



## RADIATION MONITOR RM-1SM-03

DETECTION OF FISSILE AND RADIOACTIVE MATERIALS IN HEAVY PEDESTRIAN FLOWS, WITH POSSIBILITY OF CONCEALED INSTALLATION

### INTENDED USE

Automatic detection of gamma radiation sources carried by a pedestrian through the search area, in continuous mode.

### APPLICATION

The RM-1SM-03 radiation monitor is used for radiation monitoring of heavy pedestrian flows at transportation facilities, offices and other institutions. The monitor is designed for concealed installation in doorways or mounting into constructions like metal detectors installed at building entrances.

### DESIGN

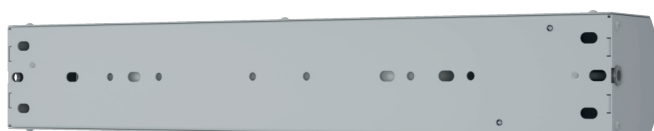
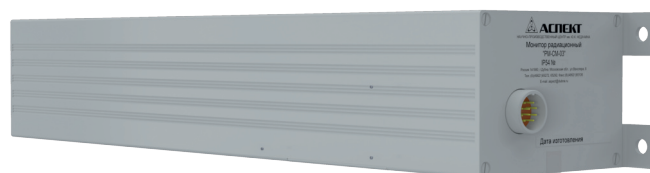
The RM-1SM-03 radiation monitor is designed as a metal case containing gamma-detector and electronics units. It is shipped with a set of mounting parts depending on the place of its installation.

The radiation monitor is equipped with an embedded occupancy sensor that allows reliable detection of the object in the search area.

The radiation monitor transfers data to a control panel or a PC and mobile device with the installed dedicated software.

### KEY FEATURES

- Operating mode - continuous, automatic
- Settable detection thresholds
- Automatic classification of alarms into three safety categories set by the operator
- Possibilities of expansion and connection of external devices
- Generation of "dry contact" in case of an alarm event
- Automatic registration of events in a non-volatile archive
- Embedded automatic selftest system
- Access to the system parameters via RS-485 interface (optional Ethernet)
- Generation of video information on the target object (when video surveillance sets are connected)
- Service life is 12 years





## RM-1SM-03

### SPECIFICATIONS

Detection channels	gamma
Gamma detector	plastic scintillator
Detection thresholds (detection with probability of no less than 0.5 at a confidence level of 0.95) for a search area width of 0.8 m and height 2 m and object speed of up to 5 km/h	140 kBq ( $^{133}\text{Ba}$ ) 170 kBq ( $^{137}\text{Cs}$ ) 85 kBq ( $^{60}\text{Co}$ )
False alarm rate	0.001
Ingress protection	IP54
Environmental	-50 to +50 °C, 95 %
Dimensions	(545×126×90) mm (w/o set of mounting parts)
Weight, max	4 kg (w/o set of mounting parts)
Power supply	(9–28) V, 10 V·A max
Installation place	indoor
Objects	pedestrians

### CERTIFICATION

- Registered in the Register of the Russian Industrial Products (RF Government Resolution 719 of 17.07.2015) under No 10552033
- Complies with the requirements for the functional properties of technical means of ensuring transport security (RF Government Resolution 969 of 26.09.2016)
- Complies with the requirements of the Technical Regulations of the Customs Union on safety of low voltage equipment (TR CU 004/2011), Technical Regulations of the Customs Union on electromagnetic compatibility of technical means (TR CU 020/2011)



By 2024, over 8600 RM radiation monitors of various modifications have been produced and put into operation.