not apply the instrument to a place with high-intensity radiation, and replace the normal backup instrument at the same time.
3. If the instrument prompts a blocking warning, please leave the high-intensity radiation site immediately.
4. Do not use in an environment containing explosive and flammable gas or dust.
5. Do not use the instrument in water.
6. When the instrument is not in use, please turn off the instrument; if the instrument is not in use for a long time, please remove the battery.
7. When the instrument displays a low battery reminder, please replace the battery in time to ensure the accuracy of the measured value.
8. This device can be powered by Type-C interface, but it does not have the charging function.
9. The manual version is subject to upgrade without notice.
10. If the equipment fails, technical support is needed, contact the original factory for consultation.

1.Product introduction

FS-600 is a small high-range radiation detector, the main function is to monitor X-ray, γ -ray and β -ray. The detector of this instrument is an energy-compensated Geiger counter (hereinafter referred to as GM tube), which is characterized by accurate measurement and high range. This product uses a 32-bit microprocessor and is equipped with a 64*128 dot matrix LCD display, which is simple to operate and has a strong anti-interference ability. The equipment provides an audible alarm, and the alarm threshold is continuously adjustable. When the alarm threshold is reached, an alarm is issued to remind the staff to pay attention to safety. The main counting indicators of the instrument comply with international standards.

2.Applications

This product can be widely used in home improvement radiation testing, irradiation processing enterprises, health and epidemic prevention, radiotherapy, nuclear laboratories, nuclear power plants, import and export commodity inspection, building materials, petrochemicals,

geological surveys, scrap iron and steel, industrial non-destructive testing, etc. where ionizing radiation exists. Under the supervision and protection of radiation dose received by individuals.

3.Radiation dose limit

Radiation industry personnel dose limit:

Average annual effective dose for 5 consecutive years	20mSv
Effective dose in any year	50mSv
Annual equivalent dose of eye lens	150mSv
Annual equivalent dose of limbs (hands and feet) or skin	500mSv

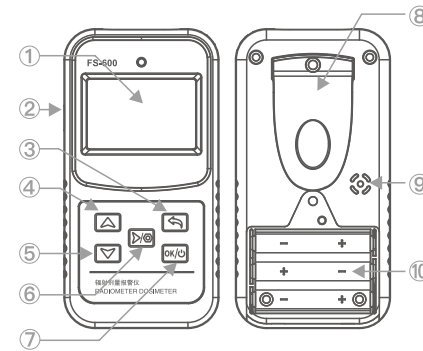
Non-radiation industry personnel dose limit:

Annual effective dose	1mSv
The effective dose in a single year	5mSv
Annual equivalent dose of eye lens	15mSv
Annual equivalent dose of limbs (hands and feet) or skin	50mSv

4.Features

1. Measure the dose rate real-time, and record the cumulative dose at the same time.
2. The dose rate alarm threshold and dose alarm threshold can be continuously adjustable and arbitrarily set.
3. Can view the start date of the current cumulative dose.
4. Have dual alarm functions of dose rate and dose value.
5. With buzzer sound alarm function.
6. When the radiation dose rate exceeds 10mSv/h, it has a blocking warning prompt function (display 999MAX).
7. Built-in memory, the accumulated dose value, dose rate alarm threshold and dose alarm threshold data will not be lost after power off.
8. With calendar and clock functions, the time can be recorded normally even after shutting down.
9. Continuous monitoring of battery power, Low battery reminder function.
10. Chinese/English menu can be switched freely.
11. With real-time dose rate curve display function.
12. Screen backlight ON/OFF function.
13. Particle sound ON/OFF function.
14. The external Type-C interface can be used for power supply.

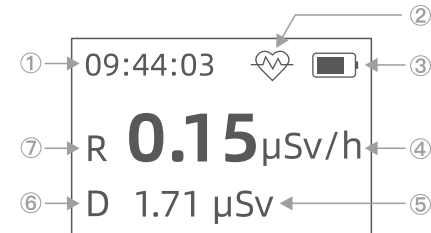
5.Technical parameters



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|--------------------|-----------------|
| ① Screen | ⑥ Right/Setting |
| ② Type-C interface | ⑦ OK/Power |
| ③ Cancel | ⑧ Back clip |
| ④ Up | ⑨ Buzzer |
| ⑤ Down | ⑩ Battery box |

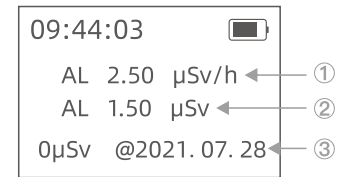
6.Product structure description

a). Measurement interface



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|--|-----------------------|
| ① System time | ② Running heartbeat |
| ③ Battery power | ④ Real-time dose rate |
| ⑤ Accumulated dose | |
| ⑥ D, dose alarm icon (only shows when the dose alarm is displayed), and the alarm sounds at the same time. | |
| ⑦ R, the dose rate alarm icon (only shows when the dose rate alarms), and the alarm sounds at the same time; | |

b).Alarm threshold display interface



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|------------------------------|
| ① Dose rate alarm |
| ② Cumulative dose start date |
| ③ Dose alarm threshold |

c).Curve display interface



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|---------------------------|---------------------------|
| ① Unit | ② Dose rate display range |
| ③ Display trend histogram | |

7.Display content description

Detector	energy compensation type GM counter tube.
Measuring range	0.1 μ Sv/h~10mSv/h
Dosage	0.00 μ Sv/h~10Sv/h
Sensitivity	>0.25cps/ μ Sv/h (relative to 137Cs)
Energy response	48keV~1.5MeV
Relative error	<10% (at 1mSv/h)
Power supply	3 AAA batteries
Power consumption	<150mW
Temperature characteristics	-10 $^{\circ}$ C~+50 $^{\circ}$ C \leq 10%
Dimensions	116*60*25(mm)