## RADIOACTIVE CONTAMINATION CONTROL AT THE EXITS OF NUCLEAR PLANT SITES OR CONTROLLED AREAS

SaphyRAD

## / CONTEXT

Radiation protection of workers is at the heart of the concerns of nuclear power plants.

To help nuclear industry organizations to comply with the « As Low As Reasonably Achievable » (ALARA) principle, Bertin has developed the **SaphyRAD** in order to limit the radiation exposure of people working in the nuclear sector.

This contamination meter has thus been designed to perform the control of radioactive contamination at the exits of sites and controlled areas.

## / CHECKOUT AT THE EXITS OF SITES/CONTROLLED AREAS

The SaphyRAD is a multiprobe, handheld contamination meter for the detection of alpha/beta and gamma radioactive contaminations..

Robust and functional, it is equipped with a monitor and a wide range of probes which allow it to adapt to all surfaces (31 cm² or 100/170 cm² probes) and to detect all types of radioactivity (total count  $\alpha\beta\gamma$  or discrimination  $\alpha$  from  $\beta\gamma$ ).



31 cm<sup>2</sup> probe



<u>100 and 170 cm² probes</u>

Positioned at the exits of sites and controlled areas, the **floor-stand**, along with its **removable probe** help the worker to carry out a complete body control. The probe is automatically recognized by the floor-stand thanks to a magnet located on the display unit.



INIT HILIMATE \*\*\*

Hands check

Control of external contamination

The « direct screening » mode allows for a simple and efficient control, even by non-specialized users.

The background noise measurement can either be manual or automatic. Furthermore, reading the monitor is quick and clear thanks to an easy-to-check bar graph and two contamination levels.

All the carried out measurements' results are then stored on a removable SD card and can be read later.

Two **indicative lights** are integrated into the probe to notify the users of the right distance to realize the radiation control, and to warn them if contamination is detected.

**Ergonomic and user-friendly**, the SaphyRAD is perfectly adapted for daily use by all users, even non-specialists.

## / CONCLUSION

Mainly used at the exits of nuclear plant sites and controlled areas, the **multiprobe contamination meter SaphyRAD** developed by Bertin Technologies is a comprehensive and effective detection system of radiological contamination. Adapted to both body and surface controls, it ensures the radiological cleanliness of workers and workplaces, while keeping with ALARA approach.

