

AlphaE

Professional Meter for Radon Concentration, Personal Exposure and Dose

ALPHA E

- For time-resolved and fast measurement of Radon concentration in buildings, outdoor, personal exposure and dose
- Measurement from 20 Bq/m³...10 MBq/m³ (0,54 pCi/l ...270 nCi/l)
- Ultra-small, light-weight
- Up to 6 months battery life
- Acoustic alert for radon concentration and dose
- Developed in cooperation with Helmholtz Centre, Munich, Germany
- GOS Standard homologation and US NRPP device listing started



The AlphaE is an ultra-small continuous radon monitor for fast and time-resolved radon monitoring in buildings, outdoor as well as in mines.

Typ. 80 % of the final result is achieved after 2 hrs (faster response for higher values). Due to the light-weight and small dimensions it can also perfectly be used to measure the personal radon exposure and to manage personal dose. Based on a silicon diode diffusion chamber the sensitivity is 3 cph at 100 Bq/m³ (2.7 pCi/l). Thus, also low radon levels below 100 Bq/m³ (2.7 pCi/l) can be measured as specified by the latest WHO recommendations (12 % uncertainty at 1 sigma/24 hrs.). The calculation of dose is possible due to a user-settable equilibrium factor.

Up to 6 months battery life allows long-term measurement without mains power, permanent operation via mains supply possible via USB port. AlphaE stores all measurement data in the internal flash storage. In 1 hr. measurement cycle up to 6 months of measurement data is available for read-out via the USB port. In addition to the radon measurement the data from the built-in tampering/movement detector and temperature sensor are recorded, as well as the measurement time. New DataVIEW software (included with AlphaE) or DataVIEW PRO are available for readout and export to Excel or DataEXPERT etc. DataVIEW PRO allows generation of customized reports with user definable measurement periods per weekday and hours.

Calibration from an accredited calibration lab (BfS, GER) as well as extensive measurements and comparative tests with AlphaGUARD (traceable to PTB national standard) and site-tests under harsh conditions prove the validity of calibration and correct operation, even in higher humidity applications like in water works, mines etc.

FEATURES

- Time-resolved measurement for the exact determination of radon
- Ultra-small and light-weight with optional belt bag, alternatively for wall-mounting
- Battery operation up to 6 months
- Wide measurement range up to 10 MBq/m³ (270 nCi/l)

APPLICATIONS

- Short-term/long-term radon examinations of objects, indoor and outdoor
- Measurement of personal radon exposure and dosimetry for workers in health centers, mines, waterworks etc.
- Cost-effective radon measurement for mitigation activities

CHARACTERISTICS

• Detection principle:	Diffusion chamber with silicon diode
• Measurement range / unit:	20 Bq/m ³ ... 10 MBq/m ³ (0,54 pCi/l ... 270 nCi/l) (specify with order)
• Sensitivity:	3 cph at 100 Bq/m ³ (2,7 pCi/l)
• Dose calculation:	Based on user-settable equilibrium factor
• Dose range:	0 ... 1 Sv (0 ... 10 rem)
• Measuring cycle:	Adjustable from 1 min to 12 hrs
• Storage capacity:	10 000 data sets (ca. 7 ... 5 000 days, depending on set measuring cycle)
• Diffusion time constant:	Typically 1 ... 2 hrs (user adjustable smoothing factor)
• Temperature range (operation):	- 20°C ... + 50°C (- 4°F ... + 122 °F)
• Battery life (rechargeable):	Up to 6 months (rechargeable via USB)
• Interface:	USB, cable incl. charging unit
• Additional sensors:	Temperature sensor, tamper detection
• Display:	6 digit LCD + 5 digit alphanumeric, backlight
• Dimensions/Weight/Housing:	108 mm x 68 mm x 30 mm / 165 g / aluminium
• Protection class:	IP40 without pouch/bag, IP51 with belt pouch, IP62 with dust protection bag

ACCESSORIES

- Free DataVIEW software for data analysis and visualization
- DataVIEW PRO software with additional functionalities, see data sheet
- Wall support
- Belt Pouch
- Suitcase
- Dust protection bag (Tyvek®)



RELATED PRODUCTS

- More about radon measurement: Ask for information about the AlphaGUARD product range!
- More about software: Ask for detailed information!

SAPHYMO FRANCE - Headquarters

25 route de l'orme - Les Algorithmes
Bât. Esope
91190 Saint-Aubin
Tél.: +33 (0)1 69 53 73 00
Contact: nuclearsales@saphymo.com

SAPHYMO GmbH

Heerstrasse 149
D-60488 Frankfurt am Main
Tel.: +49 (0)69 976 514 0
Contact: sales@saphymo.de

SAPHYMO ITALIA

Vico Chiuso Paggi, 4/11
I-16128 Genova
Tel.: +39 (0)010 25 12 978
Contact: mail@saphymoitalia.com