# UDG-1B: noble gas monitor



Continuous automatic monitoring of the beta-emitting radioactive gases concentration in the working air and in the air in ventilation ducts and stacks.

- Gamma background compensation
- Audible and visual alarm signals of the excess of preset thresholds
- Periodic calibration by means of standard beta- source

#### **Reference standards**

Nuclear: IEC 60761, IEC 62302

EMC: IEC 61010, IEC 61000-6-2

Seismic: IEC 60980

# **Physical characteristics**

• Silicon detectors (2 pcs: for measurement and for background compensation)

• Air flow rate: 10 ÷ 100 l/min

• Operation temperature range: minus 10 ÷ +50 °C

#### Measurement range:

• 104 ÷ 6·109 Bq/m3

### **Energy range:**

• 0.08 ÷ 3.0 MeV

### **Electrical characteristics**

• Power supply:  $100 \div 250 \text{ V}$ ,  $47 \div 440 \text{ Hz}$ 

• Interfaces: RS-232, 2x RS-485, Ethernet

• programmable relay output (SPDT relay)

• Analog output 4 ÷ 20 mA (optional)

#### **Mechanical characteristics**

Protection index: IP 65Paint: decontaminable

## Overall dimensions, weight:

• Stationary version: 395×240×304 mm, 29.5 kg

• Mobile version with pump unit BN-1: 395×468×950 mm, 54.3 kg

#### Alarm:

Sound alarm: 80 ÷ 100 dBA at distance 1 m

• Visual alarm: green, yellow, red

• Connection of the external alarm unit "BAS" type

#### **Versions:**

- Stationary version
- Stationary version with pump unit BN-1
- Mobile version with pump unit BN-1

#### Accessory

Pump unit BN-01	Pump unit is ensures air sampling by feeding the air from work places and/or ventilation systems to the aerosol and gas monitors.
BI-2: External display & alarm unit	<ul> <li>Display of data received from equipment of Automated Radiation Monitoring System (ARMS)</li> <li>Audible and visual alarms on exceeding preset thresholds of the ARMS equipment</li> </ul>

	<ul> <li>individual threshold setting for each measurement channel</li> <li>Audible alarm: 80-100 dB at a distance of 1 m</li> <li>Visual alarm: red, yellow, green</li> </ul>
BAS/BAS-1s: external alarm	Generation of audible and visual signals of the excess of preset thresholds RMS monitors
External display unit	Display of data received from equipment of Automated Radiation Monitoring System (ARMS)