

RadReflex 2

Portable Contraband Detector

Art.-No.: 0400100

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

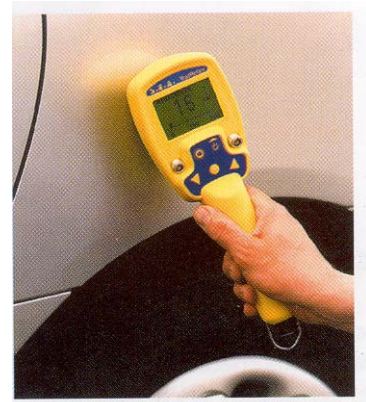
- μ -controller-based measuring electronics
- digital and analogue measuring value information on large area,
- backlit graphic LC-display (128 x 64 pixels)
- menu-guided user interface, comfortable and simple to operate
- adjustable warning thresholds
- simple to operate measuring system, 5 function 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 (< 1MBq)
- integrated, optimized tungsten shielding
- fulfils the limit values defined in the StrISchV (§ 4 StrISchV – 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
- externally connectable indication unit for use in difficult accessible areas (option)
- serial data interface (option)

New! Possibility to detect γ -radiation, emitted by e.g. nuclear material.

Technical Data:

Detector:	CsI-detector 24 x 21 x 10mm ²
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, at least 15 till 20 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 < 0.5 μ Sv/h in 10cm distance from touchable surface in active, intended measuring mode - blinking LED (in keyboard area) as safety warning in case of open radiation source (measuring mode)
Electronics:	micro-controller-based measuring electronics with intelligent battery charge electronics
LC-display:	graphic 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 IP 56
Temperature:	-15°C up to +40°C
Power supply:	2 batteries AA 1,5V
Interfaces:	RS 232 for PC-system and I ² C-interface for external display
Dimensions:	90mm x 60mm x 270mm (incl. handle)
Weight:	approx. 985g (without batteries)



Options:

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