NUVIATECH INSTRUMENTS

SPECIFICATION SHEET

LARS

Large Area Radiation Scanner

Checking large areas for radioactive contamination requires a fast and reliable solution. For this purpose, NUVIATech Instruments has developed the mobile radioactivity measurement system LARS (Large Area Radiation Scanner).
Roads, transfer stations for fuel element containers or radioactive waste storage areas can be checked quickly and easily with a LARS. The measurement system can be used in a variety of ways thanks to its user-friendly design.

Benefits

- Mobile detector unit
- The distance from the detector unit to the ground can easily be height-adjusted electrically (approx. 5 - 35 mm)
- Calibration stored for each height
- Integrated direction and speed monitoring
- Calculation of max. speed based on the specified detection limit
- Large areas can be checked quickly and reliably
- 2-channel measuring method
- Easy to use
- Optical and acoustic alarm

Key figures

2 x 1250 cm^2

➥ *Detector area*

5 preset nuclides

➥ *4 nuclides + cps*

5–35 mm

➥ *Detector height adjustable*

Product description

The mobile, highly sensitive radioactivity measurement system LARS (Large Area Radiation Scanner) enables fast and reliable monitoring of large areas for γ-contamination, e.g. roads, transfer stations for fuel element containers or radioactive waste storage areas.

The measuring system is equipped with two large area plastic scintillation detectors with a total detector area of approx. 2500 cm^2

- to check large areas for γ-contamination quickly and reliably
- to search for radioactive sources
- to detect hidden/concealed radioactive materials
- to radiologically assess hazard situations after large-area contamination, e.g. after terrorist attacks involving radioactive material ("dirty bomb")

Technical data

Detector	Large area plastic scintillation detectors Total volume 250 x 500 x 50 mm^3 x 2
Measurement channels	Total energy from approx. 100 keV - approx. 2 MeV High energy from approx. 500 keV - approx. 2 MeV
Measured value display	Optionally in cps, Bq or Bq/m^2 (5 reference nuclides)
Measuring time	0.1s - 10s (adjustable) or calculated depending on detection limit
Alarm	Separately adjustable for each channel
Detector electronics	High voltage generation 500V to 2000V, preamplifier for scintillation detectors, output amplifier with line driver and discriminators for energy selective measurement.
Measuring electronics	Microprocessor-controlled measurement electronics with integrated LCD control, relay outputs, count inputs
Keyboard	Plastic foil keyboard, 4 single keys, 2 arrow keys and 2 function keys
Fields of application	Nuclear facilities, military facilities, safety relevant facilities
Power supply	12 V, lead gel accumulator 12 Ah
Display	Large LC display
Size (L x W x H without handle)	900 x 780 x 350 mm
Weight	Approx. 70 kg