

Data sheet

Dose Rate Probe LB 1236-H10

Use

Used as photon dose rate probe in radiation protection

Measured Radiation Quantity

Ambient dose equivalent $H^*(10)$

Ambient dose rate equivalent $\dot{H}^*(10)$

Application

Dose rate probe for environmental or local dose rate measurement.

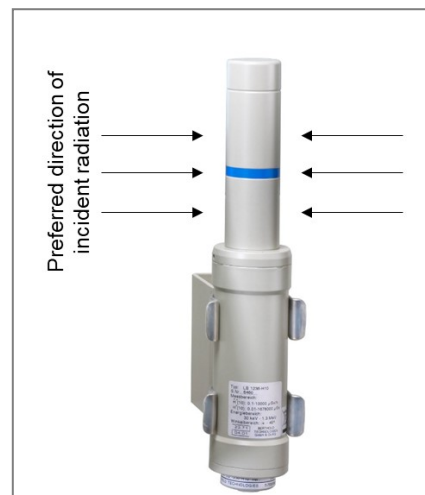
Qualification

For low dose rate levels (from background levels to 10 mSv/h).

Functional Description

The probe contains following modules:

- ▶ Ambient equivalent energy compensated proportional counter
- ▶ High voltage for the proportional counter tube (high voltage setting internally or external control signal)
- ▶ Amplifier discriminator circuit



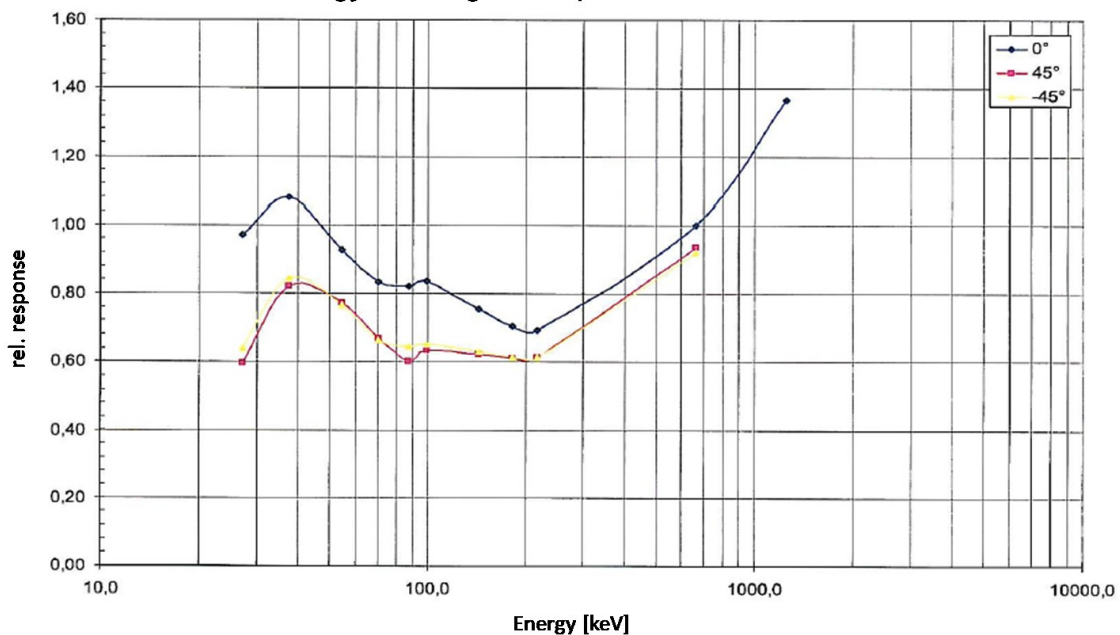
Technical Data

- ▶ **Dose Rate Range**
50 nSv/h – 10 mSv/h
- ▶ **Energy Range**
30 keV – 1.3 MeV
Angular response $\pm 45^\circ$
- ▶ **Background**
< 0.1 cps
- ▶ **Calibration Factor**
0.214 μ Sv/h per cps
- ▶ **Output Signal**
Polarity: positive
Amplitude: + 5 V
Width: approx. 1.5 μ s
Min. Repetition time: approx. 1.5 μ s
Rise & Fall time: 100 ns
Impedance: 60 Ω
- ▶ **Operation Voltage**
1700 Volt
- ▶ **Plateau length**
approx. 300 Volt
- ▶ **Operation Conditions**
Ambient temperature: - 20°C to + 40°C
Rel. Humidity: 30 % to 90 %
- ▶ **Protection Degree**
IP 65 (according to IEC 60529)
- ▶ **Dimensions / Weight**
Outer diameter: 50 mm
Length: 275 mm
Weight: 0.46 kg

Version

LB 1236-D-H10 with differential data transfer

Energy and Angular Dependence LB 1236-H10



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