

COMPACT HAND HELD RADIATION DETECTOR

RS-111

GEORADIS

The **RS-111 HANDY SCINT** is a compact hand held radiation detector specifically designed to quickly determine the location of radioactive material. The high sensitivity **RS-111** is an ideal instrument for surveying people, packages or materials, quickly and simply detecting Gamma Ray emitting radioactive sources in various combinations and in most situations.

The small size and light weight of the **RS-111** together with the balanced handle, equipped with a single thumb button, allows easy one handed operation. The single ON/OFF button also allows easy set up of a limited number of working parameters.

The **RS -111** features a large numeric LCD display showing, user selectable, either actual counts per second (cps) or dose rate (based on equivalence to Cs 137). The visual display is complimented by a loud variable pitch audio tone, proportional to the intensity of the gamma radiation detected, for eyes free searching. The threshold for audio indication is adjustable manually or automatically and reflects the current background. The audio indication can be switched off if required.

For working in potentially dangerous situations, a maximum allowed dose rate or cps rate can be set. If the dose rate or cps rises above this level it triggers an automatic acoustic alarm warning.

USE

- Nuclear facilities
- Scrap metal recycling plants
- Recycling facilities
- Waste management
- Production facilities
- Geophysical applications
- Security and surveillance operations
- Hospitals and special laboratories



The **RS-111 HANDY SCINT** has a dustproof, shower proof, lightweight aluminium case. A detachable plastic boot with carrying strap provides additional protection for difficult situations.

The unit is powered by four AA type batteries. A fully automatic charger is integrated in the unit for use with rechargeable (NiCd or NiMH) batteries. Nonrechargeable batteries (Alkaline) can also be used if necessary (but not recharged). The **RS-111** is supplied in an aluminium carrying case.

GEORADIS

Technical data:

Detector:

Nal(Tl), dimensions ϕ 30 x 30 mm (1,18" x 1,18")
 10 cm³ (1.3 in³) integrated with bi-alkali
 photomultiplier

Sensitivity:

60 cps/1MBq for 137-Cs in the free space, in 1 m
 distance

Energy response: 30 keV - 3,5 MeV

Acoustic indication:

miniature speaker piezo
 audio frequency is proportional to registered
 count rate

Display:

7 segment LCD, - 4 1/2 segments, maximum
 counts 19999, reflective

Control: single push button, thumb activated
 ON/OFF function and background reset

Power supply:

4 "AA" type battery rechargeable (NiCd or NiMH)
 or nonrechargeable (alkaline) lifetime typically
 50 hours of operation at 20 °C for NiMH accu 2,0
 Ah

80 hours of operation at 20 °C for alkaline battery
 2,8 Ah. Automatic charger build in the unit.



PROPERTIES

- High sensitivity with NaI/Tl crystal
- Numeric LCD display maximum 19999 cps and audio output
- Readings in counts per second. Sampling rate 4 per second
- Adjustable audio threshold
- Automatic warning of high dose rate
- Plastic protection boot with carrying straps
- Sprinkling water and dust resistant (IP66)
- Lightweight and well balanced 1,3 kg (2,4 lb)
- Fully automatic charger integrated in unit
- Supplied in aluminium suitcase with moulded insert

Temperatures:

Working temperature range: -10 °C - +50 °C

Storage temperature range: -20 °C - +60 °C

Dimensions:

width: 65 mm

height: 145 mm

long: 220 mm

Mass:

1.3 kg including the batteries

Standard accessories:

- RS 111 Handy Scint
- Protection boot with carrying strap
- Batteries 4 pieces
- Power net adaptor
- User manual

Optionally:

- RS 111T with telescopic detector extension