

# 수중 라돈 측정기

하천/해양

## Radon Monitor

환경부 형식승인 IAMS-2007-17호



← H<sub>2</sub>O



← AQUA

Model : RAD7

### 용도

### Applications

- 지하수, 하천수 및 해수의 라돈 가스 농도 측정
- 지하수의 해수 유출 경로 추적
- 건축물 및 다중 이용 시설의 라돈 가스 농도 측정
- 건축 및 토목 자재의 라돈 방출량 측정

### 특징

### Features

- 표준 교정 장치로 국내에서 교정 가능
- 단시간 측정 및 연속 장기간 측정 가능
- 라돈 및 Thoron 측정 및 그래프 출력 가능
- 1시간 이내에 EPA Action Level인 4pCi/L 측정 가능
- 빠른 응답 속도와 신속한 영점 조정으로 수분 이내에 재측정 가능
- 0.2 pCi/L의 고감도 측정 가능
- 펌프 및 프린터 기본 탑재

## SPECIFICATIONS

Multi-Modes

Continuous Radon Gas Monitor

Long-term/short-term screener

Sniffer, with small tube "snout", to search for radon and thoron entry points

Multi-Measurements

Measures radon in air, soil, and water (with RAD H2O accessory)

Sensitivity

Monitor : 0.4 counts/min/pCi/L

Sniffer : 0.2 counts/min/pCi/L

Range	0.1 to 20,000 pCi/L
Memory	1,000 previous radon concentrations, and associated data. Can be read out on LCD, printed out or downloaded to PC. Also shows high, low, average and standard deviation of readings
Principle of Operation	Electrostatic collection of alpha-emitters with spectral analysis
Built-in Air Pump	Nominal 1ℓ/min flow rate. Inlet air filter. Inlet and outlet air connectors
Spectrum Readout	Pulse height spectrum of alpha distribution verifies radon/thoron, and also shows the RAD7 is operating properly. Accurate determination of the alpha particle energies produces a radon signature that allows discrimination of radon and thron's alpha particles from those of other isotopes
Fast Low-Level Readings	In continuous monitor mode, RAD7 measures the EPA action level of 4 pCi/L in just 1 hour(60 minutes), with standard deviation of 10%. Since the RAD7 has virtually no background, it is much more sensitive than other electronic detectors, easily measuring down to 0.1 pCi/L
Recovery in Minutes	Recovers from high radon exposure with a 3.05 minute half-life : to less than 10% of peak value in 12 minutes ; to less than 1% of peak value in 30 minutes. Drops from 20,000 to 1 pCi/L in less than an hour
Tamper Proof	A "Test Lock" command is programmed into the machine to secure your RAD7 against all kinds of intentional or unintentional tampering
Auto Mode	This setting starts a test run in SNIFF mode, then switches to NORMAL mode after the first 3 hours. No more waiting for equilibrium. Gives quick response, followed by statistical precision
Continuous Updating	Gives continuous update of radon levels so you can see the trend at all times, not just at pre-set intervals
Computer LCD Display	2 line × 16 character, alpha-numeric. easy to read
Audible Radon Count	Indicates presence and intensity of radon and thoron. May be turned on or off
Power	AC/battery powered - 5 AH 6V batteries. Automatic charge when plugged in. Continuous battery operation : 24 hours sniffing : 72 hours continuous monitoring
RS-232 Port	Computer or modem hookup
Operating Range	Temperature : 5 °C ~ 45 °C Humidity : 0 ~ 100%, non-condensing
Weight/Size	4.9kg - 24 × 19 × 27cm
Case Material	High density polyethylene

## CONFIGURATIONS

Radon Monitor	1 ea
RADLINK Remote Control Software	1 ea
H.P. Infrared Printer & 3 extra rolls paper	1 ea
2 sets Velcro Tabs	1 ea
4 Drying Tube	1 ea
Gas Drying Unit	1 ea
5 Lb Desiccant	1 ea
1 Dust Filter & 6 Uniflow Filters	1 ea
Vinyl Tubing	1 ea
Keyspan USA-19HS High Speed USB/RS232 Serial Adapter & Cable	1 ea
New Capture Data Link & Graphic Software	1 ea
Designated Certificate by NIER	1 ea
Operation Manual (한글)	1 ea

## OPTIONAL ACCESSORIES

H <sub>2</sub> O Water Accessory	1 set
Continuous Radon in Water Accessory	1 set
Soil Gas Probe	1 set