SAPHYGATE G
Portal Monitor

- More than 3,000 systems in a wide range of industries:
    - NPPs
    - Nuclear research centers
    - Seaports et airports
    - Steel works
    - Treatment centers (waste, recycling)
    - Hospitals
- Automatic correction of background noise shielding
- Robust equipment even under harsh weather conditions
- Compliance to international standards

The SaphyGate G Portal detects very low radioactive sources, even when they are hidden in high density loading. This type of system has been initially designed to address issues in the nuclear industry and research, but it is now a critical building block to prevent the risks related to the use and movement of radioactive sources.

The SaphyGate G Portal achieves high sensitivity in accordance with the international standards. The portal may include from 1 to 8 DSPS detectors depending on the needs.

The SaphyGate G Portal thus allows to control flows at strategic points, such as sea port, steelwork, waste treatment center, incinerator, exposed building. The system results from Saphymo's 30-year experience in the area of detection portal monitors, with more than 3,000 systems installed in over 40 countries.
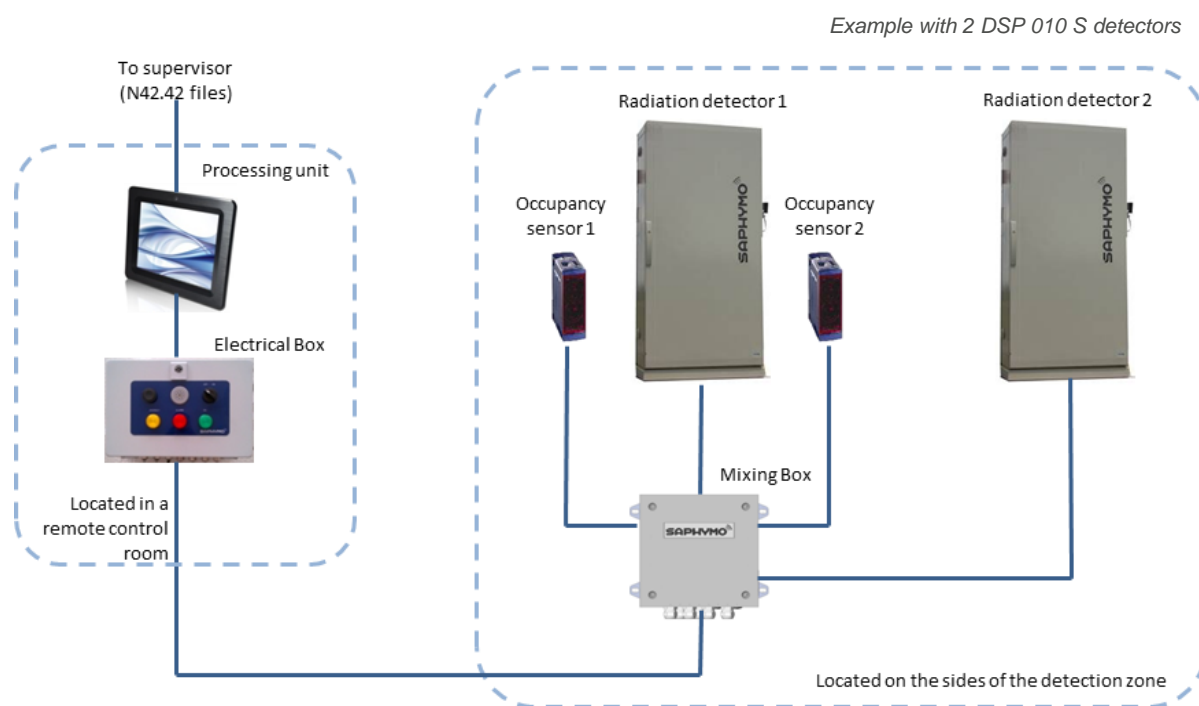
SYSTEM DESCRIPTION

- **Configurations :**
  - **1-detector:** pedestrians
  - **2-detector :** light vehicles and truck
  - **4-detector :** long vehicles (trucks, trains, container systems)
  - **8-detector :** long vehicles with highly sensitive detection

- **Radiation detector:**
  - **DSP010 detector** : 5 x 50 x 100 cm (single panel) premium grade PVT plastic scintillators for gamma detection
  - **very high speed electronic for high speed vehicle processing**
  - **operating temperature:** -30°C to +55°C
  - **relative humidity:** up to 93 % (ANSI 42.35 standard)

- **Occupancy sensors:**
  Presence detection can be provided either with:
  - **smart infrared sensors** fixed on the detector supports with vehicle speed monitoring
  - **magnetic inductive loop BDM 400** to be embedded into the pavement

- **Processing unit**
  - **large touch screen interface providing user friendly operation**
  - **radiation profile for easier source location**
  - **multilingual interface**
  - **N42 data files storage on SQL server data base allowing easy remote access, configuration, maintenance and third party software integration**
  - **speed control ensured by an infrared detection system**

- **Alarm management**
  - **EB7 electrical and alarm box:**
    alarm and acknowledgement system consisting of a buzzer, an acknowledgement button and four indicator lights (normal operation, technical failure – error, alarm)
  - **BVS 300 local alarm unit:**
    visual and audible alarm with xenon flash and a loud siren alarm

Example with 2 DSP 010 S detectors

ACCESSORIES AND RELATED PRODUCTS

- printer
- site and remote supervision software
- camera(s)