ROTEM

IC-10 Detector

Rugged ion chamber detector for gamma, X-ray and beta radiation

Rugged ion chamber detector for accurate and highly stable field measurements of exposure rates from gamma, X-ray and beta radiation over a wide range. It is used with the RAM DA-2000 or in the WebiSmarts system and is also available with a 6 MeV energy sleeve.



Detector	Measurement range	Weight
Ion chamber, 500 cc; wall a nd cover 300 mg/cm² (tissue e quivalent); end window 7 m g/cm² [1]	**1 µSv/h – 250 mSv/h (0.1 mR/h – 25 R/h)** [1]	**470 g** [1]

Specifications

DETECTOR

Detector	Ion chamber, 500 cc; wall and cover 300 mg/cm² (tissue equivalent); end window 7 mg/cm²	[1]

PERFORMANCE

Accuracy	±15% of reading within the measuring range	[1]

MEASURING RANGE

Measurement range	1 µSv/h – 250 mSv/h (0.1 mR/h – 25 R/h)	[1]
Sensitivity	0.04 pA per mR/h (gamma)	[1]
Energy response	Gamma: better than ±20% at 20 keV–1.2 MeV (Cs-137)	[1]
Angular dependence	Less than ±5% within ±120° of the front direction (Cs-137)	[1]

CONNECTIVITY & INTERFACE

Display range	0.1 µSv/h – 250 mSv/h	[1]

MECHANICAL

Dimensions	Chamber: 11.7 cm long, ø8.9 cm; handle: 14.3 cm long, ø5.2 cm	[1]
Weight	470 g	[1]

ENVIRONMENT & RATINGS

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

Sources

[1] IC-10 Detector data sheet
Rotem Industries · datasheet · TDS, Technical Data; Specifications – Dimensions; Specifications – Temperature Range · checked 2026-10-16
https://rotem-radiation.co.il/wp-content/uploads/2025/07/IC-10-Ion-Chamber-30012023.pdf

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.