

UIM-D AREA MONITOR PROVIDES SOLUTIONS FOR DIFFERENT RADIATION PROTECTION PROBLEMS DEPENDING OF THE CHOSEN DETECTOR UNITS

FEATURES:

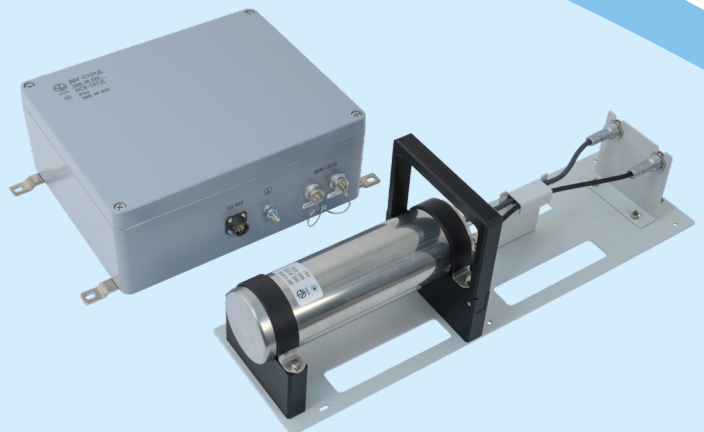
- Individual threshold setting for each measurement channel
 - Continuous area and process monitoring
 - Collects & displays data from two measurement channels (units with RS-485 or analog pulses)
 - Audible and visual alarms on exceeding preset thresholds or status of connected devices
 - Individual threshold setting for each measurement channel
- Activation of the external alarm or executive devices when any threshold is exceeded
The wide panel displays the following information:
- Values of measured parameters as $\text{min}^{-1} \cdot \text{cm}^{-2}$, $\text{s}^{-1} \cdot \text{cm}^{-2}$, $\mu\text{Sv/h}$
 - Diagnostic information about the status of connected devices
 - Current date and time
 - Position of measured values relative to the thresholds in the form of scales with green, yellow and red zones
 - Time history (trend) for each measured value

SYSTEM CONFIGURATION



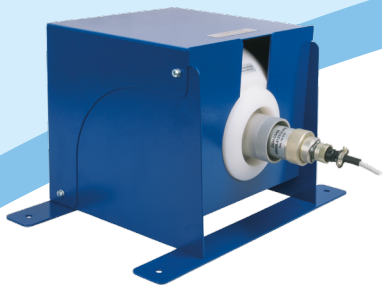
Display unit UIM-3D

- Collects & displays data from two measurement channels, generates audible and visual alarms
 - Displays data in CPM or in units per user's choice ($\mu\text{Sv/h}$, $\text{min}^{-1} \cdot \text{cm}^{-2}$, etc.)
 - Wireless connection to PC
 - Can be mounted on a wall or on a table
 - Shows measurement trends
- Physical characteristics:**
- Measurement range: count rate: up to 150 000 CPM
 - Operating temperature range: $-20 \div +50 \text{ }^{\circ}\text{C}$
- Electrical characteristics:**
- Power supply: 220 V , 50 Hz
- Mechanical characteristics:**
- Protection index: IP65
 - Overall dimensions, weight: 221×172×85 mm, 3.9 kg



Photon Dosimeter DBG-S101D

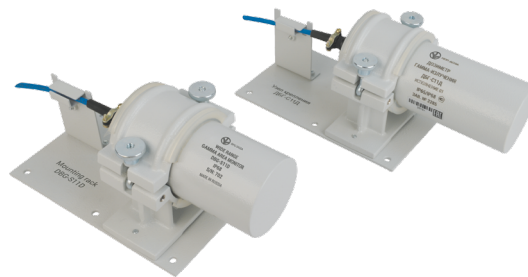
- Dosimeter of continuous measurement of ambient dose equivalent rate and the absorbed dose rate in air for X-ray and gamma radiation. Dosimeter consists of an ionization chamber module and an electrometric interface unit connected by a pair of electrometric cables.
- Energy range: 0.05 ÷ 3.0 MeV
 - ADER measurement range: $1 \cdot 10^{-5} \div 1 \cdot 10^4 \text{ Sv/h}$
 - ADR measurement range: $1 \cdot 10^{-5} \div 1 \cdot 10^4 \text{ Gy/h}$



Neutron Area Monitor UDMN-100

Area Monitor to measure dose rate of neutron radiation from analogue and digital detector units/detecting device.

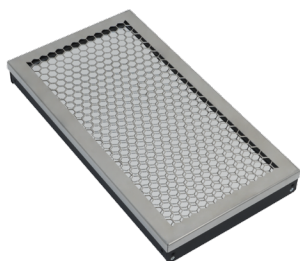
- Detected energy range: $0.025 \text{ eV} \div 10.0 \text{ MeV}$.
- ADER measurement range of neutron radiation: $1 \cdot 10^{-7} \div 1 \cdot 10^{-1} \text{ Sv/h}$.



Wide Range Gamma Area Monitor DBG-S11D

Area Monitor to continuous measure ambient dose equivalent rate (ADER) and absorbed dose rate (ADR) of gamma radiation.

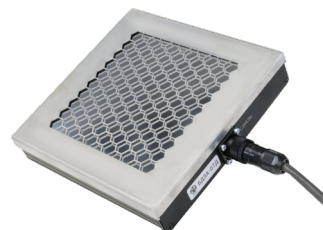
- Energy range: $0.05 \div 3.0 \text{ MeV}$.
- ADER measurement range: $0.1 \text{ } \mu\text{Sv/h} \div 100 \text{ Sv/h}$.



Detector Unit BDZA-09D

Scintillation Detector Unit to measure flux density and surface activity of alpha radiation with sensitive surface area 465 cm^2 .

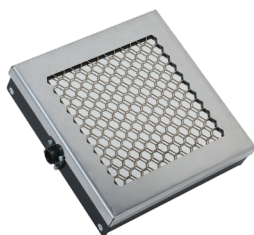
- Energy range of detected alpha radiation $4.0 \div 8.0 \text{ MeV}$.
- Measurement range of alpha flux density $0.1 \div 1 \cdot 10^5 \text{ min}^{-1} \text{ cm}^{-2}$.
- Measurement range of surface alpha activity of radionuclide ^{239}Pu : $3.4 \cdot 10^{-3} \div 3.4 \cdot 10^3 \text{ Bq} \cdot \text{cm}^{-2}$



Detector Unit BDZA-07D

Scintillation Detector Unit to measure flux density and surface activity of alpha radiation, sensitive surface area 146.4 cm^2 .

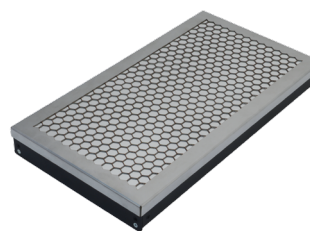
- Energy range of detected alpha radiation $4.0 \div 8.0 \text{ MeV}$.
- Measurement range of alpha flux density $0.1 \div 1 \cdot 10^5 \text{ min}^{-1} \text{ cm}^{-2}$.
- Measurement range of surface alpha activity of radionuclide ^{239}Pu : $1.0 \cdot 10^{-2} \div 3.4 \cdot 10^3 \text{ Bq} \cdot \text{cm}^{-2}$.



Detector Unit BDZB-19D

Scintillation Detector Unit to measure flux density and surface activity of beta radiation, ADER of gamma radiation with sensitive surface area 146.4 cm^2 .

- Energy range of detected beta radiation: maximum: $0.156 \div 3.54 \text{ MeV}$; average: $0.049 \div 1.508 \text{ MeV}$.
- Measurement range of beta flux density $0.1 \div 1 \cdot 10^6 \text{ min}^{-1} \text{ cm}^{-2}$.
- Measurement range of surface beta activity of radionuclide $^{90}\text{Sr} + ^{90}\text{Y}$: $3.4 \cdot 10^2 \div 3.4 \cdot 10^4 \text{ Bq} \cdot \text{cm}^{-2}$.



Detector Unit BDZB-18D

Scintillation Detector Unit to measure flux density and surface activity of beta radiation, ADER of gamma radiation with sensitive surface area 465 cm^2 .

- Energy range of detected beta radiation: maximum: $0.156 \div 3.54 \text{ MeV}$; average: $0.049 \div 1.508 \text{ MeV}$.
- Measurement range of beta flux density $0.1 \div 5 \cdot 10^5 \text{ min}^{-1} \text{ cm}^{-2}$.
- Measurement range of surface beta activity of radionuclide $^{90}\text{Sr} + ^{90}\text{Y}$: $3.4 \cdot 10^2 \div 1.7 \cdot 10^4 \text{ Bq} \cdot \text{cm}^{-2}$.

