

Model R750 High Sensitivity Radiation Detector



*Super-high sensitivity
Ultra fast response 50ms*

Description

Model R750 High Sensitivity Radiation Detector is new generation of radiometer designed by Coliy Technology GmbH. Coliy develops a set of revolutionary graphical interfaces operating system to break the traditional instrument operating system and the use of interface, customers can get a new experience by using the R750. Model R750 is equipped with 3.2 inches color LCD touch screen, energy response is 15keV-7MeV, and added background value removal function. The R750 has very high resolution 1nSv/h or 1nGy/h, response time is 50ms, can detect various kinds of x-rays and gamma rays in ultra fast speed. The R750 owns huge memory capacity to store data which can be uploaded to PC. It use unique circuit design and software algorithm, can do dose equivalent rate and absorbed dose rate energy calibration respectively. The R750 is the only one can detect both dose equivalent rate (Sv/h) and absorbed dose rate (Gy/h) in the world. Model R750 radiation detector is equipped with clarity and large touch screen, not only can display the real value, maximum, minimum and alarm threshold at the same time, but also the radiation dose rate can be shown through the time domain waveform figure, and the dose rate accumulation automatically. The R750 has European CE and ISO9001 quality certification.

Application

Model R750 radiation detector can measure the intensity of X and γ ray in the surrounding environment, help the operator to estimate the leakage of X and γ ray using the function of background value removal quickly, and staff can make related to facilities and regional measures in time, ensure people avoiding the damage from radiation.

The R750 can be used in:

All kinds of X-ray equipment

Hospital γ knife treatment

Radiation health hospital

NDT (Non destructive testing)

Import and export commodity inspection

Building materials, petrochemical industry, geological survey

Iron and steel scrap, nuclear laboratories and all places where radiation

Product features

3.2 inches color LCD

Graphical interfaces operating system

Background value removal, can detect low-energy x-rays

High sensitivity sensor, $1 \mu\text{Sv/h} > 2000\text{cps}$ (Cs137)

Can display time, real time value, maximum value, minimum value, alarm threshold, %

Energy response 15keV-7MeV

Response time less than 50ms

Huge memory capacity

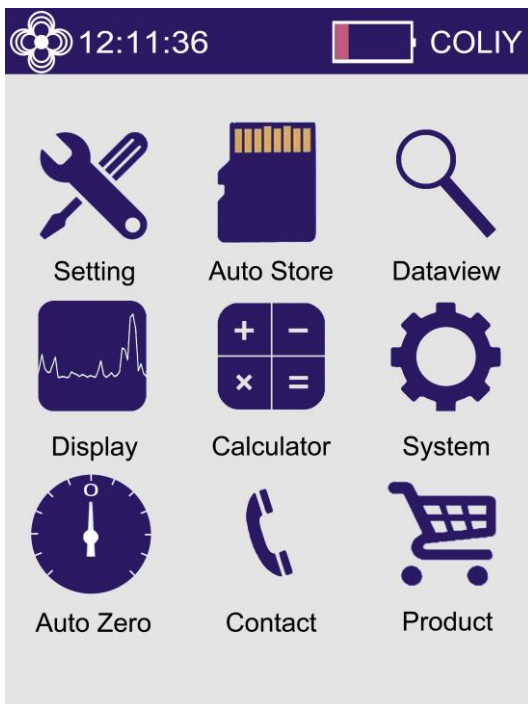
History data can be uploaded to PC

Dose rate (Sv / h) and absorbed dose rate (Gy / h), automatic dose rate cumulative

Specification

| | |
|---------------------------------|--|
| Sensor | Φ80x80mm plastic scintillation |
| Range | Dose equivalent rate: 0.001-200μSv/h Absorbed dose rate: 0.001-150μGy/h |
| Sensitivity | 1 μSv/h > 2000cps (Cs137) |
| Dose equivalent measuring range | 0.001-9999μSv 0.001-9999μGy |
| Best Response time | <50ms |
| Energy response | 15keV-7MeV (±15%) |
| Display | 3.2 inches color LCD |
| Software | History data can be uploaded to PC |
| Background value removal | Automatically or manually, 95% remove |
| Operating system | Graphical interfaces operating system |
| Alarm function | Audible and visual alarm, alarm value setting fully adjustable |
| Alarm condition. | Super threshold alarm, fault alarm, low battery alarm, outrange alarm |
| Accuracy | ±15% |
| Repeatability | 30% |
| Angle response | ±20% (662keV, Cs137) |
| Working humidity | ≤80% R.H (condensate) |
| Atmospheric pressure | 86kPa-135kPa |
| Operating temperature | -20 ℃ to 60 ℃ |
| Storage temperature | -30 ℃ to 70 ℃ |
| Size | Meter : 238mm x 95mm x 42mm Probe: Φ100x350mm |
| Weight | Meter: 0.35kg Probe: 1.65kg |
| Communication interface | USB |
| Battery power | 4500mAh rechargeable lithium batteries |
| Battery continuous working time | >24 hours |
| Power saving mode | >40 hours |

Display

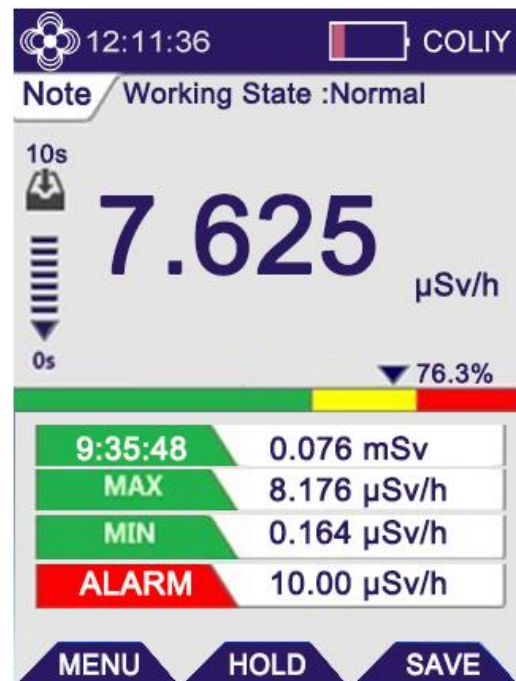


Graphical interfaces operating system

Coliy develops a set of revolutionary Graphical interfaces operating system which breaks the style of traditional instrument, and the customer can use the R750 like using the smart phone and will get a new experience by using this system.

Style of display

Large and clarity touch screen can display the real value, maximum, minimum, alarm threshold, % and so on, intuitively.



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