

# Handheld Radiation Detector

**GEORADIS**

## RT-21 and RT-22 series

The RT-21 and RT-22 SUPER SCINT are a robust and compact series of hand held radiation detectors specifically designed to quickly scan for radioactive materials. Models with NaI or BGO scintillator are available as well as models with an extensible telescopic arm for ease of operation when tall objects are to be scanned.



Quickly determining the location of lost radioactive sources in the environment or scrap, monitoring of waste in hospitals or waste incinerators, scanning people or baggage to disclose illicit trafficking of nuclear materials; all are typical applications for the RT-21 and RT-22 series.

- **Highest Sensitivity**
- **Rugged, Lightweight and Compact design**
- **Graphical Display**
- **One Button Operation**
- **USB connection**
- **Bluetooth (RT-22 only)**
- **Weather protected**
- **2-Year Warranty**

The graphical display shows a histogram of the last 100 measurements to quickly determine the location of the radiation. The RT-21 and RT-22 series have a balanced handle equipped with a single push button, that allows for easy one handed operation.

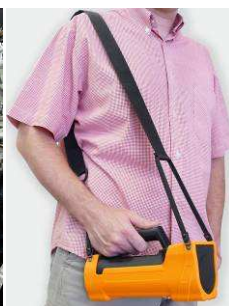
A loud variable pitch audio tone, proportional to the intensity of the gamma radiation detected, provides eyes free searching. Both trip level for the audio as well as a threshold for danger alarms can be set by using GeoView software package.

Georadis is acknowledged as a foremost producer of innovative radiation detection products, devices and solutions. The built-in Bluetooth connectivity for the RT-22 series allows a GPS location to be integrated with the measurement. Bluetooth also provides access for wireless headsets for audio feedback in high noise areas.

The ruggedness, small size and light weight of these instruments, combined with a choice of very sensitive Gamma Ray scintillation detectors makes the RT-21 and RT-22 series very versatile for quick measurements in a large variety of applications.

### Applications

- **Waste Recycling and Incineration plants**
- **Scrap metal recycling**
- **Security and surveillance operations**
- **Hospitals**
- **Customs and Border protection**
- **Nuclear facilities**
- **Research laboratories**
- **Production facilities**

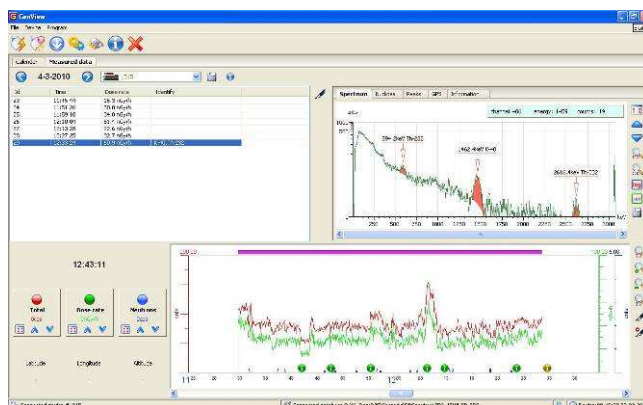


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## GeoView Software

To support the administrative and recording requirements for many applications Georadis introduces the software package GeoView. Making a report has never been easier using this universal user interface.

Depending on the instrument, GeoView provides detailed views on collected data such as survey data in both cps and dose rate. User comments can be added to the measured data by using the built-in active notepad. All information is easily exported and then used in external software packages like Google Earth to plot GPS information.

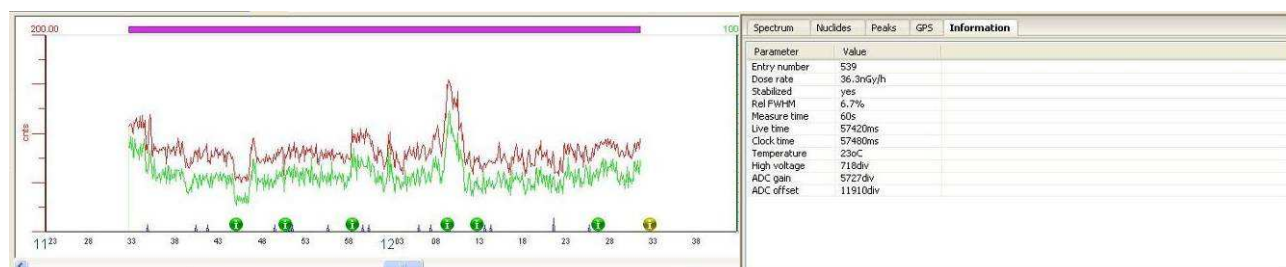


The universal connectivity of GeoView allows the download of stored information from any of the connected Georadis instruments via Bluetooth or USB. The SQL oriented database contains all downloaded information from all units in a structured manner and archiving of data was never easier. Multiple users are able to view the information stored in a shared database. In addition GeoView administrates and stores the instrument settings for each unit connected, making it easy to manage multiple instruments.

- Survey data
- Calendar based
- Export data to e.g. Google Earth
- Instrument administration
- Add comments
- Maintenance support

GeoView also provides for maintenance assistance on the Georadis instruments and uploads instrument details and parameters to Georadis Service Centre via Internet. Georadis experts analyse amongst others the instrument LOGs to check instrument behaviour. Modified settings are then send via Internet to GeoView and the user can then upload these parameters to the instrument.

GeoView is a versatile software package that is installed under Linux or Microsoft Windows operating system.

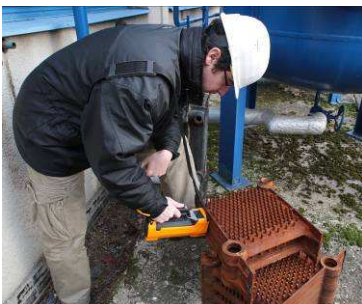


## RT-21 and RT-22 Product Range



The RT-21 and 22 series have an IP65 dust- and waterproof, lightweight cast aluminium housing and a detachable plastic boot with shoulder strap for additional protection under harsh environments. The units are powered by a handy quick change 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.

<b>GEORADIS</b>		RT-21	RT-21T	RT-21B	RT-21BT	RT-22	RT-22T	RT-22B	RT-22BT
<b>Standard Comparison Table</b>									
Display	Numerical								
	Graphical	•	•	•	•	•	•	•	•
Data acquisition	Gross Counting	•	•	•	•	•	•	•	•
	Spectroscopy								
Connectivity	USB	•	•	•	•	•	•	•	•
	Bluetooth					•	•	•	•
Memory	Medium (4Mb)					•	•	•	•
	Large (1Gb)								
Software	GeoView Package					•	•	•	•
	Isotope Identification								
	Assay mode								
Detector type	NaI, 30 x 30mm								
	NaI, 51 x 51mm	•	•			•	•		
	BGO, 51 x 51mm			•	•			•	•
	GM tube								
	Neutron Detector								
Mechanical	Handheld	•		•		•		•	
	Telescopic arm		•		•		•		•



## Technical data

### Detectors

NaI(Tl),  $\Phi 51 \times 51$  mm (2" x 2"), 104 cm<sup>3</sup> (6.3 in<sup>3</sup>), RT-21, RT-21T, RT-22 and RT-22T.  
BGO,  $\Phi 51 \times 51$  mm (2" x 2"), 104 cm<sup>3</sup> (6.3 in<sup>3</sup>), RT-21B, RT-21BT, RT-22B and RT-22BT.

### Energy range

30 keV - 3 MeV

### Scintillometer

Sampling period 20/second

### Gamma ray sensitivity free in air at 1m

(for RT-21, RT-21T, RT-22 and RT-22T only)

75 cps/1MBq for Am-241

160 cps/1MBq for Cs-137

270 cps/1MBq for Co-60

### Display

Graphic LCD 128x64 pixels 28 x 60 mm

Automatic Backlight

### Data Storage and Transfer

(RT-22 series only)

4 MByte FLASH

Bluetooth 1.2 Class 2

GPS Support NMEA 0183

USB 2.0 (all models RT-21 and RT-22)

### Environmental

IP-65 Water and Dust resistant

Operating temperature range -10°C to +50°C

RFI/EMF Shielding complies with FCC(47 CFR part 15) for Class A CE Certification

### Size (LxWxH) and Weight (incl batteries)

RT-21 & 22: 260x81x96 mm<sup>3</sup>, 2 kg  
(10.2"x3.2"x3.8", 4.4lb)

RT-21B & 22B: 260x81x96 mm<sup>3</sup>, 2,2 kg  
(10.2"x3.2"x3.8", 4.8lb)

RT-21T & 22T: 1225x85x135 mm<sup>3</sup>, 3,5 kg  
(48.2"x3.3"x5.3", 7.7lb)

RT-21BT & 22BT: 1225x85x135 mm<sup>3</sup>, 3,8 kg  
(48.2"x3.3"x5.3", 8.4lb)

### Package

Aluminium outer case (RT-21, RT-21B, RT-22 and RT-22B)

Special mould plastic case (RT-21T, RT-21BT, RT-22T and RT-22BT)

AC Net power adaptor

Spare battery cartridge

User guide

GeoView software (RT-22 series only)



Specifications are subject to change without notice

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