

Portal-M

PORTAL MONITOR FOR FAST AND MOBILE USE



In emergency situations a fast and secure way to screen a large number of people for radioactive contaminations needs to be available and installed on the spot. The Portal-M is specifically designed for these situations. It can be equipped with several types and numbers of scintillation detectors based on the actual risk and contamination levels, providing fast and reliable monitoring results. It is both robust and extremely fast to assemble without the need to any tool. Children and adults are recognized automatically and the alarm thresholds are adjusted autonomously.

Benefits

- Simple and fast assembly without any screws & tools
- Easy decontamination
- No loose cables
- Children / adults automatic recognition and monitoring options
- Available with high sensitive plastic scintillation detectors
- Optional CsI(Tl) detectors or GM-tubes for higher contamination risks
- Optional top and bottom detectors for extra head and foot sensitivity

Key Figures

<5 minutes to install

12 kBq MDA for Cs-137

High count rate detector optional

Up to 6 detectors

Product Description

The Portal-M is a portal monitor for fast and secure radioactivity checks for people via several CsI- or plastic scintillation detectors.

The special design of the Portal-M leads to a fast and simple assembly of the portal in under five minutes. This allows a quick and flexible reaction to emergency situations. The robust, weather-proof and stable portal is an ideal solution for an entrance control for emergency units.

In the clear and intuitive software two thresholds can be programmed for children and two for adults. Surpassing the thresholds is indicated via acoustic and optical signals.

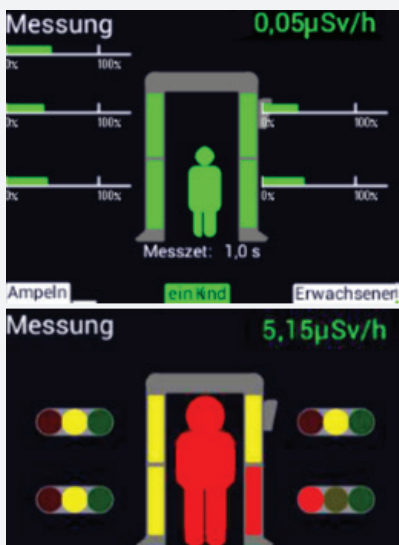
The Portal-M continuously measures the incoming radiation. Breaking the light barrier initiates the analysis of the radiation recorded in a specified time window before and after the initiation. This allows to pass through the portal in walking speed, which facilitates a high throughput.

Performance Characteristics

- Fast and secure contamination measurements with up to six detectors
- Head- and Foot-detector can be integrated (optional)
- Equipped with task-specific detectors
- Continuous background correction
- Multiple alarm thresholds individually programmable
- Separate program for children including an automatic recognition
- Fast assembly by 1-2 people in under 5 minutes without any tools (2 people recommended)
- Robust and weather-proof design enables outdoor use
- Secure stand with large base; adjustable angles optional
- Different display options: bar graph, traffic light, measurement value
- The display unit can be equipped with a 10 m extension cable and a mobile stand (optional)
- Transport and storage in an aluminium box

Product Specifications

Analysis and display of measurements	Microprocessor-controlled electronics
Weight	Approx. 60 kg (70 kg with transport case)
Dimensions	Approx. 2.20 x 1.30 x 0.85 m (HxWxD)
Assembly	Only 10 individual parts (<20 parts including all optional accessories)
Barrier-free passage size	100 x 209 cm (WxH)
Light barriers	At approx. 60 and 120 cm height
Up to six detectors	One detector in each of the lateral elements plus head and foot detector
GM-Counter	(optional) in the display unit
Examples of available scintillation detectors:	CsI: 13x13mm / 38x25mm (LxØ) detection threshold: 320/75 kBq ¹³⁷ Cs --- 200/45 kBq ⁶⁰ Co Plastic: 750x100x50mm (HxWxD) detection threshold: 12 kBq ¹³⁷ Cs --- 5 kBq ⁶⁰ Co
Power supply	Usable via vehicle socket or via 230V grid
Data Transfer	USB-interface



Different display options
 Top: bar graph & display of a child
 Bottom: traffic signal & display of an adult.



Simple assembly procedure of the Portal-M via plug- or clamp-connections.