

NuROC Road Contamination Monitor



NuROC is an innovative system designed to improve radiological safety of roads and other traffic areas. This vehicle-mounted equipment is optimized for rapid, accurate and repeatable detection of beta contamination hot spots, avoiding laborious manual monitoring. NuROC is suited to both routine monitoring and clearance measurements. Its array of detectors provides a large effective detection area making it feasible to monitor extensive areas of nuclear site as a matter of routine. The contamination monitoring system uses industry proven CoMo 300 thin-layer plastic scintillation detector technology.

Benefits

- Accurate and repeatable measurement with a fixed ground clearance
- Large surface measured in one pass
- User-friendly thanks to easy parameter setup and intuitive control
- Built-in safety features including lighting, beacon and rear camera

Key figures

400 Bq
 ➔ Minimum Detectable Activity

2700 cm²
 ➔ Detection area

1000 m²/h
 ➔ Coverage

Technical Specifications - Detection System

Number of detectors in array	9 fitted (+ 1 spare)
Detection threshold (configurable)	400 Bq (Beta contamination)
Measurement speed	4 km/h
Coverage	1000m ² /hr
Measurement array	Tilting table with 4 wheels to maintain a constant clearance from the ground
Total detection width	900mm
Distance to the ground (for Beta)	25mm (adjustable)
Power supply	CoMos are battery powered using USB cables + battery level indicator
Remote display	Windows tablet with 9 individual channels
Marking of the monitored surface	Water tracer powered by the battery
Nominal operating range	-10 °C to +40 °C (special version down to -20°C) Up to approx. 90 % RF (non-condensing)



Carrier - Adapted industrial compact autonomous vehicle

Brand	Kubota
Autonomy	8 hours (diesel fuel tank capacity 20L)
Speed range	0 - 13.5 km/h with speed control
Reverse	Yes
Cruise control	Yes

Safety Features

Platform lift	When not in use, the detection platform can be lifted.
Bumper and Roll bar	Yes
Warning signals	Safety lighting front and rear flashing beacon
Measurement array	Tilting table with 4 wheels to maintain a constant clearance from the ground
Headlights	for operating during darkness
Rear camera	Yes
Battery charge level indicator	Battery included into the storage box
Storage box	Capacity to store tooling for decontamination

