

R500 Radiation scanner/ Surface Contamination Meter

Food inspection



USB PORT

High-sensitivity sensor

Detect α β γ X radiation

Computer analysis software

Description

R500 radiation scanner can not only be used as Personal radiation detector (unit as $\mu\text{Sv/h}$) but also can be used as Surface Contamination Meter (unit as cps, cpm). R500 radiation scanner can detect α , β , γ and X-rays. The R500 has adopted the nuclear radiation sensor standards as recommended by the American Bureau of Standards and has a 2 inch large flat high sensitivity sensor. The R500 is one of the best performing instruments in the current market. With a correction factor function the customer can adjust correction parameters; the unit provides an average time setting function. The R500 has a significantly improved response time. New ergonomic design, protection from electromagnetic interference using anti-saturation circuitry. Calibration of this unit can be done remotely so there is no need for direct contact at the time of calibration. The R500 has full CE certification and is manufactured to ISO9001 quality standards.

Application

Model R500 can be easily used in restaurants, hotels, home, public places, laboratories, power plants, quarries, emergency rescue stations, metal treatment plants, underground oil fields, and oil pipeline equipment, environmental protection, police stations and other departments. It can also be used to:

Inspect food pollution

Inspect environmental pollution

Inspect radioactivity of porcelain tableware and glass etc.

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

Inspect radon radiation and cesium pollution in the surrounding environment

Inspect landfill and garbage dumps in danger of nuclear radiation contamination

Features

1. Slide cover



By opening the slide you are able to detect α β γ and x-rays



By closing the slide the sensor is dual protected and can detect gamma and x-rays.

2. Stain-proof sets



With stain proof sets, even if contacting with materials polluted by radiation there is no need for concern just replace the stain-proof sleeve on the R500.

3. Telescope link



Telescope link can extend to 1.5 meter maximum to remotely detect radiation rays and protect humans from potential injury.



The point angle of the telescopic rod can be randomly adjusted.

Specifications

Types of measured Ray	α 、 β 、 γ and X ray
Range	Radiation dose rate:0.01 μ Sv/h-1000 μ Sv/h/0.001mR/hr-100mR/hr Impulse dose rate:0-300,000cpm/0-5,000cps Radiation dose accumulation:0.001 μ Sv-999Sv
Sensitivity	3500CPM/mR/hr(aboutCs-137)
Sensor	Large GM tube effective diameter 45mm MICA window density1.5-2.0mg/cm ²
Output port	USB Port (with special USB extend cable to opt which can extend to 100M)
Average time	Default:32 seconds adjustable from 2s to 120s automatically or manually
Display	Large LCD with bar graph display
Efficiency	Pu239(α)about40%, Am-241(5.5MeV α)about 36%;Sr-90(546KeV 2.3MeV β max)about65%;C-14(156KeV β max) about 8%;Bi-210(1.2 MeV β max)about64%;
Anti saturation	Exceed the maximum reading of up to 100 times reading remains at full scale.
Calibration	Calibration factor adjustable
Alarm	Alarm value setting fully adjustable default: 5 μ Sv/hr
Precision	\pm 15%
Storage	Storage of up to 2000 data points manually or automatically
Software	Transmit data in real-time to computer for displaying analyzing and recording.
Working temperature of detector	-40 $^{\circ}$ C to75 $^{\circ}$ C Degrees C
Weight	450 g
Dimension	L 300mm W90mm H 40mm
Power	3 AA battery Continuous operation for up to 30 days
Quality certifications	European CEUS FCC15
Warranty	1 year