

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-Iodide 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.



Features

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



GR-110E Option

For the hard to reach surveying locations, Exploranium offers a 6 ½ foot (2 meter) telescopic extension version of the GR-110G. The GR-110E offers a safe alternative in physically demanding environments.

GR-110E
Telescopic Extension Feature



From

EXPLORANIUM
RADIATION DETECTION SYSTEMS

GR-110G

SPECIFICATIONS



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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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.

Controls

- 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
- HE - 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 cps = 0.1 x 10 ⁻³ mR/Hr	1 cps = 0.36 x 10 ⁻³ mR/H
= 1.0 x 10 ⁻³ μSv/Hr	= 3.23 x 10 ⁻³ 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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