

# Gamma-Neutron Radiation Portal Monitor SMP-44

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**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.



## Sample applications of the SMP radiation portal monitors:

Application:	SMP type	Control zone [width/height]	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	5 km/h (optimal) 8 km/h (permitted)	<ul style="list-style-type: none"> <li>- trucks</li> <li>- buses</li> <li>- rail vehicles</li> </ul>

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Main characteristics:	Technical data:	SMP-44
Automatic radiometric control without interference on the traffic.	Type of radiation detected	gamma and neutron
High sensitivity.	Amount of detection blocks:	4
Generation of reports and alarm signals.	Control zone (width/height)	6 m / 4 m
Interactive control panel with a 8.3" touch screen.	Maximum speed	8 km/h (permitted)
Bi-directional communication which provides: - remote control of the SMP - remote change of selected parameter settings.	Alarm	acoustic and optical
Operation in the dedicated Remote Management System SMP-Studio.	Number of false alarms / number of objects in the zone	1/10000
Video recording (supervised by the SMP-Studio).	Standard communication connections	Ethernet
Reliability.	Power supply	230V 50 Hz
User-friendly.	Power consumption	145 VA
Aesthetic appearance.	Continuous operation time	24 h/day
The SMP system complies with the recommendations of the International Atomic Energy Agency of Vienna.	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/high/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.	
	Lumel S.A. delivers anchor frames together with foundations installation documentation.	
	<b>Options:</b> Remote Management System SMP-Studio, IP cameras, database server, workstations, barriers.	



SMP-44

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