



SOLUTION

NUVATCH SCALABLE EARLY WARNING RADIATION MONITORING NETWORK



NuWATCH is a comprehensive early warning network for radiation monitoring and analysis based on a multiple sensors distributed over a medium to large area. This network of detectors connected to the RADIS software can display a near real-time map of the radiological conditions.

NuWATCH solution is specifically designed to warn about important deviations from averages caused by radionuclides, so that efficient countermeasures can be used.

Characteristics

- Continuous and autonomous real-time monitoring of radiation combined with monitoring of radioactivity in environmental samples (water, soil, crops, ...)
- Ability to couple ambient dose rate measuring with spectrometry for identification of the detected radionuclides
- Simultaneous recording and storage of data from different detectors. Data transfer to the central database every 10 minutes
- Additional environmental measurements provided as an option (air sampler, weather monitoring...)
- User-friendly, modular and customizable central software RADIS
- After-sales service provided by local partners
- Rugged design of monitoring stations for extreme weather conditions

Benefits

- Scalable network coverage adapted to any size of geographical area, from a single installation to national monitoring network
- Continuous and autonomous real-time monitoring and analysis
- Wide dose rate range measurements, from 10nSv/h to 10Sv/h
- Preventive solution enabling identification of effective measures if radiological events occur
- Battery or solar power



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Scalable monitoring

A number of installed monitoring stations that create a radiation monitoring network across large region is called AREA MONITORING, such as MonRas at the scale of the Czech Republic national territory. Continuous real-time measurements of radioactivity are guaranteed by state authorities and publicly shared via the Internet.

Alternatively, the monitoring stations can be strategically placed in the vicinity of power plants, for so called RING MONITORING, or inside nuclear facilities.

Related products: NuDET EGM, ENA, ENA UW

Mobile monitoring & sampling

Mobile monitoring is an effective way how to obtain large-scale data during routine monitoring, radioactive material transport or during radiological events.

Mobile monitoring can be airborne with the use of drones, or ground monitoring with the help of the cutting-edge detection and measurements devices.

Mobile monitoring is usually coupled with measuring of environmental samples, such as soil, air, water, crops, or agricultural products.

If the contamination exceeds a preset threshold, the authorities are warned in time to take early precautions.

Related products: Drone-G, RADPATROL, NuVISION

Data collection & processing

Highly sensitive detectors provide the ambient gamma dose rate or spectrometry data, depending on client's requirements.

The versatile and modular software RADIS analyzes data from any size of network while displaying all connected devices on a single screen. Some stations communicate via the satellite.

Related products: NuSOFT RADIS

