

**HIGH SENSITIVITY MONITOR RZBA-07D IS DESIGNED FOR MEASUREMENT OF CONTAMINATION LEVEL BY ALPHA AND BETA-ACTIVE MATERIALS OF PERSONNEL'S HANDS, FEET/SHOES AND CLOTHING AND ALARMING WHEN THE THRESHOLDS ARE EXCEEDED.**

The monitor is recommended for monitoring personnel contamination at NPPs, nuclear fuel cycle facilities, radiologic laboratories and other enterprises that use radioactive substances.

## FEATURES:

- advanced and intuitive interface, easy at operation;
- availability of a version with a remote beta detector unit, BDZB-09D, or alpha detector unit, BDZA-07D;
- smooth adjustment of alarm thresholds within full measurement range;
- voice instructional support while measuring;
- determination of hand/foot position in the detected area; voice and visual support for correct positioning;
- simultaneous colour and sound indication of measurement results;
- automatic compensation of external gamma background after every measurement;
- alarm if detector units are defective and/or contaminated.

## PHYSICAL CHARACTERISTICS:

- type of detectors: plastic scintillation.

### Energy rang:

- beta radiation: 0.1 ÷ 2.5 MeV;
- alpha radiation: 4.16 ÷ 5.6 MeV;
- gamma radiation: 0.05 ÷ 1.5 MeV.

### Measurement range of flux density:

- beta radiation: 1 ÷ 25 000 min<sup>-1</sup>cm<sup>-2</sup>;
- alpha radiation: 0.1 ÷ 10 000 min<sup>-1</sup> cm<sup>-2</sup>.

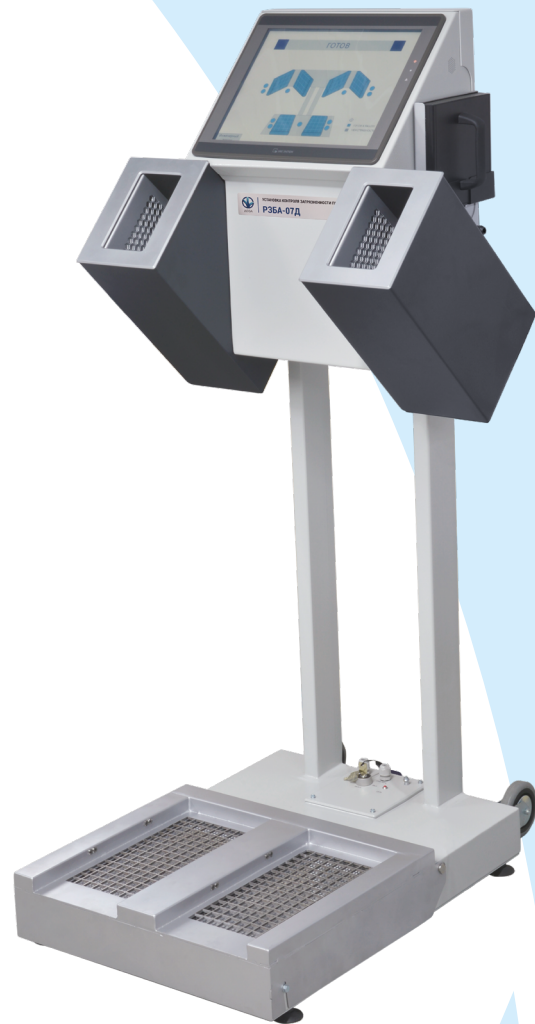
Time of one exposure: 10 s.

Continuous operation time: ≥ 24 h.

Operating temperature range: 0 ÷ +50 °C.

## ELECTRICAL CHARACTERISTICS:

- Power supply;
- 220 V, 50 Hz;
- Power consumption ≤ 150 W.



## MECHANICAL CHARACTERISTICS:

### Overall dimensions, weight:

- RZBA-07D monitor 809×614×1444 mm, 85 kg;
- BDZB-09D detector unit 168×176×70 mm, 1.4 kg;
- BDZA-07D detector unit 168×176×70 mm, 1.4 kg.

### Detectors overall dimensions:

- Hand: 288 cm<sup>2</sup>;
- Foot: 465 cm<sup>2</sup>;
- Alpha detector unit: 144 cm<sup>2</sup>.

