LUDLUM

RDS Beta Photon Probe

Beta/photon probe with two GM tubes

Probe for the RDS Base Unit that measures beta and photon (gamma and X-ray) radiation with one GM tube for low and one for high dose. The end cap comes off for beta radiation and low-energy X-rays, and the probe fits the Telescoping Probe Handle for reaching further.



Detector type	Energy range	Count-rate range
Low-dose and high-dose Geiger-Mueller tubes [1]	**Photons 60 keV – 3 MeV; beta 200 keV – 3 MeV** [1]	**0–1.5 Mcpm** [1]

Specifications

DETECTOR

Detector type	Low-dose and high-dose Geiger-Mueller tubes	[1]
Window	1.7 ± 0.3 mg/cm² mica, protected by a stainless steel screen (79% open)	[1]

PERFORMANCE

Dead time	50 µs	[1]
Background rate	Typically 60 cpm (in a 10 µR/h field)	[1]
Detection efficiency	4π: Pu-239 15%, Tc-99 19%, Sr-90/Y-90 22%, C-14 5%, P-32 32%	[1]

MEASURING RANGE

Dose-rate range	0.1 µGy/h – 100 Gy/h (gamma/X-ray)	[1]
Energy range	Photons 60 keV – 3 MeV; beta 200 keV – 3 MeV	[1]
Count-rate range	0–1.5 Mcpm	[1]

POWER & BATTERY

Power supply	Supplied by the RDS Base Unit	[1]

MECHANICAL

Dimensions	24 × 3 × 4 cm (9.26 × 1.2 × 1.6 in)	[1]
Weight	0.35 kg	[1]
Housing material	Anodised aluminium	[1]

ENVIRONMENT & RATINGS

Operating temperature	−30 to 50 °C	[1]
Storage temperature	−50 to 60 °C	[1]
Humidity	3–100% relative humidity	[1]

IP rating	IP67	[1]

ORDERING & ACCESSORIES

Part number	V038276	[1]

GENERAL

Standards met	ANSI N42.17 and N42.34; MIL-STD 461F, 1686C and 810G	[1]
NATO Stock Number (NSN)	6665-01-671-4352	[1]

Sources

[1] **RDS Beta-Photon Probe data sheet (V038276)**
Ludlum Measurements · datasheet · p. 2, Radiological; p. 2, Radiological – Detection; p. 2, Radiological – Beta Window · checked 2026-11-16
https://www.ludlum-slc.com/beta-photonprobe_v038276/

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.