Gamma-Neutron Radiation Portal Monitors SMP-11, SMP-22











SMP-11 or **SMP-22** Radiation Portal Monitors (RPMs) are equipped with one or two measuring columns, respectively, 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 re-

ceived 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	Zone [width/height]	Maximum speed	Types of controlled vehicles	
 border crossings: road, railway, ports, airports control locations in nuclear plants and accompanying facilities logistic centers sport or event centers facilities that require high level of protection (courts, penitentiaries, government buildings etc.) 	SMP-11	3 m/ 2 m	5 km/h	- pedastrians, pedastrians with bagga- ge - indoor or outdoor use	
	SMP-22	6 m/ 2 m 3 m/ 2 m	8 km/h 5 km/h	 baggage conveyor (registered or ov sized baggage) small vehicles (trolleys ect.) cars 	

Main characteristics:

Automatic radiometric control without interference on the traffic.

High sensitivity.

Generation of raports 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: Control zone (width/height)		SMP-11	SMP-22	
		1,5 m / 2 m	3 m / 2 m 6 m / 2 m	
Detection of radiological and nuclear materials	Pu-239	1,6 g	1,1 g	4,2 g
	Pu- 239 (4 cm Pb, gamma 1%)	120 g	85 g	250 g
	U-235 (HEU)	60 g	40 g	150 g
	Cf-252	7000 n/s	5000 n/s	15000 n/s
Maximum speed		5 km/h	5 km/h	8 km/h
Gamma detector - organic plastic - active capacity		5 l x 1	51x2	
Neutron detector: He3 or r	eplacement with the si	milar efficiency.	1	

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	85 VA	105 VA		
Continuous operation time		24 h a 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	140 kg			
Measuring columns dimensions (H / W / D)	1,65-1,8 m / 0,69 m / 0,18 m			
Control panel: - dimensions (width/hight/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.

Options

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

