Find radioactive material quickly and accurately with the rugged, fully automatic GR-110G

GR-110G

Gamma Radiation Detector

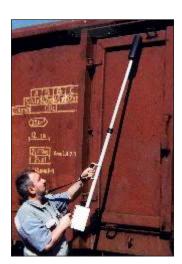
Designed Specifically For The Metals & Nuclear Industries.

The GR-110G Radiation Detector offers high sensitivity and automatic operation in a rugged, light-weight package, making it an ideal survey instrument for any demanding environment.

The instrument, equipped with a 4.5 cubic inch Sodium-lodide detector, provides sensitivity on the order of 10 to 100 times that achieved by Geiger-Mueller, ion chamber or plastic detector hand-held units.

The combination of an adjustable audio alarm, two sensitivity and sample time modes and a bright digital display enables the operator to quickly and accurately determine the location of the radioactive material, even in the noisiest environments.





GR-110E Option

For the hard to reach surveying locations, Exploranium offers a 6 ¹/₂ foot (2 meter) telescopic extension version of the GR-110G. The GR-110E offers a safe alternative in physically demanding environments.

Features

- Easy-to-Use
- Fully Automatic Operation
- High Sensitivity & Quick Response Time
- Most Rugged Detector On The Market

GR-110E Telescopic Extension Feature









Standard GR-110G Kit

When received from Exploranium, the GR110G standard kit includes the following items:

- GR-110G Detector
- Leather case with belt clip and shoulder strap.
- Test Source (Cesium-137)
- Instruction Manual.
- Two "D" Cell Batteries.
- PVC, Rugged Storage Case.

FOR MORE INFORMATION

EXPLORANIUM RADIATION DETECTION SYSTEMS

Proven Leadership In Innovative And Reliable Radiation Detection Technology.

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GR-110G

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GR-110G SPECIFICATIONS

Detector

- 1.5" x 1.5" x 2" (38 x 38 x 50 mm) Sodium-Iodide, Crystal NaI (T1) with PMT, magnetic shield and shock mounting.
- 4.5 cu.ins. (74 cm³) crystal gives the instrument very high sensitivity and quick response time

Display

4 digit LCD display - maximum count rate 9,999
Overload protection

Audio Alarm Level

- Audio alarm adjustable to the local background level
- Audio via high efficiency loudspeaker and proportional to the count rate.
- Low battery alarm via beeping audio and flashing display.

<u>Controls</u>

- Two concentric controls
- Outer Knob
 - Off System off
 - B Battery check/display test
 - 1 1 second accumulate / 45 keV 3.0 MeV
 - 10 10 seconds accumulate / 45 keV 3.0 MeV
 - $\mbox{HE -} \quad 1 \ second \ accumulate \ / \ 0.40 \ MeV \ \ 3.0 \ MeV$

Center Knob

Audio background control: Permits "zeroing-out" of the background in order to discern small changes in the audio.

Energy Response

• 45 keV to 3.0 MeV

Time Constant

• Audio: 1.0 second for 0 to 2500 cps change.

Conversion Factors (for cesium 137),

• Range 1/10 $1 \text{ cps} = 0.1 \text{ x } 10^3 \text{ mR/Hr}$ $= 1.0 \text{ x } 10^3 \text{ µSv/Hr}$ Range HE $1 \text{ cps} = 0.36 \text{ x } 10^3 \text{ mR/H}$ $= 3.23 \text{ x } 10^3 \text{ µSv/Hr}$

Temperature Ranges

- Operating: 25°C to 50°C
- Storage : 30°C to 70°C

Housing

• Hardened aluminum 0.05" (1mm) thickness case.

Dimensions

• Approximately 2.3" x 4.9" x 8.3" (5.3 x 12.4 x 21 cm).

Weight

• 3.3 pounds (1.5 kg)

Power Requirement

• 2 alkaline "D" cell batteries permit 100 hours of continuous operation

Agent Information

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