



Rapid  
deployment,  
unparalleled  
operational  
flexibility

# P2000: Multipurpose Portable Radiation Portal Monitor

A heavy duty, relocatable system for a variety of applications

The P2000 portable radiation portal monitor (PRPM) provides unparalleled flexibility and requires minimal setup time. Its modularity enables obstruction-free configurations suitable for scanning luggage, pedestrians or cars. The system can be controlled remotely via a secure connection. The monitor software is web based and thus compatible with any operating system. Operations can be customized through various peripherals and software algorithm options.

## Key features

Adjustable configuration:

- Luggage, pedestrians, cars
- Bi-directional
- One or two sided measurement
- Occupancy or threshold-based measurements
- Supports CCTV cameras and other peripherals (optional)

Easy and fast installation and operation:

- Outdoor or indoor (IP54)
- Clear lane (no cable hindrance on the floor)
- High stability (uneven surfaces)
- Minimal setup time (20 minutes)

Outstanding performance:

- Highly sensitive: designed to ANSI requirements
- Gamma and neutron measurement
- Automatic scanning, high throughput
- Smart control interface (networkable, remote access)

# P2000: Multifunction Portable Radiation Portal Monitor



A heavy duty, relocatable system for a variety of applications

The P2000 is man-portable and can be transported by a team of two. It is suited for a wide variety of deployment scenarios, providing security to mass events and critical infrastructure as well as airports. The P2000 allows source detection at high throughput, high flexibility and remote control.

Specifications	
Physical Specifications	Two-sided model with one detector pillar on each side (the enclosures are also the transport boxes) Ready-to-operate setup allowing maximal transportability and minimal setup time Dimensions of one pillar: 146 x 47 x 29 cm <sup>3</sup> (57.5" x 18.5" x 11.4"), electronics box: 105 x 45 x 38 cm <sup>3</sup> (41.3" x 17.7" x 15.0")
Detection Range	Distance between pillars adjustable (between 0.6 m (2 ft) and 3 m (10 ft)). Vertical: Full sensitivity over full detection zone's 2 m (6.6 ft) vertical dimension as required by ANSI.
Power Options	120-230 VAC, 50-60 Hz
Alarm	Automatic screening with alarm display based on signal above threshold; Background updated automatically, can also be updated manually. Thresholds user-configurable. Entirely digital signal readout and analysis to maximize response speed. Audible and visual alarm; LCD/LED display
Walk-through Speed	All performance tests performed at a speed of 1.2 m/s (3.9 ft/s); configurable occupancy area.
False Alarm Rate (FAR)	<1/1000
Data Transmission	Transmission via 4G or WiFi Network; equipped with interface to directly connect to a readout computer.
Operating Temperature	-30 °C - 50 °C (-22 °F - 122 °F )
Storage Temperature	-50 °C - 60 °C (-58 °F - 140 °F )
Ingress Protection	IP54, higher IP version available
Gamma Detectors	
Gamma Detector Specifications	Material: PVT Dimensions: 100 X 20 X 5 cm <sup>3</sup> (39.4" x 7.9" x 2.0") each
Sensitivity	According to ANSI N42.35-2016, pedestrian portal monitor Energy range: 60 keV to 2 MeV
Optional Neutron Detectors in Same Box	
Neutron Detector Specifications	1 per side; He-4 based (natural helium), rugged SiPM-based readout Dimensions: 23 x 17 x 120 cm <sup>3</sup> (9.1" x 6.7" x 47.2")
Sensitivity	According to ANSI N42.35-2016, pedestrian portal monitor
Gamma Immunity of Neutron Detector	Gamma rejection: 10 <sup>-7</sup> Gamma immunity up to 100 µSv/h (10 mR/h) with 0.9 < GARRn* < 1.1
Peripherals	
Occupancy Sensors	Occupancy sensors to enable automatic screening based on occupancies
Power Autonomy	Optional UPS enables uninterrupted power supply for up to 8h. Other battery solutions available.
Cameras	Optional CCTV cameras to monitor passages

\* Gamma Absolute Rejection Ratio for neutrons. See R. Kouzes et al, "Neutron detection gamma ray sensitivity criteria", <http://dx.doi.org/10.1016/j.nima.2011.07.030>.

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