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## MDG-12S, MDG-13S

# SMART DIRECTIONAL DOSE RATE METERS



### KEY FEATURES

- Directional measurement of gamma dose rate without external shielding
- Smaller size and lower weight compared to externally shielded detectors.
- Two programmable alarm levels
- Integrated local processing electronics
- Can be used as an autonomous detector or as part of larger monitoring system

### DESCRIPTION

The MDG-12S and MDG-13S meters are designed for directional dose rate measurement, where the measurement from only one source of interest is required (for example one pipe, one filter, etc.), and it is desired to depress the response due to other sources.

They can be used as part of host monitoring systems or with a local display unit as autonomous monitors that display the measured values directly at the measurement location.

Both models include a semiconductor detector located within a lead shielding and collimation block, with integrated signal processing electronics. The collimator provides attenuation of radiation coming from the side and rear directions and therefore the detector is sensitive mainly to radiation entering the front end of the detector housing.

The monitor components are protected by the waterproof cylindrical metal housing.

The MDG-12S and MDG-13S detectors are available in two versions - standard and robust. The robust version has larger diameter and is equipped with a collimator with better attenuation.

The processing electronics in the robust version can also be protected against radiation by inner lead shielding. The standard version does not have this option.

The measured values and status of the monitor are transmitted to the host system or local display unit by RS-485 data interface.

### SPECIFICATION

Detector type	
- MDG-12S	semiconductor CdTe (5 x 5 x 5) mm
- MDG-13S	semiconductor Si 7 mm <sup>2</sup>

Measurement range	
- MDG-12S	from 1E-6 to 1E-1 Gy/h
- MDG-13S	from 1E-4 to 1E+1 Gy/h

Dimensions	
- MDG-12S-01	80 × 229 mm
- MDG-12S-03	65 × 186 mm
- MDG-13S-01	80 × 229 mm
- MDG-13S-03	65 × 186 mm

Weight	
Basic version	3,8 kg
Robust version with shielding	5,7 kg

Collimators angle	
- standard	15°
- optionally	30°

Power supply	24 V DC / 2 W
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Temperature range	from 5 to 50 °C
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Humidity range	max. 80 % non-condensing
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## OPTIONAL ACCESSORIES

- 50-A-0012351 Internal shielding of electronics 1 cm
- 50-A-0014068 External shielding of the detector 2 cm

## RELATED PRODUCTS

- RDU-22 Radiation Display Unit
- ASU-50 Alarm Slave Unit



RDU-22 Radiation Display Unit



ASU-50 Alarm Slave Unit



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Specification subject to change without prior written notice.

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