Technical Data Sheet

Ionisation Chamber LB 6701M-H10

Application

Dose rate probe for photon radiation in Health Physics applications.

Measured Quantity

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

Construction

The Ionisation Chamber is made from Aluminium with a Nitrogen gas filling at 10 bar and a radiation resistance up to 10^6 Gy. The chamber current is propotional to the dose rate, this current is converted into a +11V Norm pulse frequency in the Current/Frequency converter LB3856-23.

The Current/Frequency converter is mounted in a separate housing LB6703 which also contains the High Voltage module to operate the Ionisation Chamber.

A ^{90}Sr check source with 25 kBq activity is built in the Ionisation Chamber to continuously monitor the proper functioning of the system.

Technical Data

- **Measuring Range**
  0,1 mSv/h – 100 Sv/h
- **Energy Range**
  45 keV – 1,3 MeV
  with regard to Cs-137 and 0°
- **Calibration Factor**
  1 mSv/h per cps
- **Output pulse I-F-Converter**

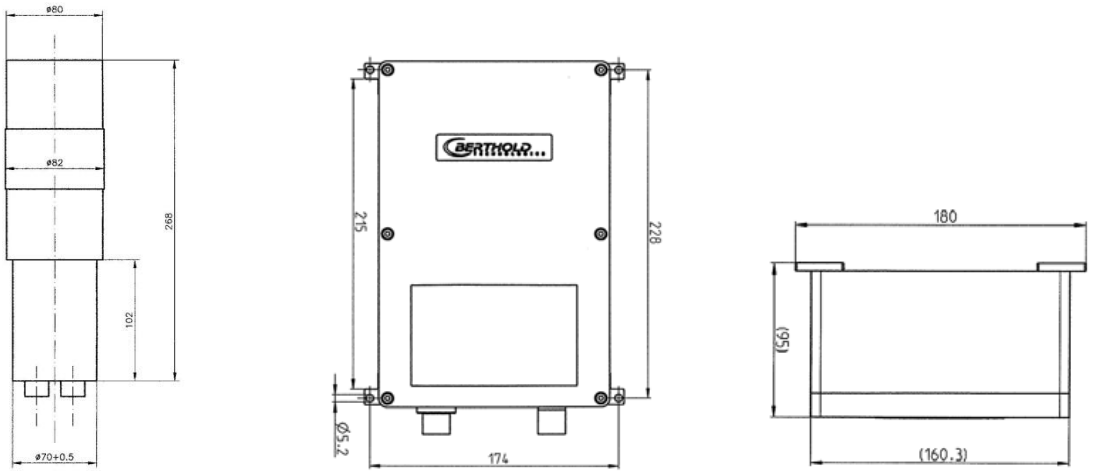
Polarity:	positive
Amplitude:	+ 4,5 V in 50 Ω
Pulse Width :	2 - 5 µs
Frequency range:	0,1 Hz – 100 kHz

- **High Voltage**
  1000 Volt
- **Operating Conditions**

Temperature:	0 to + 50°C
Rel. humidity:	20 to 80 %
Storage temp.:	max. 60°C

- **Protection Degree**
  IP 65
- **Dimensions**

- Ionisation chamber:	80 mm Ø x 268 mm
- I-F-Converter Connection box:	240 x 160 x 90 mm



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