



PGH-Smart

Harsh Background Gamma Portal

The PGS-Smart monitor is designed for contamination monitoring in harsh background areas.



FEATURES

- Performance: large surface of detectors, high efficiency geometry, 4π shielding, directional morphology compensation
- Reactivity: unique algorithm for quick background variation adaptation, quick decision algorithm
- Reliability: proven plastic scintillator technology
- Smart: localization of the contamination, radionuclide categorization
- Ease-of-use: automatic opening of doors, free positioning, voice guidance of the user..

DESCRIPTION

The PGH-Smart is designed for contamination monitoring in high gamma background areas, such as reactor building. 4π shielding and sophisticated morphology correction is then a premium.

It offers an homogeneous body coverage thanks to large detectors and a unique detection geometry.

Automatic door opening, free positioning, quick measurement and voice and visual guidance to the user, gives the PGH-Smart a real ease of use.

The PGH-Smart is unique and uses the last proven innovations of the Mirion Technologies Smart range.



PGH-SMART | WHOLE BODY CONTAMINATION MONITOR

PHYSICAL AND FUNCTIONAL CHARACTERISTICS

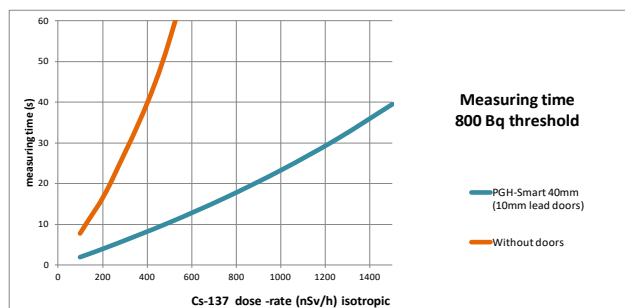
- Detection volume: 50x80x210 cm
- 10 plastic scintillation detectors
2*4 lateral detectors + detector head and feet, total 168 liters
- **Energy Range:** 100 keV to 3 MeV
- **Measurement Range:** 10² Bq to 10⁶ Bq
- **Detection efficiency:** 39% (Co-60, center)
- **Homogeneity:** ± 20%
- **Energy uniformity:** ± 20%
- Directional morphology compensation
- Background monitoring: suppression of quick variations, quick follow-up of background variation
- **Automatic calculation of measurement time and fast decision algorithm**
- Spectrometric approach, isotopic families identification
- Categorization and weighted activity calculation
- Localization of the contamination
- Measurement history, background, availability, control
- Detailed data storage, image, localization and spectra
- Data export on USB stick or network
- Latest contaminated measurements recall function
- ISO 11929:2010 compliance

ELECTRICAL CHARACTERISTICS

- Power supply: 230 V - 110 V
- 2 external USB connectors
- 1 LAN connection via cable gland
- 2 information reports by isolated relays

ENVIRONMENTAL CHARACTERISTICS

- Operating temperature: 5°C to +40°C
- Storage temperature: -25°C to +60°C
- compliant to EC EN 61000-6-2, EN61000-6-4, EN6110-1

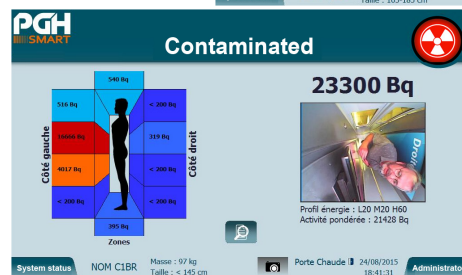
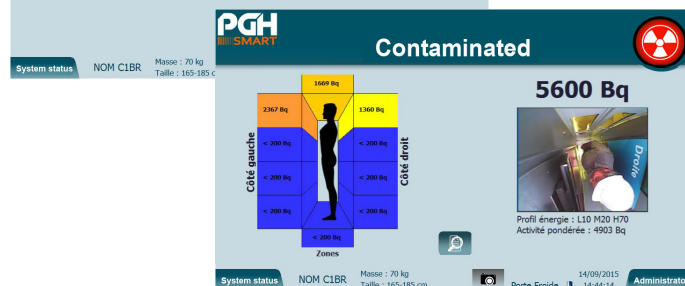
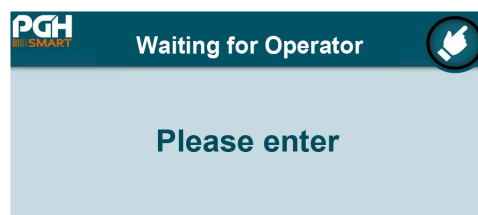


MECHANICAL CHARACTERISTICS

- Shielding 10, 20 or 40 mm
- Dimensions :
• overall: 100 x 100 x 245 cm
• body : 70 x 100 x 220 cm
- Weight :
• from 2000 kg to 4000 kg depending on shielding

CONSTITUTION

- Proximity detection radar
- 2 leaf shielded doors - automatic or manuel opening
- Infrared barrier for doors opening
- Scale integrated in the floor
- Internal LCD color touchscreen + 1 external screen (option)
- Loudspeaker
- Internal lighting: white / green / red / blue
- Camera
- Visual signaling: powered, available, busy, unavailable, contaminated, non-contaminated



Localization of the contamination head and chest examples