

SOIL GAS PROBE



Monitoring Radon in soil gas (with AlphaGUARD DF2000 and AlphaS)

MAIN ADVANTAGES

- Sampling and continuous monitoring
- Robust and reliable set-up for long-term use
- Field-proven sampling method and protocol
- Option for AlphaGUARD: Differential Pressure Sensor Unit (DSP-5000)
- Easy-to-use soil gas measuring probe for sampling as well as for continuous monitoring of radon in soil gas



DESCRIPTION

The soil gas probe has been reliably applied for many years in conventional soil gas analysis. It is suited for manual as well as for machine-driven propulsion (adaptor for striking tools of the types Cobra, Bosch, Wacker and Makita). The exchangeable drilling tip, the insertable capillary probe and the aqua-stop filter ensure easy and safe sampling.

The electronic flow controlled pumping unit which is inbuilt part of the AlphaPUMP DF2000 as well as AlphaS transports the soil gas from the tube tip into the measuring chamber of the radon monitor. The AlphaGUARD DF2000 or AlphaS as measuring- and recording device provides optimized features for soil gas measurement, e.g. short recovery time (typically: 5 min), even after measuring extremely high radon concentrations. A sampling method, developed in cooperation with GGD Leipzig for the previous version of AlphaGUARD – PQ2000 PRO – is provided and can be likewise applied to the AlphaGUARD DF2000 and the AlphaS. This approach is based on the experience with several thousand measurements. The expenditure of time for one measurement point is approx. 15 min.

The soil gas probe can optionally be completed by an inflatable bag (packer) for airtight measurements when using existing drill holes (ø 35-42 mm). Moreover, an extension set up to 10 m as well as lifting tools or hydraulic extraction devices are available for safely pulling out the rod.

SOIL GAS PROBE

Monitoring Radon in soil gas (with AlphaGUARD DF2000 and AlphaS)

COMPONENTS

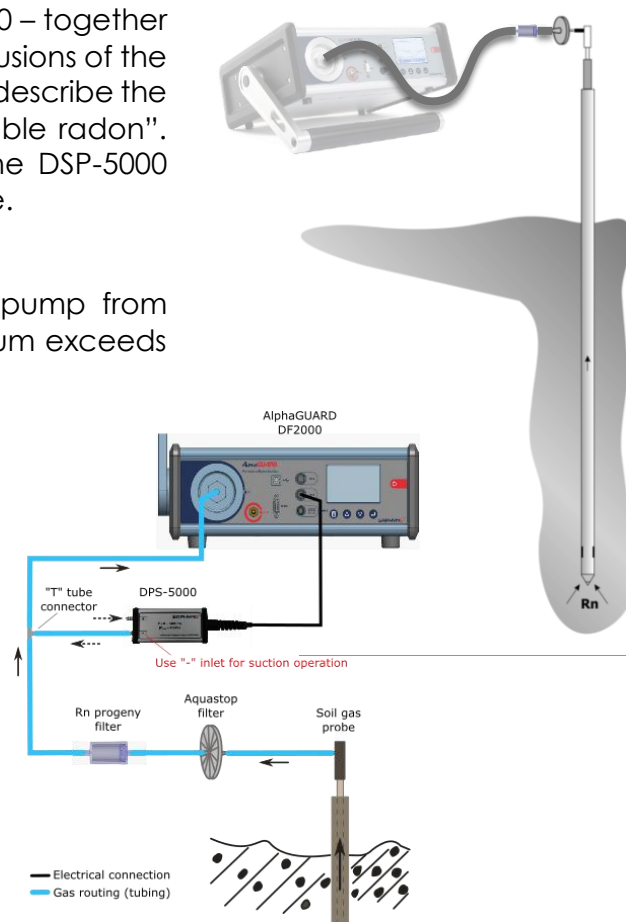
Drilling rod $\varnothing$ 22 mm, length 1 m, hammering head and handle
Exchangeable probe tip with airlock and rivet holder
Capillary probe for reliable routing of the measuring gas
Aqua-stop filter
2 m connection tube
50 rivets, spare parts and tools

OPTIONS

Soil Gas Measurement using the Differential Pressure Sensor

The use of the Differential Pressure Sensor – DSP-5000 – together with the AlphaGUARD DF2000 allows to draw conclusions of the prevalent soil permeability at the site and hence to describe the specific spot by the radiological variable “disposable radon”. When connected to the AlphaGUARD DF2000, the DSP-5000 forwards generated data to the monitor for storage.

Furthermore, the DSP-5000 prevents the internal pump from overloading. As soon as the threshold of the vacuum exceeds 50 mbar, the pumping unit is switched off.



RELATED PRODUCTS

More about radon measurement: Ask for information about the Radon product range