POLIMASTER®
Radiation Detection Technologies

RADIATION PORTAL MONITOR

PoliGate™ Deployable

PoliGate™ Deployable Radiation Portal Monitor (RPM) is a highly sensitive deployable radiation monitor designed to detect radioactive and nuclear materials transported through a controlled area. The RPM is designed for fast deployment in emergencies and is suitable for indoor and outdoor use.

Fast deployable RPM is designed to provide a high level of mobility and flexibility, allowing to be used in a variety of settings to screen individuals, vehicles, or cargo at the scene of an incident or in temporary screening situations, such as at major public events.

PoliGate™ Deployable is transported and stored in three transport cases, can be quickly assembled without any specialized tools and provides continuous 24-hour personnel-free operation. The constituent parts of the RPM are the Control Block and Detection Blocks with a laptop with the RPM User Software for advanced operation.

Applications

- Temporary checkpoints for:
  - o Public events security
  - o Emergency response
  - o Customs and border
  - o Police and security
- Waste management sites
- Airports and seaports
- Industrial facilities

Features

- Easy transportation in IP67 cases
- Fast and easy deployment and operation
- Back-up battery providing at least 8 hours of operation
- Ethernet or Wi-Fi communication with the operator PC
- No stop of an object is required for measurement
- Lead shielding for natural background rejection
- Presence detection system (occupancy sensors)
- Control zone up to 3 m × 2 m (W×H)
- Optional video surveillance system

γ IP65

SPECIFICATIONS

Model	Speed, km/h	Control zone W x H, m	Minimal detectable amounts of nuclear and radioactive materials*					
			^{241}Am, kBq, (µCi)	^{137}Cs, kBq, (µCi)	^{60}Co, kBq, (µCi)	^{238}U, g	^{235}U, g	^{239}Pu, g
PoliGate™ Deployable	5	1.5 × 2	200 (5.5)	34 (0.9)	18 (0.5)	204	14	0.4
		3 × 2	610 (16.5)	100 (2.7)	55 (1.5)	610	40	1.1

Gamma detectors	Plastic scintillators (PVT) Detector volume is 5.3 l
Energy range	30 keV to 3 MeV
False alarm rate	< 1/1000 passages
Communication	Ethernet, Wi-Fi
Ingress protection	IP65, IP67 in transport cases
Power supply	90-260 V AC / 14V DC adapter; 12 V built-in rechargeable battery (> 8 h of operation)
Operating conditions	ambient temperature: −30 °C to 50 °C atmospheric pressure: 84 kPa to 106.7 kPa relative humidity: up to 100 % at 35 °C

Weight
Detection Block   < 51 kg
Control Block   < 9 kg
Transport Case No.1   < 16 kg (empty), 74 kg (loaded)
Transport Case No.2   < 17 kg (empty), 72 kg (loaded)
Transport Case No.3   < 17 kg (empty), 72 kg (loaded)

Dimensions
Detection Block   116×34×16 cm(H×L×W)
Control Block   30×25×25 cm (H×L×W)
Transport Case No.1   80×60×50 cm (L×W×D)
Transport Case No.2   150×50×30 cm (L×W×D)
Transport Case No.3   150×50×30 cm (L×W×D)