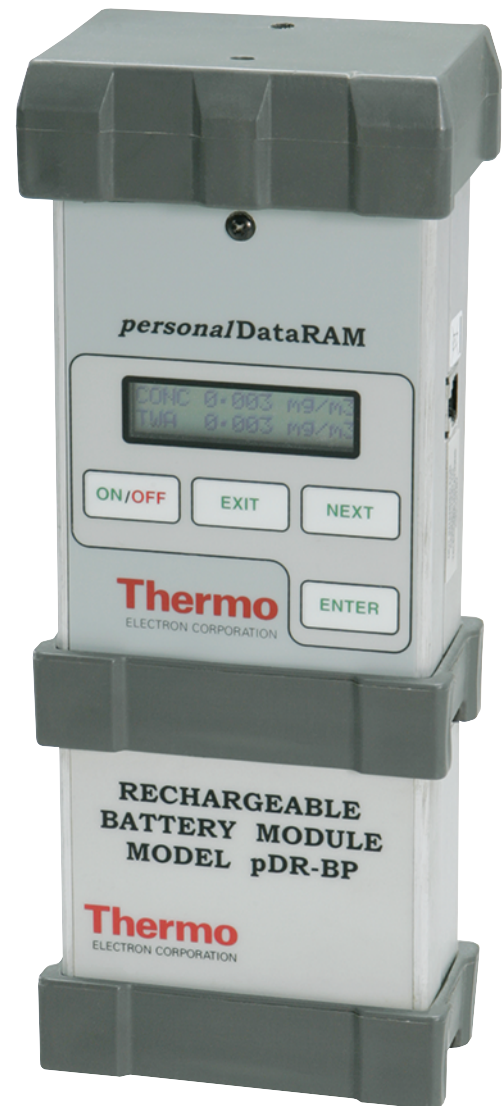


The personalDataRAM™ pDR-1000AN passively measures mass concentrations of dust, smoke, mists, and fumes in real time, and sounds an audible alarm whenever the user-defined level is exceeded.

FEATURES

- **Highest performance of any real-time personal particulate monitor** – Measurement range from 0.001 to 400 mg/m³ (auto-ranging).
- **Rugged and extremely compact** – Palm sized pDR-1000AN weighs only 18 oz. (0.5 kilogram) and can be attached to a belt or shoulder strap, hand held, operated on a table top, or mounted on a tripod.
- **Simple zeroing and calibration** – The pDR-1000AN comes gravimetrically calibrated (NIST traceable) in mg/m³ using standard SAE Fine (ISO Fine) test dust. Zeroing with particle-free air is accomplished quickly and effectively under field conditions using the zeroing kit including with the instrument.
- **Safety approvals and certifications** – The pDR-1000AN complies with US FCC rules (Part 15) and has received CE certification. It also has intrinsic safety approval from the US Mine Safety and Health Administration (MSHA) for use in coal mining environments containing methane gas. The MSHA Type 2G approval closely resembles the standard intrinsic safety rating as defined by Class 1, Division 1, Group D. In addition, it meets US FCC and European CE rules.



Thermo Scientific pDR-1000AN
with Optional Battery Module

CALL GEOTECH TODAY (800) 833-7958

Geotech Environmental Equipment, Inc.

2650 East 40th Avenue • Denver, Colorado 80205

(303) 320-4764 • FAX (303) 322-7242

email: sales@geotechenv.com • website: www.geotechenv.com

ACCESSORIES & OPTIONS

Standard Accessories

- Universal voltage power supply
- PC communications software
- Zeroing kit
- Belt clip kit
- Instruction manual
- Soft-sided carrying case
- Signal output cables

Optional Accessories

- Rechargeable battery module (NiMH)
- Portable pump unit
- Shoulder strap
- Remote alarm interface
- Wall mounting bracket
- Hard-sided case (see below)



Optional hard-sided carrying case for your personalDataRAM

SPECIFICATIONS

Concentration Measurement Range (auto-ranging):

Referred to gravimetric calibration with SAE Fine test dust (mmd = 2 to 3 mm, sg = 2.5, as aerosolized) 0.001 to 400 mg/m³

Scattering Coefficient Range:

1.1 x 10⁻⁶ to 0.6 m⁻¹ (approximately) @ wave length = 880 nm

Precision/Repeatability (2-sigma at constant temperature):

±5 µg/m³ for 1 second averaging
±1.5 µg/m³ for 10 second averaging

Accuracy:

Referred to gravimetric calibration with SAE Fine test dust (mmd = 2 to 2 mm, sg = 2.5, as aerosolized) ±5% of reading ± precision

Resolution:

0.1% of reading or 0.001 mg/m³, whichever is larger

Particle Size Range of Maximum Response:

0.1 to 10 µm

Concentration Display Updating Interval:

1 second

Alarm Level Adjustment Range (user selectable):

Selectable over entire measurement range

Datalogging Averaging Periods (user selectable):

1 second to 4 hours

Total Number of Data Points/Tags in Memory:

13,000 points/99 tags

Concentration Display Averaging Time:

1 to 60 seconds

Readout Display:

LCD 16 characters (4 mm height) x 2 lines

Serial Interface:

RS232, 4800 baud

Analog Signal Output:

0 to 5V and 4 to 20 mA, with selectable full scale ranges between 0.1 and 400mg/m³

Computer Requirements:

IBM compatible PC, 286 pr higher; Windows™ 3.1, 3.11, or '95; 2 MB memory or more; hard drive; 3.5" floppy drive; VGA or higher resolution monitor

Power:

Internal battery: 9V alkaline, 20 hour run time (typical)
9V lithium, 40 hour run time (typical)
AC source: Universal voltage adapter (included)
100-250 Volts, 50-60 Hz (CE marked)
Optional battery pack: Rechargeable NiMH, 70 hour run time (typical)

Operating Environment:

14° to 122°F (-10° to 50°C), 10 to 95% RH, non-condensing

Storage Environment:

-4° to 158°F (-20° to 70°C)

Dimensions and Weight:

6" H x 3.6" W x 2.5" D; 18 oz. (0.5 kg)

Alarm Averaging Time (user selectable):

Real-time (1 to 60 seconds) or STEL 15 (minutes)

Approvals:

- Intrinsic safety approval by US Mine Safety & Health Administration (MSHA)
- Coal-mining environments containing methane gas (the pDR-PU pump is not approved by MSHA)
- US FCC Rules (Part 15)
- CE Certified

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