

# IMPROMAT

## *PORTIA*

### **Portal Monitor for Radiation Detection**

The PORTIA system is designed to detect the presence of any gamma ray above 60keV in packages, waste, vehicles, laundry and persons.

It is typically installed in doorways at hospitals and other institutions where there is need to control all goods coming in or going out.



It is designed to be quickly set or for stationary use. It can be optimized for many applications and tailored to your needs. From stand alone units to Ethernet based networked systems with 2,4 or more detectors.



**IMPROMAT**

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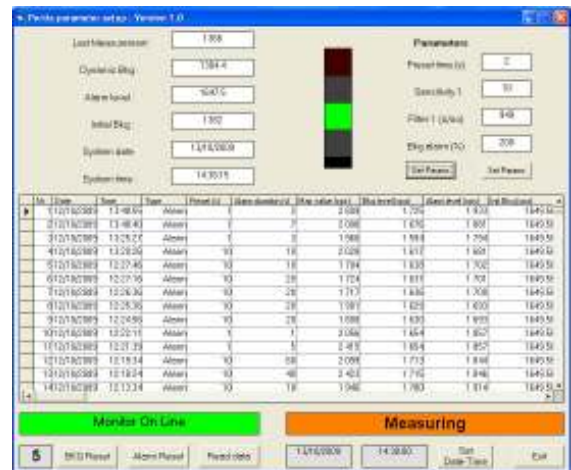
V1.0

## Features

- Detection of gamma ray emitted by any radioactive source from laundry, waste, packages, vehicles or pedestrians.
- Sensitive to photons from 60 keV to 3000keV.
- Optional lead shielding for low background.
- Weather resistant stainless steel enclosure for outdoor operation.
- Walk-by or walk through operation.
- Modular architecture allows easy expansion and integration.
- Fully automated measurements and continuous background monitoring.
- Light weight design for emergency response applications.
- Suited for permanent or temporary installations.
- Quick and easy setup with automatic start-up operation.
- Integrated controller with data logging and RS232, wireless or Ethernet output.
- Visual and audible alarm.
- Excellent price / performance ratio.

## Parameter Set-up

- The software enables users to completely set-up the PORTIA from a PC.
- All parameters are downloaded via RS232 interface.
- The database contains the last 50 events in descending order of measurement date and time.
- The software (user interface):



## Basic Configuration

- The Radiation Sensitive Panel comprises a single, large plastic scintillator sensitive to gamma rays, a bPAD and the control unit mounted in a weather resistant stainless steel cabinet.
- On the outside of the cabinet alarm/status indicators and reset button.
- The cabinet contains a climate control to operate under all weather conditions.
- A black 2,5mm plastic window is used to optimize performance.
- Several detection modules can be connected in any configuration to achieve the necessary geometric efficiency.
- The simplicity of this design results in a safe, reliable and configurable system to meet multiple detection applications.
- The visual and audio alarm can be easily removed.
- The PORTIA can be operated with very little training or expertise in radiation detection technology.

## Specifications

- Plastic Scintillator (40x60x5cm) with integrated Photomultiplier Tube.
- bPAD with TTL output.
- Tower lamp with visual and audible indication of alarm.
- Dimensions: 0,50x1,70x0,20m (WxHxD).
- Weight = ± 100kg.
- Noise level < 70dB (buzzer has noise level of 92dB at 1m).
- Enclosure rating IP65.
- Power: 220VAC – 4A – 50HZ.
- Operating temperature -20°C to +40°C.