

## Radiation monitoring stand (RMS)



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### **Purpose:**

The radiation monitoring stand (RMS) is designed for continuous monitoring of radiation parameters in premises and technological systems at nuclear facilities. RMS can be used as a structural element of the lower-level of automation radiation monitoring systems at nuclear power plants and other nuclear facilities that involved in obtaining, processing, use and storage of radioactive materials.

### **Features:**

The stand provides:

- measurement of volumetric activity of alpha and beta-emitting aerosols in the air in monitored premises;
- measurement of volumetric activity of beta-emitting gases in monitored premises;
- primary processing, storage and transmission of measured and related data into the information channel based on the Ethernet IEEE 802.3 interface (TCP/IP protocol);
- transfer of required data to the location where the equipment is installed via technological channels based on RS-232 interface;
- generation of audible and light warning / alarm signals when the preset limits for monitored parameters (thresholds) are exceeded.
- presentation of received data on the liquid crystal displays (LCD) of direct reading measuring devices.

**Delivery set:**

Composition and modification depend on the tasks to be solved using the RMS.

The rack, which is an integral part of RMS, accommodates:

- Radiometric units UDA-1AB, UDG-1B, UDG-03D, UDI-1B, UDGB-01T;
- Pump unit BN-01;
- Data processing and transmission unit BOP-1M;
- Alarm signaling unit BAS or BAS-1s;
- Equipment of sampling line (flow meters, ball valves, filter holder, piping, solenoid valve);
- Switchboard (intended for switching of all equipment and transfer of data to the upper level via the unified communication channel).

Air flow rate provided by external pumping devices	5 to 100 L/min;
Communication interfaces	RS-485 and Ethernet;
Warm-up time	not more than 10 minutes;
Mode	round-the-clock, continuous;
Power supply	220 V, 50 Hz;
Power consumption	not more than 500 VA;
Safety class	classified as normal operation system components of safety class 3N;
Mean time between failures	20 000 hours or more;
Overall dimensions	1386x841x1696 mm;
Weight	not more than 200 kg;