

# Gamma Radiation Portal Monitors SMP-4/100, SMP-2/50

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**SMP-4/100** or **SMP-2/50** 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 signals and realizes the implemented functional and decision algorithms.

The communication is bidirectional: control panel remotely controls operation of two 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 important parameters. **SMP-Studio** generates complete report of events (in PDF, Excel), registers images from the IP camera archives all important 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*
- scrap metal recycling facilities - steel mills	SMP-4/100	4.5 m / 4 m (optimal)	5 km/h (optimal)	- trucks - rail vehicles - containers
- landfills - incineration plants	SMP-2/50	6 m / 4 m (permitted)	8 km/h (permitted)	- trucks

\* Measuring columns height and detectors arrangement is designed individually depending on the size of the control zone and vehicles types.

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## Main characteristics:

Automatic radiometric control without interference on the traffic.

High sensitivity.

Generation of reports and alarm signals.

Speed control.

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:

Type of radiation detected	gamma
Amount of detection blocks: SMP-4/100 SMP-2/50	4 2
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	from 90 to 105 VA
Continuous operation time	24 h a day
Maximum operation time with a built-in UPS power pack	8 h
The measuring columns works in the range ambient temperature range:	from -30°C to + 50°C with relative humidity up to 90% at an air temperature ≤ 35°C, without condensation
Measuring columns protection	IP55
Measuring columns dimensions: SMP-4/100 - road SMP-4/100 - rail SMP-2/50 - road	up to 3.75 m x 1.49 m x 0.18 up to 3.00 m x 1.49 m x 0.18 up to 2.70 m x 0.94 m x 0.18
Measuring columns weight: SMP-4/100 SMP-2/50	380 kg 240 kg

Assembly of the load-carrying structure of measuring columns requires a reinforced base.

Lumel S.A. delivers anchor frames together with foundations installation documentation.

It is necessary to arrange vertical or horizontal grounding for the purpose of protection against disturbances.

**Control panel:** dimension 453 mm x 294 mm x 146 mm; weight 16 kg;

- works in the ambient temperature range from + 5°C to + 40°C at a relative humidity of up to 90% at an air temperature ≤ 35°C, without condensation;
- it can be hung (e.g. on the wall) or placed on a dedicated column, only for indoor use.

Declaration of Conformity CE

**Options:** Remote Management System SMP-Studio, IP cameras, database server, workstations, barriers.



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