

RADIATION MONITORS



Model AB-5



Model AB-5R

Model AB-5 and AB-5R Portable Radiation Monitors

The Pylon Model AB-5/AB-5R Portable Radiation Monitors are by far our most popular and versatile instruments for fast accurate measurement of environmental radiation levels. The AB-5 & AB-5R are lightweight radiation monitors offering a built-in PMT, air pump and rechargeable battery to minimize set-up time in the field. They are laboratory grade instruments. Their compact size and rechargeable battery also make them well suited for field use.

The wide variety of accessories that interface to the internal PMT make the unit well suited to a large number of applications and measurements. The units only differ in casing styles. The AB-5R is ruggedized.

Applications:

- Continuous Monitoring
- Grab Sampling
- Radon Gas & Decay Products
- Working Levels
- Environmental Studies
- Area Scanning
- Field Surveys
- Surface Contamination
- Airborne Particulates
- X-Ray Leakage and more ...

Features:

- Internally rechargeable battery maintains basic operation during a power interruption
- Memory retained when powered off
- Pulse output port provided for external data logging
- User adjustable high voltage & discriminator settings for the PMT

Theory of Operation:

A separately purchased radon detector detects alpha particles from radon and thoron decay. These detections are converted to light pulses which are fed to the AB-5 monitor PMT. The AB-5 monitor counts the pulses and displays the results in accordance with the User specified program.

AB-5 / AB-5R

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Specifications:

GENERAL

Mode of Operation: Multiple.
Sample & Count Periods: User Programmable.
Maximum Counting Rate: 10,000 cps
Electronic Background: < 0.4 cpm

DETECTOR

Detector: Various.
Detection Specifications: Please refer to the appropriate brochures.

POWER

Power Supply Requirements: 12 Vdc \pm 20%, 0.5 A - 110/220 VAC Adapter/Charger Included.
Battery Type(s): Integrated 6V gel cell.
Battery Operating Time: 72 Hrs Without pump.
48 Hrs With pump at 100 ml/min.
8 Hrs With pump at maximum flow rate.
Battery Charge Time: 16 Hrs

FEATURES

Display: 8 Digit LCD.
Memory: 680 Data Points (28 Days at 1 hour Intervals).
Data Ports: 1) Printer via 15 pin D-Sub Connector.
2) 5V TTL Positive Going Pulse via BNC Connector.
3) RS-232 via Printer Port and Optional Pylon DA-2005 Package.
Low Battery Indicator: Display flashes colons.

PUMP

Pump Flow Rate: 0 to 3.7 lpm - User adjustable.

ENVIRONMENTAL

Operating Temperature Range: 0 to +50 (-32 to +122) °C (°F)
Storage Temperature Range: -20 to +60 (-4 to +140) °C (°F)
Relative Humidity Range: 0 to 90 % - Non-Condensing.

DIMENSIONS

	AB-5	AB-5R	
Length:	26.7 (10.5)	25.4 (10)	cm (in.)
Width:	25.4 (10)	40.6 (16)	cm (in.)
Height:	9.8 (3.9)	22.9 (9)	cm (in.)
Weight:	3.7 (8.2)	6 (13.2)	kg (lb.)

• Values are nominal.

Ordering Information:

Model AB-5: Order part number 6202049.
Model AB-5R: Order part number 6243001.

Specifications subject to change without notice.
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