

FYCDY-P30 Radon Analyzer

Introduction of instruments

This product is based on the principle of pump electrostatic collection method and uses the latest generation of PIPS detectors to create a high-performance radon detector. It has advanced technologies such as automatic compensation of temperature and humidity for measurement sensitivity and rapid follow-up of changes in environmental radon concentration. Based on the Android system to create a leading user interface and rich functions, the device measures accurately, stably and reliably. It is a new generation of radon detector created by our company to achieve multiple application scenarios, which meet the needs of conventional single-point measurement, and also realize true online continuous monitoring.



Features

1. The detector adopts advanced technology of passivated ion implanted planar silicon (PIPS), with high sensitivity, high signal-to-noise ratio, low leakage current, and strong durability;
2. Based on the industrial-grade high-performance CORTEX architecture microcontroller design, it adopts multi-tasking software design, with high operating efficiency, stable and reliable;
3. It adopts pump-suction electrostatic collection α energy spectrum analysis method;
4. It has good resolution of α energy spectrum and displays the measurement spectrum in real time;
5. Industrial-grade 5.0-inch touch screen with a resolution of 800x480 and adjustable brightness;
6. The measurement cycle is short, the recovery is fast, and it can quickly respond to changes in radon concentration;
7. Dry tube constant humidity measurement and temperature and humidity compensation measurement
8. Automatic measurement of temperature, humidity, and atmospheric pressure;
9. The instrument can be upgraded remotely or offline, and maintenance is convenient;
10. Built-in printer can quickly print measurement results in real time;
11. The display has a powerful user interface and rich functions, which is easy to upgrade and maintain.

Technical parameter

Items	Parameter
Detection object	Rn-222 (radon-222) Rn-220 (thoron)
Detection function	Air radon concentration, soil radon concentration ,(optional) Water radon concentration,(optional) radon exhalation rate measurement,(optional)
Measurement method	Active pumping electrostatic collection α spectrum measurement
Detector	PIPS semiconductor detector
Temperature Accuracy	±0.2℃ Temperature and humidity automatic correction
Humidity Accuracy	±1.8%RH
Sensitivity	≥0.65cpm/[pCi/L] at 10%RH humidity
Detection limit	1Bq/m³
Suction method	Active pumping electrostatic collection
Measurement range	Air radon: (1~1000000)Bq/m³ Soil radon: (100~1000000)Bq/m³ Water radon: (0.002~1000.000)Bq/L Sedimentation rate: (0.001~60.000) Bq/[m²·s] (optional)

Configuration

Items	Qty
Host	1
Charger Special charger	1
Printer Built-in printer (including printing paper)	1
soil radon sampler	(optional)
silica gel dryer	1
Rubber hose	1
Analysis software (Fangyuan Technology portable radon detector analysis software)	1
radon daughter filter	1
exhalation rate measurement accessory	(optional)
Radon in water measurement accessory	(optional)
Instruction manual	1