

R700 Multi probes Radiation Detector



Description

The R700 multi probes radiation detector in the traditional handheld operating system on a comprehensive upgrade to the new development of the Coliy graphical interface operating system, greatly simplifying the operational process. The R700 is equipped with a 3.2 inches touch color LCD, allows customers to read the data clearly. With various probes, R700 can detect the radiation measurement α β γ X and neutron. The energy response ranges from 2keV to 7MeV, high resolution, fast response, and increased patented background removal algorithm, can remove 95% of the background. The probe is made of advanced aviation aluminum, seamless, waterproof and dustproof. The R700 owns huge memory capacity to store massive amounts of data which can be uploaded to PC. Probe cable up to 500 meters (to be customized), optional wireless probe, greatly facilitate the use of customers.

The R700 multi probes 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 articulation can be done automatically. The host identifies probe built-in probe parameters and calibration parameters automatically and to remind users when to calibrate next time. The R700 has European CE and ISO9001 quality certification.

Application

R700 multi probes radiation detector could be widely used in restaurants, hotels, families, public places, laboratories, power plants, quarries, emergency rescue stations, metal treatment plants, undergrounds and underwater oil fields and oil pipeline equipment, environmental protection, police stations and other departments. It can also be used to:

Inspect food pollution

Inspect water pollution

Inspect environmental pollution

Inspect underground water, radium pollution

Inspect radioactivity of porcelain, tableware and glass etc

Inspect local radiation leakage and nuclear radiation pollution

Inspect radioactivity of materials architecture, such as stone etc

Inspect radioactivity of underground drilling pipes and equipment

Inspect harmful radiation in personal precious property and jewelry

Inspect landfill and garbage dumps in danger of nuclear radiation contamination

Inspect X-ray intensity of Medical and industrial X-ray instrumentation

Product Features

Graphical interface operating system

Chinese and English interface both available

3.2 inches touch color LCD

Connect different types of probes

The host automatically recognizes the probe and automatically prompts the next calibration date

Remove background value

Display various kinds of measurement data

Huge memory capacity, can be set automatically or manually

7000mAh rechargeable lithium batteries

History data can be uploaded to PC

Instrument Specification

Range

See probe specification

Types of probe

See probe specification

Display unit

Sv/h, Gy/h, rem/h, Sv, cps, cpm, Bq/ cm²

Operating temperature

-20 ℃ to 60 ℃

Storage temperature

-30 ℃ to 70 ℃

Display screen

3.2 inches touch color LCD

Display mode

Standard mode; Time domain chart mode

Operating system

Graphical interface operating system

Display interface is Chinese and English

Alarm

Audible and visual alarm, user-defined range

Alarm threshold value

User-defined

Communication interface

USB

Telescopic link (Optional)

Length 153cm (customize)

Size

L238mm, W95mm, H42mm

Weight

Meter:350g

Battery power

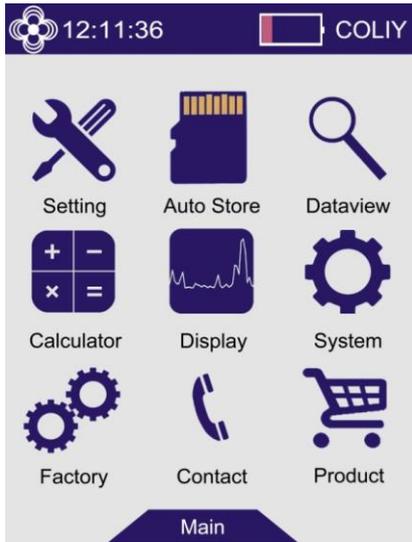
7000mAh rechargeable lithium batteries

Battery continuous working time

Power saving mode

24 hours

40 hours



Style of display

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

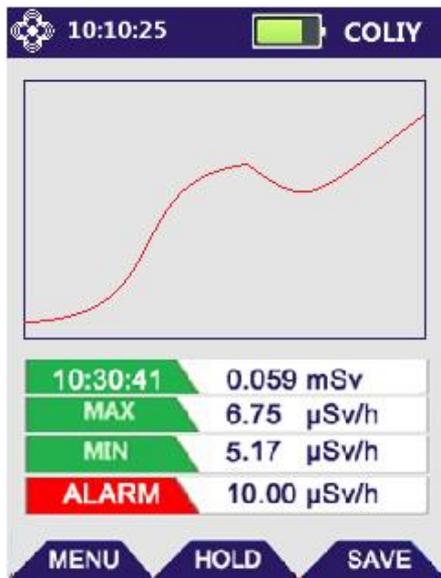
Graphical interface operating system

Coliy develops a set of revolutionary graphical interface operating system which breaks the style of traditional instrument, and the customer can use the R700 like using smart-phone, greatly simplifies the operation process.



Trend Graph

Color LCD also can show trend graph. Customer can set X-axis from 1 minutes to 30 minutes.



Probes Specification

Probe Mode	Description
CS30A NaI Scintillator Probe	Sensor: $\phi 30 \times 30$ mm NaI Crystal Range: 0.01-2500 $\mu\text{Sv/h}$ Sensitivity: $1 \mu\text{Sv/h} \geq 350 \text{cps} (^{137}\text{Cs})$ Energy response: 50keV-3MeV Accuracy: $\leq \pm 15\%$
CS75 Plastic scintillator probe	Sensor: $\phi 75 \times 75$ mm Plastic scintillator Range: 0.001 $\mu\text{Sv/h}$ -200 $\mu\text{Sv/h}$ Energy response: 50keV-3MeV Sensitivity: $1 \mu\text{Sv/h} \geq 1500 \text{cps} (^{137}\text{Cs})$ Resolution: 0.001 $\mu\text{Sv/h}$
GM30A GM tube probe	Sensor: GM tube Range: 0.01 $\mu\text{Sv/h}$ -1000 $\mu\text{Sv/h}$ Energy response: 50keV-3MeV Sensitivity: $1 \mu\text{Sv/h} \geq 7 \text{cps} (^{137}\text{Cs})$ Accuracy: $\leq \pm 15\%$
N10 H neutron gamma probe	Sensor: H neutron gamma ray detector 4 π omnibearing Size: $10 \times 10 \times 10$ (mm ³) Range: Neutron: 0.1 $\mu\text{Sv/h}$ -10 mSv/h γ : 0.01 $\mu\text{Sv/h}$ ~20 mSv/h Sensitivity: Neutron: $1 \mu\text{Sv/h} \geq 0.5 \text{cps} (^{252}\text{Cf})$ Energy response: 0.025eV-16MeV Gamma suppression ratio: $\geq 1000:1$
N20 H neutron gamma probe	Sensor: H neutron gamma ray detector 4 π omnibearing Size: $20 \times 20 \times 20$ (mm ³) Range: Neutron: 0.1 $\mu\text{Sv/h}$ -10 mSv/h γ : 0.01 $\mu\text{Sv/h}$ ~10 mSv/h Sensitivity: Neutron: $1 \mu\text{Sv/h} \geq 2.7 \text{cps} (^{252}\text{Cf})$ Energy response: 0.025eV-16MeV Gamma suppression ratio: $\geq 1000:1$
CS170 Large area Surface contamination detector	Sensor: ZnS+Plastic scintillator Effective area: 170cm ² Range: 0-1Mcps Energy range: $\alpha > 3 \text{MeV}$ $\beta > 150 \text{keV}$ Detection efficiency: $\alpha \geq 24\%$ (²⁴¹ Am); $\beta \geq 30\%$ (²⁰⁴ Tl) Detection background: $\alpha \leq 0.1 \text{cps}$; $\beta \leq 12 \text{cps}$
CS30D Surface contamination detector	Sensor: ZnS+Plastic scintillator Effective area: 30cm ² Counting range: 1~10 ⁵ Detection efficiency: $\alpha \geq 30\%$ (to ²³⁹ Pu); $\beta \geq 25\%$ Detection background: Every minute counts $\alpha \leq 3$, $\beta \leq 120$ Relative basic error: $\leq \pm 15\%$

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Contents in this file for reference only. The actual specification of the product is subject to the client's contract.

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