

RADIATION MONITORING SYSTEM PM520

RADIATION MONITORING OF LARGE AREAS AND REMOTE LOCATIONS



PM520-04



PM520-08

Purpose

PM520 is all-in-one easy customized solution for the effective detection of gamma and neutron sources to ensure radiation security on the customer facility.

Description

PM520 system has flexible configuration and consists of main **Processing Unit** and up to 8 wall-mounted **Gamma and Neutron Detectors** of different sensitivities and measurement ranges (**BDG2, BDG3, BDN from PM1403 series**).

The detectors are connected to the main unit via the RS-485 lines up to 1000 m, and they are installed at the entrances, checkpoints of buildings and areas.

The Processing Unit can have up to 4 (**PM520-04**) or up to 8 (**PM520-08**) connected probes.

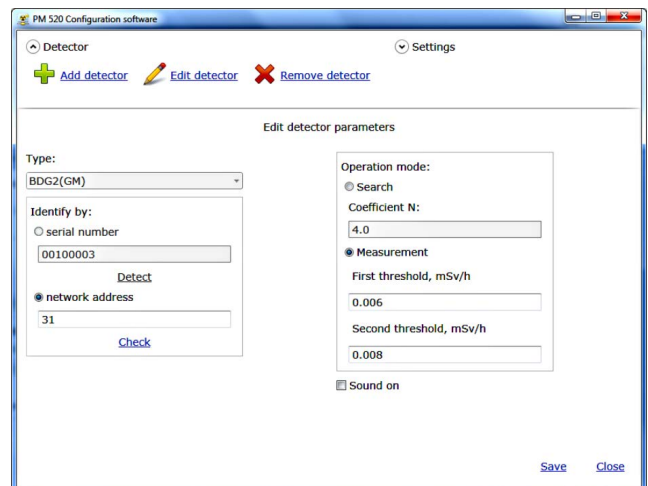
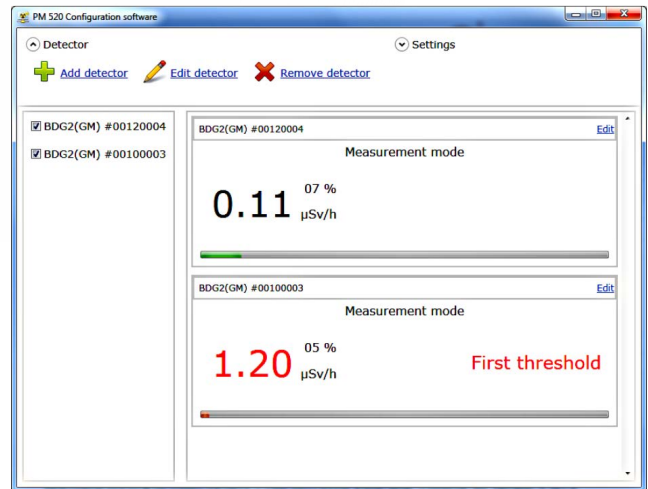
PM520 Processing Unit processes dose rate measurements from distributed radiation detectors over the area and alerts users if thresholds (ATTENTION and DANGER) are above the average background by visual and sound alarms.

PM520 can be supplied with **PC control unit** with the installed **Configuration Software** for the adjusting settings, sensitivity and alarming thresholds of particular detectors.

Additionally, PM520 can be equipped with **external alarming devices** and has possibility for integration into Customer security system.

Applications

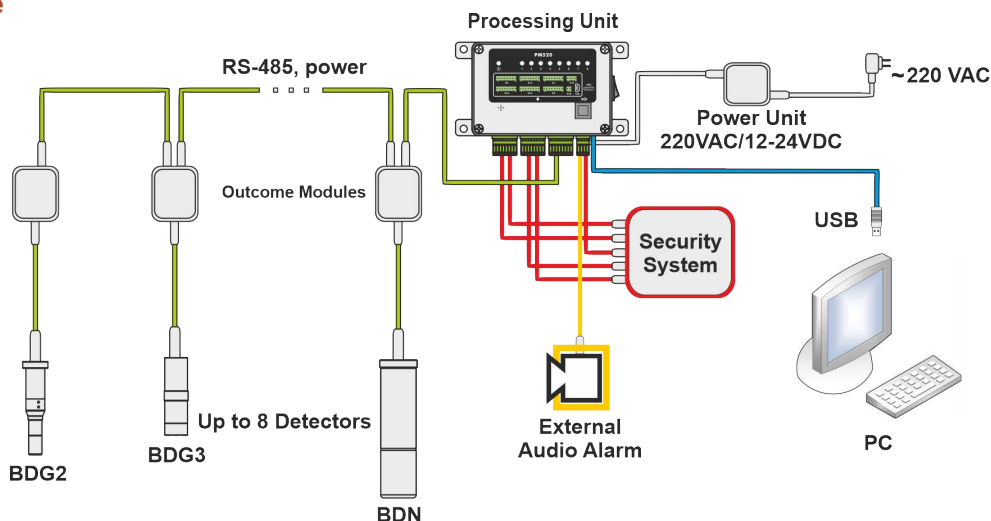
- Nuclear Facilities
- Waste Management
- Areas and Buildings with limited access
- VIP buildings



RADIATION MONITORING SYSTEM PM520



Architecture



SPECIFICATIONS

Processing Unit

Connection:

- PM520-04 – up to 4 detectors
- PM520-08 – up to 8 detectors

Connection Type:

RS-485 for detectors; USB for PC

Operation range: up to 1000 m

Alarm:

- internal sound and light (LED)
- remote sound module can be connected

Configuration:

wall mounted

Output:

- 8 (PM520-04) /16 (PM520-08) safety relays for integration into the security system (60 V, 320 mA)
- 2 additional relays. One for external alarm unit, second for faults (60 V, 320 mA)

Protection: IP41




Power supply:

- 110/220 V AC 50/60 Hz main power supply (via adaptor)
- 9-12 V DC main

Operation temperature: -20°C ... +50°C

Dimensions: 148x97x65 mm

Detectors

	BDG2-PM1403 Gamma Radiation Detector	BDG3-PM1403 Gamma Radiation Detector	BDN-PM1403 Neutron Radiation Detector
			
Detector	GM tube	CsI(Tl)	He-3
Energy range	gamma 0.03 - 3.0 MeV	gamma 0.05 - 3.0 MeV	neutron 0.025 x 10 ⁻⁶ - 14.0 MeV
DER Measurement range	0.1 µSv/h – 10 Sv/h	0.1 – 40 µSv/h	1 – 5000 µSv/h

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

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