# Technical Data Sheet

# Ionisation Chamber LB 6701H-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 1 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 50 kBq activity is built in the Ionisation Chamber to continuously monitor the proper functioning of the system.

## Technical Data

- **Measuring Range**
  1 mSv/h – 1000 Sv/h
- **Energy Range**
  45 keV – 1,3 MeV
  with regard to Cs-137 and 0°
- **Calibration Factor**
  10 mSv/h per cps
- **Output pulse I-F-Converter**

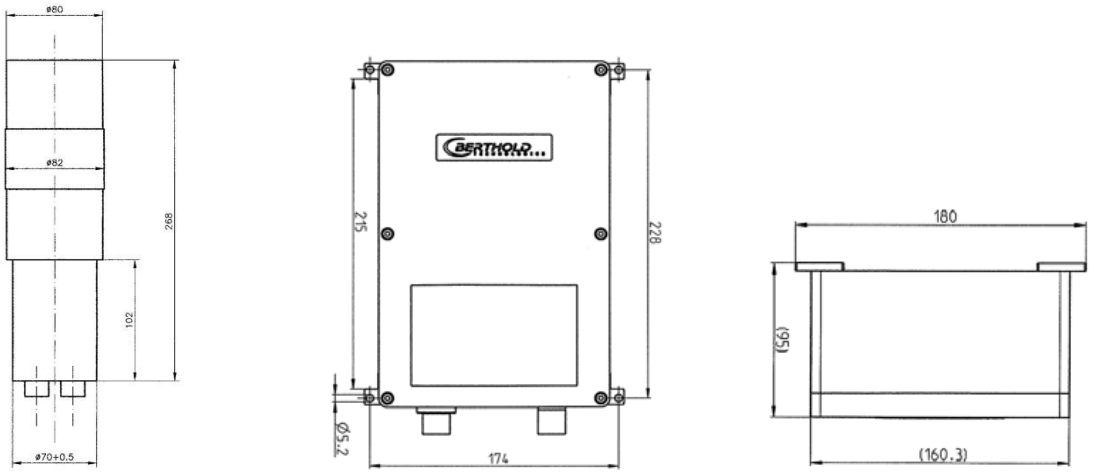
| | |
|---|---|
| Polarity: | positive |
| Amplitude: | + 4,5 V in 50 Ω |
| Pulse Width : | 2 - 5 µs |
| Frequency range: | 0,1 Hz – 100 kHz |

- **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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Rev00 20.07.2011 AM