

Soil Gas probe

Monitoring of Radon in soil gas (with AlphaGUARD DF2000)

Key features

- ❖ Sampling and continuous monitoring
- ❖ Robust and reliable set-up for long-term use
- ❖ Field-proven sampling method and protocol
- ❖ Option: Differential Pressure Sensor Unit (DSP-5000)



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Easy-to-use soil gas measuring probe for sampling and continuous monitoring of Radon in soil gas.

The soil gas probe has been successfully used 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 replaceable drilling tip, the capillary probe and the aqua-stop filter ensure easy and safe sampling.

The electronic flow controlled pumping unit which is part of the AlphaPUMP DF2000 transports the soil gas from the tube tip into the measuring chamber of the Radon monitor. The AlphaGUARD DF2000, as a 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 PQ2000 PRO is provided and can also be used for the AlphaGUARD DF2000. This method is based on the experience acquired through several thousand measurements. The period for one measurement point is approx. 15 min.

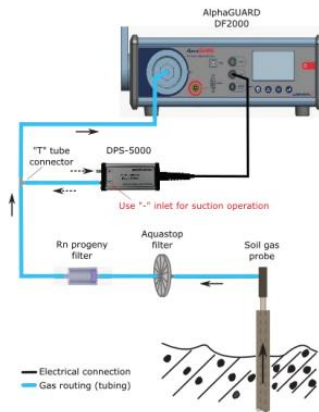
The soil gas probe can optionally be completed by an inflatable bag (packer) for airtight measurements when using existing drill holes (\varnothing 35-42 mm). Moreover an extension set up to 10 m as well as lifting tools or hydraulic extraction devices are available for a safe pull out of the rod.

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SOIL GAS MEASUREMENT USING DSP-5000

The optional use of the Differential Pressure Sensor – DSP-5000 – together with the AlphaGUARD DF2000 allows to draw conclusions of the prevalent soil permeability on 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.



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
- Optional: mallet (plastic hammer)
- Optional: pulling device



Mallet



Pulling device

RELATED PRODUCTS

- Valve Selector Switch-Box for continuous multi spot measurement
- More about Radon measurement: Ask for information about the AlphaGUARD product range