

# Compact Hand Held Radiation Detector

**GEORADIS**

## RT-20 series

The RT-20 HANDY SCINT is a robust and compact hand held radiation detector specifically designed to quickly scan for radioactive materials. The ruggedness, small size and light weight of the RT-20, combined with its sensitive Gamma Ray scintillation detector makes it a versatile instrument for quick measurements in a large variety of applications.



- **Compact and Rugged design**
- **Easy to Use**
- **One Button Operation**
- **Eyes free Scanning**
- **2-year Warranty**

The RT-20 is an ideal instrument for quickly and simply surveying people, surfaces, packages or materials, in various combinations and in most situations. An alternative model with extensible telescopic arm and carrying strap, the RT-20T is available for ease of operation when tall objects are to be scanned.

The small size and light weight of the RT-20 together with the balanced handle equipped with a single push button, allows for easy one handed operation. A loud variable pitch audio

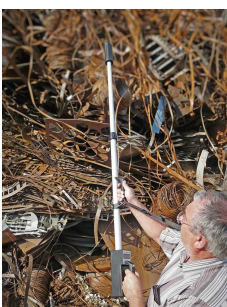
tone, proportional to the intensity of the gamma radiation detected, provides eyes free searching.

The RT-20 features a large numeric LCD display showing either actual counts per second (cps) or dose rate (based on equivalence to Cs 137). For working in potentially dangerous situations, a maximum allowed dose rate or cps rate can be set to trigger an acoustic alarm warning.

The RT-20 HANDY SCINT has an IP65 dust and water resistant, lightweight aluminium casing with a detachable plastic boot for additional protection under harsh environments. The unit is powered by a battery pack containing four AA type batteries (Alkaline or Rechargeable). A fully automatic charger is integrated in the unit for use with rechargeable (NiCd or NiMH) batteries.

### Applications

- **Hospitals**
- **Nuclear facilities**
- **Waste Recycling and Incineration plants**
- **Scrap metal recycling**
- **Research laboratories**
- **Production facilities**
- **Geophysical survey**
- **Security and surveillance operations**



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## Technical data

### Detector

NaI(Tl), dimensions 30 x 30 mm (1.18" x 1.18"),  
21 cm<sup>3</sup> ( 1.3 in<sup>3</sup> ) integrated with bi-alkali PMT

### Sensitivity

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

### Energy range

30 keV - 3,5 MeV

### Acoustic indication

miniature piezo speaker, audio frequency is proportional to measured count rate

### Display

reflective 7 segment LCD, 4 1/2 digits, maximum 19999

### Operation

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

### Power supply

4 "AA" type battery, rechargeable (NiCd or NiMH) lifetime typ. 50 hours of operation at 20 °C for 2,0 Ah NiMH or non-rechargeable (alkaline) 80 hours of operation at 20 °C for alkaline battery 2,8 Ah. Automatic charger is built into the unit.

### Environmental

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

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

IP65 Water and Dust resistant

### Dimensions

l x w x h: 220mm x 65mm x 145mm

Weight: 1,3 kg including the batteries

### Warranty

2-Year Warranty

### RT-20 Standard Delivery

RT-20 with protection boot.

Battery Pack with 4 AA-type Batteries.

Mains adaptor.

User manual.

Standard case for storage and transportation

### RT-20T Standard Delivery

RT-20T with telescopic detector extension, protection boot and carrying strap.

Battery Pack with 4 AA-type Batteries.

Mains adaptor.

User manual.

Customized case for storage and transportation.

### PROPERTIES

- Sensitive NaI/Tl crystal
- Numeric LCD display maximum 19999
- Counts per second (cps) or Dose rate
- Sampling rate 4 per second
- Adjustable audio threshold
- Automatic warning of high dose rate
- Plastic protection boot
- Water and Dust resistant (IP65)
- Lightweight and well balanced 1,3 kg
- Fully automatic battery charger integrated in unit



Specifications are subject to change without notice