

## Portable Contraband Detector - RadReflex 2

Article No.: 1070005

### DESCRIPTION

Inspection of merchandise traffic across the border and control of vehicles for illicit goods, esp. drugs, cigarettes, explosives and weapons is a prominent task for customs services.

The portable contraband detector RadReflex checks hollow spaces fast and reliably. Hereby the area to be controlled is scanned with a radioactive test source. Goods and contraband inside the hollow spaces can be measured as they will reflect the radiation. Then the measured value is compared with known reference values. Significant deviations from the standard values are a sure indication for the presence of smuggled goods inside the hollow space.



### CHARACTERISTICS

- $\mu$ -controller-based measuring electronics
- digital and analogue measuring value information on large area,
- backlit graphic LC-display (128 x 64 pixels)
- menu-guided user interface, comfortable and simple to operate
- adjustable warning thresholds
- simple to operate measuring system, 5 function buttons
- ergonomic housing, handle with wrist loop
- optimized arrangement of detector and certified radiation source (0,95 MBq Ba-133)
- radiation source activity below license-free usage limit (< 1MBq)
- integrated, optimized tungsten shielding
- fulfils the limit values defined in the StrlSchV (§4 StrlSchV – license free usage, annex II)
- battery operation
- acoustic search function can be activated  
(sound changes depending on backscatter / density)
- integrated database with reference values of goods to be checked
- externalyl connectable indication unit for use in difficult accessible areas (option)
- serial data interface (option)

New: Possibility to detect  $\gamma$ -radiation, emitted by e.g. radio-active material.

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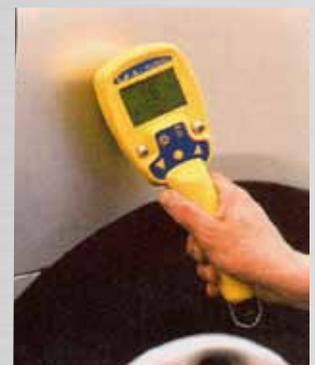
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### TECHNICAL DATA

Detector:	- Csl-detector 24 x 21 x 10 mm
Shielding:	- Separate tungsten shielding for detector and radiation source. - Minimum 14mm shielding at all sides when source is retracted.
Radiation source:	- 0,95 MBq Ba-133, ISO classification C.34444 - Enclosed radiation source integrated in tungsten turn plate and tungsten main shielding. - very long operating time of source. - Specially constructed, highly effected tungsten shielding, separate shieldings for radiation source and detector.
Radiation protection:	- Radiation source activity below license free usage limit (<1MBq) - Dose rate < 0.5µSv/h in 10cm distance from touchable surface in active, intended measuring mode. - Blinking LED (in keyboard area) as a safety warning in case of open radiation source (measuring mode). - Electronics: micro-controller-based measuring electronics with intelligent battery charge electronics.
LC-display:	- Graphical LC-display (128 x 64 pixels), illuminated. - Digital measuring value display with additional information, e.g. measuring object, additionally analogue (bargraph) measuring value display. - Keyboard: 5 function buttons, functions depending on menu (explained on LCD-display).
Housing:	- Impact resistant plastic material (Miramid), ergonomically shaped handle, with hand belt, secured operating lever.
Protection class:	- Spray and splash water protected according to IP 56
Temperature:	-15°C up to +40°C
Power supply:	- 2 batteries AA 1,5V
Interfaces:	- RS 232 for PC-system and 1 <sup>2</sup> C-interface for external display

### DIMENSIONS & WEIGHT

Dimensions:	90 mm x 60 mm x 270 mm (incl. handle)
Weight:	approx. 985 g (without batteries)



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### OPTION

1. Case for transportation and storage.
2. Serial interface for connection to a PC-system for parameter setting.
3. Software for parameter setting of RadReflex.
4. External, backlit indication unit (see fig.) with LC-display for simultaneous indication and switch for change of operating modes - for use in difficult accessible areas.
5. Telescope for controlling higher areas of a container or truck.