

SPECTATOR-2

Vehicle mounted radiation measuring system

SPECTATOR-2 is a vehicle mounted measuring system for measuring the radiation level in areas with radioactive contamination and mapping the surveyed areas. The SPECTATOR-2 measuring system is placed in a special case.



The SPECTATOR-2 measuring system can be installed on a passenger car, SUV or minibus. The system consists of a sensitive radiation sensor and a control unit located in the cabin. The radiation sensor is attached to the front part of the vehicle using a bracket, the control unit is attached to the windshield of the vehicle with a suction cup from the inside.

During measurement, radiation level is shown on the control unit display. Results are also saved to device memory. If the dose rate value exceeds the alarm level, an audible and visual alarm is triggered.

The measurement data is read to the computer via a USB cable. The computer software included with the device allows to prepare measurement reports, view graphs of measurement results and show measurement results on a map.

SPECTATOR-2 Features and Benefits

- Compact, easy to set up and use
- Measures both gamma and beta radiation
- Real-time calculation and display of measurement results on LCD display
- GPS unit to determine and store measurement location
- Different measurement modes: dose rate ($\mu\text{Sv/h}$) and pulses per second (CPS)
- Selectable averaging modes: fast (4 s), slow (16 s) average and precision (continuous average) mode
- Visual and audible dose rate alarm, alarm level can be changed

Technical specifications

Parameter	Value
Detector γ -sensitivity	2 x 90 CPS/(mR/h), ^{137}Cs
Measurement range	0,05 – 100 $\mu\text{Sv/h}$ 1 – 1800 CPS
Speed of the car when measuring	Maximum 60 km/h recommended
Memory capacity	at least 240 hours (recording once per second)
Environmental operating conditions	-25 °C to +50 °C, at 95% relative humidity
Protection rating	Radiation sensor with connectors: IP67 (waterproof) Control unit: IP65 (moisture and splash proof)
Module dimensions (length x width x height)	Control unit without mount: 90 x 120 x 60 mm Radiation sensor: 450 mm x diameter 58 mm
Power supply	5 VDC. Car USB socket, cigarette lighter socket or battery bank
Maximum power consumption	2 W