RadReflex 2 Portable Contraband Detector

New improved version

The inspection of the border crossing traffic of merchandise and the control of vehicles for illicit goods, especially drugs, cigarettes, explosives and weapons is a prominent task for the customs services.
The contraband detector RadReflex checks hollow spaces fast and reliably. The area to be controlled is scanned with a radioactive test source. The radiation is reflected by the good to be measured / contraband. The measuring 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

- μ-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 (< 1 MBq)
- integrated, optimized tungsten shielding
- battery operation
- acoustic search funtion can be activated (sound changes depending on backscatter / density)
- integrated data base with reference values of goods to be checked
- externally connectable display for use in difficult accessible areas (option)
- serial data interface

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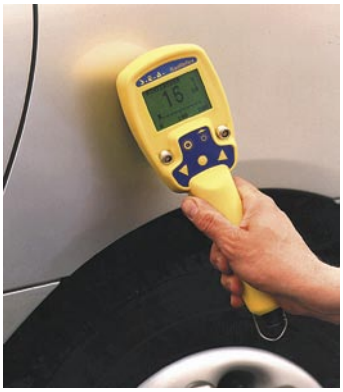
Technical Data: RadReflex - Contraband Detection System Version 2

Detector:	CsI-detector 24 x 21 x 10 mm
Radiation source:	0.95 MBq Ba-133, ISO classification C.34444 enclosed radiation source integrated in tungsten turnplate and tungsten main shielding very long operating time of source, at least 15 till 20 a
Shielding:	specially constructed, highly effective tungsten shielding, separate shieldings for radiation source and detector.
Radiation protection:	- radiation source activity below licence free usage limit (< 1 MBq) - dose rate < 0.5 µSv/h in 10 cm distance from the touchable surface in active, intended measuring mode - blinking LED (in keyboard area) as safety warning in case of open radiation source (measuring mode)
Scanning surface:	large bearing surface for reliable scanning of the area to be checked e.g. door of a car, exchangeable pads
Penetration:	penetration max. 10 mm steel or 25 mm aluminium under standard circumstances
Electronics:	micro-controller-based measuring electronics with intelligent battery charge electronics
Interfaces:	RS 232 for PC-system and I²C-interface for external display
LCD-display:	graphic-LCD-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 keys, functions depending on menu (explained on LCD-display)
Alarm:	acoustic alarm
LED in keyboard area:	- as charging control light in connection to external battery charger - blinking as safety warning in case of open radiation source (measuring mode)
Housing:	impact resistant plastic material (Miramid ®), ergonomically shaped handle, with hand belt, secured operating lever
Protection class:	spray and splash water protected IP 56
Temperature:	-15° C till + 40° C
Power supply:	2 batteries or rechargeable batteries type AA, Mignon 1.5 V
Dimensions:	90 x 60 x 270 mm (incl. handle)
Weight:	ca. 985 g (without batteries)



Options:

1. Case for transportation and storage
2. Serial interface
   for connection to a PC-system for parameter setting
3. 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
4. Software for parameter setting of RadReflex
5. Telescope for controlling higher areas of a container or truck

We reserve the right to change specifications due to continuous research and development

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