



**POLIMASTER**®  
Radiation Detection Technologies



# PoliGate™ Pedestrian

## RADIATION PORTAL MONITOR

**PoliGate™ Pedestrian** series of Radiation Portal Monitors (RPMs) are high-sensitive fixed systems designed for permanent installation and monitoring of people or packages for the presence of radioactive materials. It is an essential component of any facility that requires strict security measures, including government buildings, research facilities, and nuclear power plants.

The RPM is easy to operate and maintain, requires minimal training, and is supplied with user-friendly software that provides real-time data and alarms. The compact and ergonomic design of the RPM makes it a convenient solution for use in various applications for screening people, luggage and cargo.

### Applications





- Customs and border control
- Waste management sites
- Airports and seaports
- Public events security
- Nuclear power plants
- Police and security
- Industrial facilities
- Scrap processing
- Railway stations

### Features

- Control zone up to 1.5 m × 2 m (W×H)
- Lead shielding for natural background rejection
- No stop of an object is required for measurement
- Wide gamma energy range from 20 keV to 3 MeV
- Local and remote light and audible alarm annunciators
- Back-up battery providing at least 8 hours of operation
- Presence detection system (infrared occupancy sensors)
- Adjustable sensitivity parameters for specific applications
- Optional video surveillance system



### SPECIFICATIONS

Model (detected radiation)	Speed, km/h	Control zone W x H, m	Layout of detection units	Minimal detectable amounts of nuclear and radioactive materials*								
				<sup>241</sup> Am, kBq, (μCi)	<sup>137</sup> Cs, kBq, (μCi)	<sup>60</sup> Co, kBq, (μCi)	<sup>133</sup> Ba, kBq, (μCi)	<sup>238</sup> U, g	<sup>235</sup> U, g	<sup>239</sup> Pu, g	<sup>239</sup> Pu, g (4 cm Pb)	<sup>252</sup> Cf, neutron/s
PoliGate™ Pedestrian G1	5	1 × 2		400	80	40	50	470	30	0.8	-	-
		1.5 × 2		700	130	70	80	815	50	1.4	-	-
PoliGate™ Pedestrian G2	5	1 × 2		120	22	12	13	140	8.5	0.24	-	-
		1.5 × 2		175	33	17.5	20	205	12.5	0.36	-	-
PoliGate™ Pedestrian GN1	5	1 × 2		750	120	65	75	870	47	1.4	110	6500
		1.5 × 2		1290	210	110	130	1500	80	2.3	190	11250
PoliGate™ Pedestrian GN2	5	1 × 2		200	32	18	20	250	13.4	0.4	42	2500
		1.5 × 2		320	48	26	30	380	20	0.6	62	3700

\*If gamma radiation background is < 0.1 μSv/h, false alarm rate is < 1/1000 passages

<b>Detectors</b>	Gamma: plastic scintillators (PVT), 11 l (gamma-only detection units), 6.6 l (gamma-neutron detection units) Neutron: 10B/ZnS(Ag)
<b>Energy range</b>	20 keV to 3 MeV
<b>False alarm rate</b>	< 1/1000 passages
<b>Communication</b>	Ethernet
<b>Ingress protection</b>	IP65
<b>Weight</b>	120 kg (gamma detection block)
<b>(detection block)</b>	130 kg (gamma-neutron detection block)
<b>Dimension (RPM)</b>	2090×465×250 mm (H×L×W)
<b>Power supply</b>	85-264 V AC, 47-63 Hz; 12 V built-in rechargeable battery (> 8 h of operation)
<b>Standards compliance</b>	IEC 61000-6-2:2016, IEC 61000-6-3:2011, IEC 61326-1:2012, EN 55022:2010 (class B), IEC 61010-1:2010, ANSI N42.35-2006 (partially), IEC 62244:2019
<b>Operating conditions</b>	ambient temperature: -30 °C to 50 °C atmospheric pressure: 84 kPa to 106.7 kPa relative humidity: up to 98 % at 40 °C



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