ROTEM

GM-42 Detector

Sensitive low-range GM gamma detector for clean rooms and radiopharmacies

Sensitive low-range gamma detector for measuring dose rates where radioactive material is handled, such as clean rooms, radiopharmacies, QA departments and packing rooms, and as a backup to the extremely sensitive PM-11 exhaust stack detector. Like all WebiSmarts detectors it contains its calibration factor and a unique electronic identifier.



Detector	Measurement range	Energy range
GM tube ZP-1201 or equivalent [1]	**.5 µSv/h – 10 mSv/h (50 µR/h – 1 R/h)** [1]	**50 keV – 1.3 MeV** [1]

Specifications

DETECTOR

Detector	GM tube ZP-1201 or equivalent	[1]

MEASURING RANGE

Measurement range	0.5 µSv/h – 10 mSv/h (50 µR/h – 1 R/h)	[1]
Energy range	50 keV – 1.3 MeV	[1]
Energy response	±20%	[1]
Angular dependence	Less than ±20% within ±45° of the preferred direction	[1]

ELECTRONICS & SIGNAL

Signal outputs	TTL pulses (5 V, 5 ms); status: identification, malfunction, overflow; cable up to 100 m	[2]

MECHANICAL

Dimensions	197 × ø38 mm	[1]
Weight	250 g (0.55 lb)	[1]

ENVIRONMENT & RATINGS

perating temperature	−10 to +50 °C	[1]

Sources

[1] **Area Gamma Detector GM-42 (Low Range) data sheet**
Rotem Industries · datasheet · TDS · checked 2026-10-16
https://rotem-radiation.co.il/wp-content/uploads/2025/12/Area-Gamma-Detector-GM42-Low-Range-09122025.pdf

[2] **GM-42 Detector**
Rotem Industries · product-page · Product page – Technical Specifications · checked 2026-10-16
https://rotem-radiation.co.il/solution/area-gamma-detector-gm-42/

Every value is taken from the manufacturer’s own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer’s published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.