MIRION TECHNOLOGIES

PREMIUM ANALYSE

DT D - BM8™

660 cc Tritium Detector

Ionization chamber for use in the field or radioprotection, environmental monitoring and process surveillance.

FEATURES

- **High performance**
  - Continuous measurement
  - Wide measurement range
  - Response time under 75 seconds
- **Simple**
  - Maintenance-free
  - Quick and easy commissioning
- **Reliable**
  - Precise and stable

DESCRIPTION

The DT D - BM8 is a medium-sized ionization chamber (660 cc) detector providing a wide measurement range from 3.2 kBq/m^3 *(86 nCi/m^3)* to 3.2 TBq/m^3 *(86 Ci/m^3)*.

This robustly-housed detector is adapted for the measurement of all ranges of activity.

The detector can be connected to a DT ionix 3 touchscreen Human Machine Interface that can be installed several hundred meters away from the detector, it benefits from the most advanced features such as data extraction via USB, Modbus communication dry contact outputs...

DT D - BM8 | 660 CC TRITIUM DETECTOR

GENERAL CHARACTERISTICS

• Dimensions	139 x 112 x 140 mm (w x h x d)
• Weight	env. 4 kg
• Power supply	9-36VDC, 300mA
• Power supply connector	baseplate LEMO ENB. 1B.304.CLL
• CAN Connector	baseplate LEMO ENG. 1B.304.CLL
• Radon compensation	dynamic with digital filtration

Delivered with certificate of conformity

IONIZATION CHAMBER

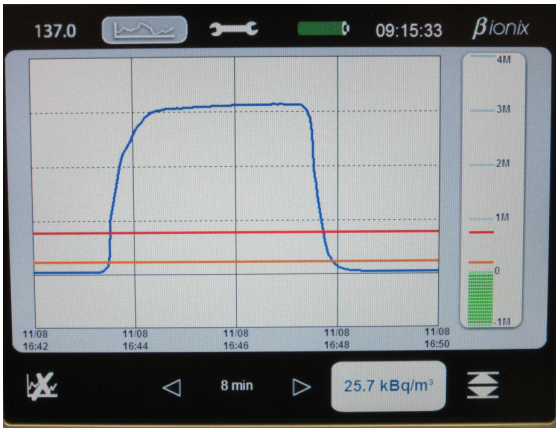
• Material	304L stainless steel electropolished
• Volume	660 cc
• Nominal flow	4 L/min
• Response coefficient	71 200 (Bq/m³)/fA
• Ionization voltage	160 VDC

PERFORMANCES (for tritium)

• Measurement range	3.2 kBq/m³ to 3.2 TBq/m³ *86 nCi/m³ to 86 Ci/m³*
• Limit of detection (2σ) = decision threshold	10 kBq/m³ *(0.27 µCi/m³)*
• Limit of detection (4σ)	20 kBq/m³ *(0.54 µCi/m³)*
• Precision	5% of measurement ± 10 kBq/m³ *± 0.27 µCi/m³*
• Maximum deviation	10 kBq/m³ / year *(0.27 µCi/m³)*
• Noise (2σ)	10 kBq/m³ *(0.27 µCi/m³)*
• Response time	< 75 sec at 90% of step

OPERATING CONDITIONS

- Temperature of use: +0°C to +40°C *(+32°F to +104°F)*
- Influence of temperature: 0.3% /°C for a variation of ambiant temperature < 3°C / hour
- Humidity: from 5 to 95% relative
- Influence of humidity: ± 1 % of the measurement from 10 to 90% relative humidity
- Influence of atmospheric pressure: 0.1 %/mbar, hence ± 5 % of the measurement form 930 to 1030 mbar



Response to a 3 MBq/m³ *(81 µCi/m³)* gas injection

Response to a 1.6 MBq/m³ *(43 µCi/m³)* gas injection

Calibration reports available, gas calibration made upon request

CONTACT US

Mirion Technologies (Premium Analyse)
Phone: +33 (0)3 87 51 31 75
Email: contact@premium-analyse.fr

PREMIUM Analyse
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