

FYCDY-P30

FYCDY-P30 is based on the design of pumping electrostatic collection energy spectrum analysis method, and adopts a new generation of high sensitivity and high resolution passivation ion implantation planar silicon detector (PIPS) to quickly capture the changes in radon concentration in real time.

FYCDY-P30 adopts mainstream industrial-grade MCU control analysis and industrial-grade display control platform, combined with advanced alpha energy spectrum analysis, temperature and humidity automatic compensation and other technologies to ensure the accuracy, stability and reliability of the measurement; the equipment is simple to operate and has rich functions. Stable and reliable operation.



Detection items	Rn-222 (Radon) Rn-220 (Thoron)	Detector	PIPS semiconductor detector
Measuring range	Radon in Air : 1~1000000Bq/m ³ Radon in Soil: 100~1000000Bq/m ³		Radon in Water : 0.002~1000.000Bq/L Exhalation rate: 0.001~60.000Bq/[m ² • s]
Measurement method	active pumping electrostatic collection, 4096 alpha energy spectrum measurement		
Temperature	-10 ~ 50°C, accuracy ±0.2°C	Humidity	relative humidity ≤90%, accuracy ±1.8%RH
Automatic Compensation of Temperature and Humidity			
Lower detection limit	as low as 1Bq/m ³	Communication interface	USB communication interface
Sensitivity	≥0.45CPM/[pCi/L] (Po218), ≥0.90CPM/[pCi/L] (Po218+Po214)	Interface display	5-inch system screen, 800*480 high-definition display, support multi-touch, support battery power display
Printing	built-in printer	Battery life	20 hours of continuous operation
Host size	292mm×232mm×259mm	Weight	about 5kg for the host machine about 12kg for the accessories

Characteristics

1. Using pump suction electrostatic collection α energy spectrum analysis method
2. The detector adopts the advanced technology of passivation ion implantation of planar silicon (PIPS), which has high sensitivity, high signal-to-noise ratio, low leakage current, and durable.
3. Good resolution of α energy spectrum, real-time display of measurement atlas, alpha energy spectrum supports up to 4096 channels
4. Based on industrial-grade high-performance CORTEX architecture microcontroller design, using multi-task software design, high operating efficiency, stable and reliable
5. Industrial grade 5.0-inch touch screen, resolution 800×480, brightness adjustable
6. Short measurement period, fast recovery, and quick response to changes in radon concentration
7. Constant humidity measurement and temperature and humidity compensation measurement for drying tube are optional
8. Automatic measurement of temperature, humidity and atmospheric pressure
9. The instrument can be upgraded remotely or offline, which is convenient for maintenance
10. Built-in printer, which can print measurement results quickly and in real time
11. Built-in storage space can store up to 200,000 measurement and energy spectrum data after expansion
12. Low power consumption, built-in lithium-ion battery, support 20h battery life, expandable.

Standard Instrument Configuration

1	1 set of host machine	8	1 piece of USB
2	1 set of analysis software	9	1 set of accessory for measuring Radon in Soil
3	1 piece of rubber tube	10	1 set of accessory for measuring Radon in Water
4	Built-in printer + printing paper extra	11	1 set of accessory for measuring Radon Exhalation Rate
5	1 piece of blue color-changing silicone desiccant + 1kg extra	12	1 set of digital cable+dedicated charger
6	5 pieces of radon daughter filter elements	13	1 piece of product manual
7	5 pieces of dust filter elements	14	1 piece of verification certificate

Note: the above is the general configuration for reference only, the actual configuration will be different according to user needs.

Accessories

1. Measuring Radon in Soil



2. Measuring Radon Exhalation Rate



3. Measuring Radon in Water

