



RADIATION MONITOR PM5000P



PM5000P is a highly sensitive radiation monitor designed to detect radioactive and nuclear materials providing continuous automatic control of pedestrians and luggage at different check-points.

The Monitor is suitable both for indoor and outdoor installation.

When radioactive materials are detected or when the current background level threshold is exceeded, audible and visual alarms are triggered and alarm information is transferred to a computer.

If there is no mains power supply, the Monitor will be automatically powered from the built-in accumulator battery. The battery power enables at least 8 hours of Monitor work.



Features

- High sensitivity due to the large volume of detector
- Advanced data processing algorithms
- Sound and light alarms
- Video monitoring system (option)
- Storage of event history in non-volatile memory
- Indoor and outdoor installations
- Automatic, 24x7 operation
- Communication with a PC via LAN (Ethernet)
- Several monitors can be controlled from one PC

Application

- Cross border check points
- Customs check points
- Check points at nuclear power plants
- Nuclear industry facilities
- Nuclear waste disposal and storage sites
- Metallurgical facilities
- Mining sites
- Public events sites
- Check points in banks, offices, etc.

DETECTION

ALARM

Monitors

- Pedestrians
- Luggage





RADIATION MONITOR

PM5000P

SPECIFICATIONS

Model	PM5000P		PM5000P-01		PM5000P-02B		PM5000P-03B		
Position of the detection units	□		□ □		□		□ □		
Type of the registered radiation	gamma		gamma		gamma-neutron		gamma-neutron		
Parameters of the control zone W(width)xH(height), m*	1x2	1.5x2	1x2	1.5x2	1x2	1.5x2	1x2	1.5x2	
Max. speed, km/h	5	5	5	5	5	5	5	5	
Minimum detectable quantities of the radionuclide and radioactive materials	²⁴¹ Am, MBq, (μCi)	0.4 (11)	0.7 (19)	0.12 (3.2)	0.175 (4.75)	0.75 (20)	1.29 (35)	0.2 (5.5)	0.33 (8.75)
	¹³⁷ Cs, MBq, (μCi)	0.08 (2)	0.13 (3.5)	0.022 (0.59)	0.033 (0.88)	0.12 (3.2)	0.21 (5.6)	0.032 (0.87)	0.048 (1.3)
	⁶⁰ Co, MBq, (μCi)	0.04 (1.1)	0.07 (1.9)	0.012 (0.32)	0.0175 (0.475)	0.065 (1.8)	0.11 (3)	0.018 (0.47)	0.026 (0.71)
	¹³³ Ba, MBq, (μCi)	0.05 (1.25)	0.08 (2.16)	0.013 (0.36)	0.02 (0.54)	0.075 (2)	0.13 (3.5)	0.02 (0.55)	0.03 (0.8)
	²³⁸ U, g	470	815	140	205	870	1500	250	380
	²³⁵ U, g	30	50	8.5	12.5	47	80	13.4	20
	²³⁹ Pu, g	0.8	1.4	0.24	0.36	1.4	2.3	0.4	0.6
	²³⁹ Pu, g (4cm Pb)	-	-	-	-	110	190	42	62
²⁵² Cf, neutron/s	-	-	-	-	6500	11250	2500	3700	

Alarm: sound and light

Energy range: 0.02 – 3.0 MeV

Power: external 90-260V AC 50/60Hz
or internal battery (12V) with minimum
8 hours life time after external power failure

Operating conditions

Temperature range:

Relative humidity at 40 °C:

Atmospheric pressure:

Protection degree:

–30 ... +50 °C

up to 100%

84 to 106.7 kPa

IP55

Design and specifications of the equipment can be changed without further notice.



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