

# Gamma-Neutron Radiation Portal Monitor SMP-44



**SMP-44** Radiation Portal Monitor (RPM) is equipped with two measuring columns to perform functions of detection and preliminary processing of the signals, and a control panel with a touch screen and printer.



**Control panel** - communicates with the measuring columns, processes the received data and realizes the implemented functional and decision algorithms. The communication is bidirectional: control panel controls operation of measuring columns and enables a remote change of parameters. It provides alarm visualization, view of the current operation status and automatic or desired generation and printing of reports.

**SMP-Viewer** - computer software designed for remote visualization of the single RPM performance. SMP-Viewer may be installed on any PC connected to the control panel by the Internet or an Ethernet. **SMP-Viewer** enables visualization of alarms, presents views of the current operation status, as well as automatic or desired generation and printing of reports.

**Remote Management System SMP-Studio** - computer database software that enables the centralized management of the SMP Radiation Portal Monitor System (from 1 to 32 control zones). This computer software provides a graphic view in an interactive synoptic chart, remotely controls the RPM's and enables a remote change of the parameters. **SMP-Studio** generates complete report of events (in PDF, Excel), registers images from the IP camera, archives all operational parameters and other data from the events in the database.



SMP-44

## Sample applications of the SMP radiation portal monitors:

Application	SMP type	Zone [width/height]	Maximum speed	Types of controlled vehicles
<ul style="list-style-type: none"> <li>- border crossings: road, railway, ports, airports</li> <li>- control locations in nuclear plants and accompanying facilities</li> <li>- logistic centers</li> <li>- sport or event centers</li> <li>- facilities that require high level of protection (courts, penitentiaries, government buildings etc.)</li> </ul>	SMP-44	6 m / 4 m	8 km/h	<ul style="list-style-type: none"> <li>- trucks</li> <li>- buses</li> <li>- trains</li> </ul>

### Main characteristics:

Automatic radiometric control without interference on the traffic.

High sensitivity.

Generation of reports and alarm signals.

Interactive control panel with a 8,3" touch screen.

Bi-directional communication which provides:

- remote control of the SMP
- remote change of selected parameter settings.

Operation in the dedicated Remote Management System SMP-Studio.

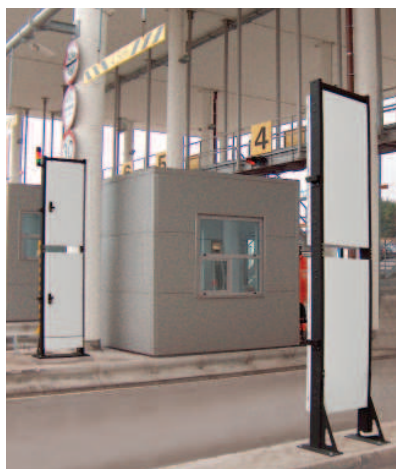
Video recording (supervised by the SMP-Studio).

Reliability.

User-friendly.

Aesthetic appearance.

The SMP system complies with the recommendations of the International Atomic Energy Agency of Vienna.



### Technical data:

### SMP-44

Control zone (width/height)	6 m / 4 m	
Detection of radiological and nuclear materials	Pu-239	3,1 g
	Pu- 239 (4 cm Pb, gamma 1%)	160 g
	U-235 (HEU)	105 g
	Cf-252	9300 n/s
Maximum speed	8 km/h	
Gamma detector - organic plastic - active capacity	5 l x 4	
Neutron detector: He3 or replacement with the similar efficiency.		
Alarm	acoustic and optical	
Number of false alarms / number of objects in the zone	1/10000	
Standard communication connections	Ethernet	
Power supply	230V 50 Hz	
Power consumption	145 VA	
Continuous operation time	24 h/day	
Maximum operation time with a built-in UPS power pack	8 h	
Measuring columns operation temperature	from -30°C to + 50°C	
Measuring columns protection	IP55	
Measuring columns weight:	260 kg	
Measuring columns dimensions (H / W / D)	3,2 m / 0,69 m / 0,18 m	
Control panel: - dimensions (width/height/depth) - weight	453 mm / 294 mm / 146 mm 16 kg	
The control panel may be hung (e.g. on the wall), only for indoor use.		
Declaration of Conformity CE		
Assembly of the load-carrying structure of measuring columns requires a reinforced base. Relpol S.A. delivers anchor frames together with foundations installation documentation.		
<b>Options:</b> Remote Management System SMP-Studio, IP cameras, database server, workstations, barriers.		



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