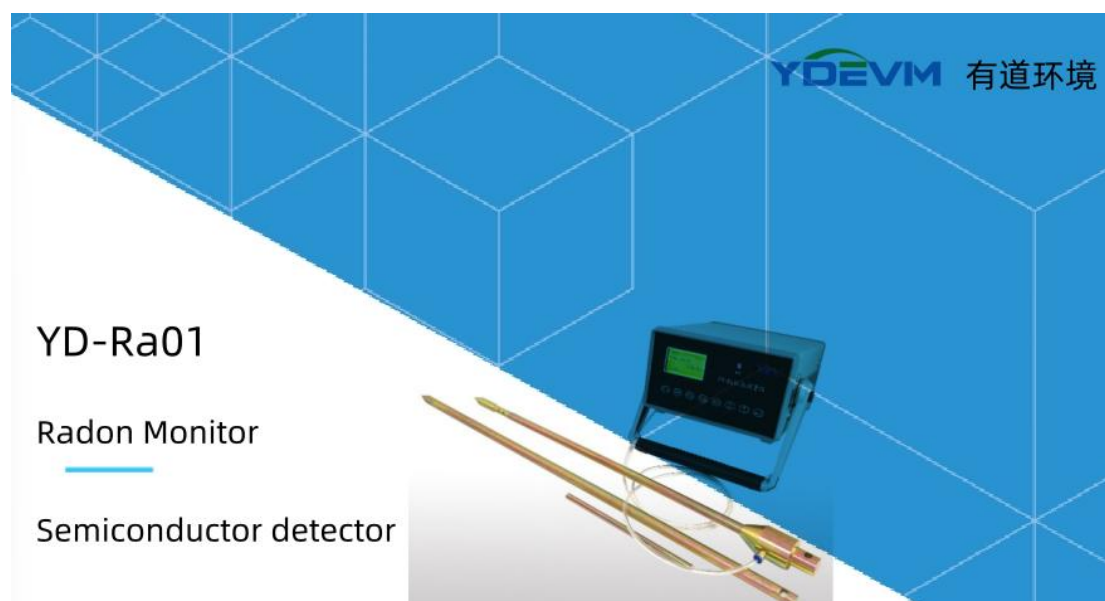


YD-Ra01 Radon Detector



Product Description

The YD-Ra01 Radon Monitor is a fully automatic, continuous sampling radon measurement device using a micro pump for air, soil, and water applications. It employs a micro pump combined with electrostatic collection of the radon decay product RaA (Po-218) as the measurement target. The instrument complies with the sampling and measurement requirements of GB/T 14582-1993, enabling quantitative measurement of radon concentration in soil or air.

The device features high sensitivity and ease of operation, eliminating the inconvenience of manual sampling and external interference factors, and delivers real-time measurement results. The measurement time can be set between 1 and 120 minutes depending on the radon level, making it one of the more highly automated instruments for soil radon detection in China. It meets the soil radon measurement requirements of GB 50325 "Code for Indoor Environmental Pollution Control of Civil Building Engineering", and is widely used in civil construction engineering, radioactive exploration (emanometry), hydrogeochemical prospecting for water radon concentration, underground water source detection, earthquake prediction, environmental protection engineering, scientific research and teaching, as well as radon level surveys and radon mitigation studies. The instrument complies with the verification requirements of JJG 825-2013 "Radon Monitors".

Features

- Built-in measurement chamber with a volume of 0.8 L
- Adopts the pump-suction electrostatic collection measurement method, with a micro vacuum pump system maintaining the sampling flow rate at approximately 1 L/min
- A desiccant is used at the sampling inlet to eliminate the influence of humidity on measurement
- The detector is a high-sensitivity alpha-particle semiconductor device, which converts alpha particles into electronic signals. The amplitude of the electronic signal is measured through electrostatic collection and amplification circuitry, thereby identifying the energy of incident alpha particles

Youdao Environmental Technology (Shenzhen) Co., Ltd.

5th Floor, Jiada R&D Building, No. 5 Songpingshan Road, Nanshan District, Shenzhen, PRC

<https://ydhjkj.cn/en>; sales@ydhjkj.cn; +86-755-23736433 / +86-18129873251

YD-Ra01 Radon Detector

- The instrument accurately measures Po-218 particles generated by indoor radon decay, featuring good energy resolution and high detection efficiency

Specifications

Parameter	Specification
Detector	Semiconductor detector, insensitive to gamma radiation
Display	Dot-matrix LCD
Measurement range	0 – 1,000,000 Bq/m ³
Uncertainty	<15% (when radon concentration >200 Bq/m ³)
Sensitivity	50 cpm/(Bq/m ³)
Micro pump flow rate	1 L/min
Working mode / sampling cycle	Continuous measurement mode: 26 min; Precision mode: adjustable 5–99 min; Fast mode: can be set to 15 min
Data interface	RS232 serial port, real-time data cable, USB port for data saving; the device can store up to 1,000 data records
Operating environment	Temperature: -20 °C to 45 °C; Relative humidity: ≤95%
Dimensions	385 mm × 370 mm × 235 mm
Weight	6.0 kg

Configuration List

Standard Configuration:

No.	Item	Unit	Qty	Remarks
1	Main unit	piece	1	
2	Power adapter	piece	1	
3	Drying tube	piece	1	Consumable

Youdao Environmental Technology (Shenzhen) Co., Ltd.

5th Floor, Jiada R&D Building, No. 5 Songpingshan Road, Nanshan District, Shenzhen, PRC

<https://ydhjkj.cn/en>; sales@ydhjkj.cn; +86-755-23736433 / +86-18129873251

YD-Ra01 Radon Detector

No.	Item	Unit	Qty	Remarks
4	Environmentally friendly desiccant	bottle	1	Consumable
5	Plastic flexible hose	meter	1.5	Consumable
6	In-line air filter	piece	1	
7	User manual	copy	1	
8	Quality assurance card (warranty card, certificate of conformity, metrological inspection report)	set	1	
9	Military green instrument case (for main unit)	piece	1	

Optional Configuration:

No.	Item	Unit	Qty	Remarks
10	Micro printer (with manual)	piece	1	
11	Printer power cable	piece	1	
12	Printing paper	roll	1	Consumable
13	Military green instrument case (for soil sampling probe)	piece	1	
14	Soil sampling probe (steel rod + sampler, 2 items)	set	1	
15	Bubbler (device for radon measurement in water)	piece	1	

Note:

- Items 1–9 form the standard configuration (capable of measuring radon concentration in air), while items 10–15 are optional.
- Before measurement, assemble the accessories according to your application needs.
- Items listed as consumables are Nos. 3, 4, 5, and 12. A certain quantity of these consumables has been provided ex-works. Should any consumables be depleted, you may conveniently purchase them locally, or contact our customer service for assistance.

Youdao Environmental Technology (Shenzhen) Co., Ltd.

5th Floor, Jiada R&D Building, No. 5 Songpingshan Road, Nanshan District, Shenzhen, PRC

<https://ydhjkj.cn/en>; sales@ydhjkj.cn; +86-755-23736433 / +86-18129873251