









## **INSTRUMENTATION RENTAL & CALIBRATION SERVICES**

### Rental

Our instrumentation services include world-wide rental, calibration, and maintenance for radiological and industrial hygiene monitoring instruments to all market sectors. With more than 2,000 instruments in inventory, availability and fast delivery are guaranteed. We offer long-term and short-term lease options at affordable rates as well as professional consultation for custom instrumentation application and development.

## **Offers Include:**

- A large inventory of Repair/Maintenance parts to support expedited requests;
- 33+ year history in servicing government clients worldwide with radiological and industrial hygiene and advanced survey instrumentation and technologies;
- State-of-the-art instrumentation center that has proven to provide a low risk, low cost, rapid, and highest quality option to all clients;
- GPS Walkover survey instrumentation
- Radiological Instrumentation for On-Site Laboratories

# Calibration, Repair and Specialty Instrumentation

The Perma-Fix instrumentation facility, located in Knoxville, Tennessee, calibrates and repairs Radiation Detection and Industrial Hygiene instruments of many makes and models from a variety of manufacturers. Perma-Fix proudly staffs experienced full-service instrumentation technicians. Our team provides the highest quality calibrations and repair services for most major manufacturers' models. All rad calibrations are performed to the requirements of ANSI N323AB-2013 unless otherwise requested. Our lab is ISO/IEC 17025-2017 accredited & ISO 9001 certified. Perma-Fix operates the Instrumentation Services under Tennessee Department of Environment and Conservation, Division of Radiological Health, Radioactive Material License numbers R-47161 and R-47209 (issued to Safety and Ecology Corporation/SEC, a wholly owned subsidiary of Perma-Fix).

\*Instrumentation rates are based on a quantity of one (1) each. Contact us for volume or long term discounts



**SEC Instrumentation Lab** 

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## **Industrial Hygiene Instrumentation**

| 2025 Rates   | Daily    | Weekly | Monthly |
|--|----------|--------|---------|
| Gas Monitors   |          |        |         |
| MultiRAE PGM-6228 (PID, CO, H2S, LEL, O2)                      | \$128    | \$320  | \$800   |
| QRAE3 PGM-2500P (LEL, CO, H2S, O2)                             | \$72     | \$180  | \$450   |
| PID (Photoionization De  | etector) |        |         |
| MiniRAE 3000 PGM-7320 (10.6 eV Lamp)                           | \$128    | \$320  | \$800   |
| Heat Stress Monitors (V  | VBGT)    |        |         |
| QUESTemp 32 (QT-32)  | \$56     | \$140  | \$350   |
| QUESTemp 34 (QT-34)  | \$56     | \$140  | \$350   |
| QUESTemp 44 (QT-44)  | \$56     | \$140  | \$350   |
| Metrosonics hs-32  | \$56     | \$140  | \$350   |
| Aerosol Monitors   |          |        |         |
| TSI 8530 DustTrak (0.001 - 400 mg/m³)                          | \$160    | \$400  | \$1000  |
| Thermo Scientific DataRAM pDR-1000AN (0.001 - 400 mg/m³)       | \$92     | \$230  | \$575   |
| HAZ-DUST IV Aerosol Monitor (.01 - 200 mg/m³)                  | \$96     | \$240  | \$600   |
| SKC Split2 w/AirChek52 Pump                                    | \$96     | \$240  | \$600   |
| Noise Monitors   |          |        |         |
| Quest NoisePro DLX Noise Dosimeter w/Calibrator                | \$56     | \$140  | \$350   |
| Quest 2200 Sound Level Meter w/Calibrator                      | \$48     | \$120  | \$300   |
| Quest SoundPro Sound Level Meter w/Calibrator                  | \$92     | \$230  | \$575   |
| Sper Scientific 840015 Sound Level Meter w/Calibrator (Type 1) | \$15     | \$36   | \$90    |





## **Industrial Hygiene Instrumentation**

| 2025 Rates   | Daily | Weekly | Monthly |
|--|-------|--------|---------|
| Air Sampling Pumps   |       |        |         |
| Gilian GilAir5 (5 mL-5 LPM)                                | \$29  | \$72   | \$180   |
| SKC Leland Legacy (5-15 LPM)                               | \$32  | \$80   | \$200   |
| Gast High Volume Pump (3 – 30 LPM)                         | \$20  | \$50   | \$125   |
| Thomas High Volume Pump (2 – 30 LPM)                       | \$20  | \$50   | \$125   |
| Pump Calibrators   | 5     |        |         |
| Bios DC Lite (DCL ML = 5 mL - 5 LPM / 50 mL - 2 LPM)       | \$32  | \$80   | \$200   |
| Bios DC Lite (DCL M = 10 mL - 12 LPM / 100 mL - 7 LPM)     | \$32  | \$80   | \$200   |
| Bios DC Lite (DCL H = 50 mL - 30 LPM / 500 mL - 30 LPM)    | \$32  | \$80   | \$200   |
| Bios Defender 510 (M or H)                                 | \$32  | \$80   | \$200   |
| Sampling Accessories                                       |       |        |         |
| SKC Aluminum Cyclone (Respirable Dust Cyclones)            | \$4   | \$10   | \$25    |
| Gas Detection Pum  | ips   |        |         |
| Drager Accuro Bellows Pump                                 | \$16  | \$40   | \$100   |
| Gastec GV-100 Tube Pump                                    | \$16  | \$40   | \$100   |
| Specialty Equipment  |       |        |         |
| EXTECH 42505 IR Thermometer (-58 to 716 F)                 | \$4   | \$10   | \$25    |
| Kestrel 1000 Anemometer (0.6 - 40 m/s)                     | \$3   | \$8    | \$20    |
| Kestrel 3000 Anemometer (0.4 - 40 m/s)                     | \$4   | \$10   | \$25    |
| Spectrum Thunderbolt Storm Activity Detection (0-70 miles) | \$16  | \$40   | \$100   |
| Amprobe LM-200LED Light Meter (Lux/FC)                     | \$12  | \$30   | \$75    |
| Sper Scientific Light Meter 840020 ( Lux/FC)               | \$12  | \$30   | \$75    |
| Sper Scientific Light Meter 840021 (FC)                    | \$10  | \$26   | \$65    |





# Experience You Can Trust RAD Instrumentation

| 2025 Rates  | Weekly | Monthly • |  |
|---|--------|-----------|--|
| Survey Meters   |        |           |  |
| Ludlum Model 3 Ratemeter (Analog Only)                                    | \$30   | \$75      |  |
| Ludlum Model 3IS Ratemater (Intrinsically Safe)                           | \$80   | \$200     |  |
| Ludlum Model 3 or 12 Scaler/Ratemeter                                     | \$40   | \$100     |  |
| Ludlum Model 2221 Scaler/Ratemeter  | \$76   | \$190     |  |
| Ludlum Model 2224 Alpha Beta Scaler/Ratemeter                             | \$50   | \$125     |  |
| Ludlum Model 2224-1 Alpha Beta Scaler/Ratemeter                           | \$50   | \$125     |  |
| Ludlum Model 2241 Digital Scaler/Ratemeter                                | \$40   | \$100     |  |
| Ludlum Model 2241-2 Digital Scaler/Ratemeter                              | \$40   | \$100     |  |
| Ludlum Model 2350-1 Digital Data Logger                                   | \$76   | \$190     |  |
| Ludlum Model 2360 Alpha Beta Data Logger Scaler/Ratemeter                 | \$56   | \$140     |  |
| Ludlum Model 2929 Dual Channel Scaler                                     | \$56   | \$140     |  |
| Ludlum Model 3002 Alpha-Beta Digital Survey Meter                         | \$100  | \$250     |  |
| Ludlum Model 177 Alarm Ratemeter  | \$40   | \$100     |  |
| Ludlum Model 177-61 Alarm Ratemeter                                       | \$40   | \$100     |  |
| Ludlum Model 239-1F Floor Monitor w/Model 2221 Scaler/Ratemeter           | \$210  | \$525     |  |
| Ludlum Model 239-1F Floor Monitor w/Model 2350-1 or 2360 Data Logger      | \$210  | \$525     |  |
| Ludlum Model 2750 Gas Flow Control (Use with Model 43-68's)               | \$20   | \$50      |  |
| Dose Rate Meters  |        |           |  |
| Ludlum Model 14C Survey Meter w/ 44-38 Energy Compensated G-M             | \$60   | \$150     |  |
| Detector  |        |           |  |
| Ludlum Model 12-4 w/42-31H Neutron Counter                                | \$120  | \$300     |  |
| Ludlum Model 15 w/42-9 Neutron Counter and 44-7 Gamma Detector            | \$120  | \$300     |  |
| Ludlum Model 2241-4 w/42-31H Neutron Counter                              | \$120  | \$300     |  |
| Ludlum Model 9 Ion Chamber  | \$50   | \$125     |  |
| Ludlum Model 19 Micro R Meter   | \$50   | \$125     |  |
| Ludlum Model 195 High Range Meter w/43-132 Alpha Ion Chamber              | \$60   | \$150     |  |
| Ludlum Model 375 Area Monitor w/133-4 or 133-6 Gamma Detector             | \$70   | \$175     |  |
| Automess 6112B Extendable Dose Rate Meter (Teletector)                    | \$210  | \$525     |  |
| Bicron Micro Rem Tissue equivalent uR Meter                               | \$100  | \$250     |  |
| Bicron Micro Rem Tissue equivalent uR Meter Low Energy                    | \$110  | \$275     |  |
| Thermo RadEye RPD-ER Personal Radiation Detector with BLE Adapter         | \$130  | \$325     |  |
| Thermo RadEye SPRD Personal Radiation Dector                              | \$204  | \$510     |  |
| Eberline RO-7 Digital Ion Chamber (Choice of Low, Med or High Range Det.) | \$210  | \$525     |  |
| Eberline RO-2 Ion Chamber   | \$48   | \$120     |  |
| Eberline RO-20 Ion Chamber  | \$70   | \$175     |  |
| MGP Instruments AMP-100 with High Range GM Dectector                      | \$120  | \$300     |  |





## **RAD Instrumentation**

| 2025 Rates   | Weekly   | Monthly |
|--|----------|---------|
| Alpha Detectors  |          |         |
| Ludlum Model 43-5 50 cm <sup>2</sup> Open Area Alpha Scintillator            | \$30     | \$75    |
| Ludlum Model 43-65 50 cm <sup>2</sup> Open Area Alpha Scintillator           | \$30     | \$75    |
| Ludlum Model 43-90 100 cm <sup>2</sup> Open Area Alpha Scintillator          | \$30     | \$75    |
| Alpha/Beta Detectors   |          |         |
| Ludlum Model 43-10-1 Alpha Beta Smear Counter                                | \$40     | \$100   |
| Ludlum Model 43-37-1 609 cm <sup>2</sup> Open Area Gas Proportional Detector | \$70     | \$175   |
| Ludlum Model 43-37 430 cm <sup>2</sup> Open Area Gas Proportional Detector   | \$60     | \$150   |
| Ludlum Model 43-68 100 cm <sup>2</sup> Open Area Gas Proportional Detector   | \$40     | \$100   |
| Ludlum Model 43-2-2 Dual Phosphor Scintillator                               | \$40     | \$100   |
| Ludlum Model 43-93 100 cm <sup>2</sup> Active Area Alpha Beta Scintillator   | \$40     | \$100   |
| Gamma Detectors  |          |         |
| Ludlum Model 44-2 1"x1" Nal Gamma Scintillator                               | \$30     | \$75    |
| Ludlum Model 44-3 1"x1mm Nal Gamma Scintillator                              | \$30     | \$75    |
| Ludlum Model 44-10 2"x2" Nal Gamma Scintillator                              | \$40     | \$100   |
| Ludlum Model 44-17 2"x2mm Low Energy Nal Gamma Scintillator                  | \$40     | \$100   |
| Ludlum Model 44-20 (12/12SS/3B) 3"x3" Nal Integral Gamma<br>Scintillator     | \$180    | \$450   |
| Ludlum Model 44-62 1/2"x1" Nal Gamma Scintillator                            | \$40     | \$100   |
| Ludlum Model 2221 w/44-10-10 Waterproof 2"x2 Nal Gamma Scintillator (100')   | \$210    | \$525   |
| Ludlum Model 2221 w/44-62-2 1/2"x1" Waterproof Nal Gamma Scintillator (100   | ′) \$170 | \$425   |
| FIDLER (20DT063QA2/5B) probes 5" Diameter Nal with Aluminum Window           | \$240    | \$600   |
| Pb Shields: 1/4" thick x 2.5" or 6" high Pb shield for Model 44-10's         | \$30     | \$75    |
| Alpha/Beta/Gamma Detectors   |          |         |
| Ludlum Model 44-7 Thin End Window G-M Detector                               | \$14     | \$35    |
| Ludlum Model 44-9 Pancake G-M Detector                                       | \$12     | \$30    |
| Ludlum Model 44-9-18 Extended Reach Pancake G-M Detector                     | \$20     | \$50    |
| Ludlum Model 44-40 Shielded Pancake G-M Detector                             | \$20     | \$50    |
| Ludlum Model 44-94 Four Pancake G-M Detector                                 | \$40     | \$100   |
| Eberline HP-210T Tungsten Shielded Pancake G-M Detector                      | \$20     | \$50    |





## **RAD Instrumentation**

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|---|---------|---------|
| Beta/Gamma Detectors  |         |         |
| Ludlum Model 44-6 Thin Wall G-M Detector                            | \$20    | \$50    |
| Ludlum Model 44-38 Energy Compensated G-M Detector                  | \$20    | \$50    |
| Ludlum Model 133-6 Gamma Detector                                   | \$20    | \$50    |
| Beta Detectors  |         |         |
| Ludlum 44-110 100 cm Open Area Windowless Tritium Detector          | \$56    | \$140   |
| Ludlum Model 44-116 100 cm <sup>2</sup> Open Area Beta Scintillator | \$30    | \$75    |
| Sample Counters   |         |         |
| Ludlum Model 2000 Scaler w/Model 43-10 Sample Counter               | \$60    | \$150   |
| Ludlum Model 2929 Scaler w/Model 43-10-1 Sample Counter             | \$96    | \$240   |
| Ludlum Model 3030E Scaler w/ Model 43-10-1 Sample Counter           | \$120   | \$300   |
| Ludlum Model 3030 Scaler Sample Counter                             | \$120   | \$300   |
| Specialty Equipment   |         |         |
| Canberra Field ISOCs gamma spec unit with LabSOCS software          | \$2,680 | \$6,700 |
| Canberra Gamma Spec   | \$1,600 | \$4,000 |
| Canberra iCAM w/F&J LV-1 Pump                                       | \$700   | \$1,750 |
| Canberra iSolo Gas-less Manual Alpha / Beta Counting System         | \$600   | \$1,500 |
| Dosimeters DMC 2000   | \$16    | \$40    |
| Dosimeters DMC 3000   | \$20    | \$50    |
| Dosimeters SRD's (0-200mR, 0-500mR, 0-2R)                           | \$12    | \$30    |
| SRD Charger   | \$12    | \$30    |
| Exploranium GR-135  | \$400   | \$1,000 |
| Eagle iScan System (With 3x3 Nal Probe)                             | \$580   | \$1,450 |
| Eagle iScan System (With 3x5x16 Crystal Probe)                      | \$720   | \$1,800 |
| Femto-Tech PTM-1812   | \$240   | \$600   |
| Ludlum Model 180-15 Source Holder                                   | \$8     | \$20    |
| Ludlum Model 180-7 Source Holder                                    | \$8     | \$20    |
| Ludlum Model 500 Series Pulser                                      | \$120   | \$300   |
| Ludlum Model 2221 with 44-110 Tritium Detector                      | \$132   | \$330   |
| Ludlum Model 4612 12 Channel Analyzer                               | \$200   | \$500   |
| Ludlum Model 8045EKR2-1 Keypad for 2350-1's                         | \$20    | \$50    |
| Ludlum Model TT145EKR2-1 Keypad for 2360's                          | \$20    | \$50    |
| ORTEC digiBASE  | \$400   | \$1000  |





## **RAD Instrumentation**

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|--|---------|---------|
| Specialty Equipment  |         |         |
| Perma-Sort <sup>SM</sup> Soil Sorter (CA License=additional \$1,000/month) | \$2,800 | \$7,000 |
| Perkin Elmer 2910TR Tri-Carb Liquid Scintillation Counter                  | \$1,600 | \$4,000 |
| Protean ASC-DP Low Background Smear Counter                                | \$1,600 | \$4,000 |
| Protean ACS-950-G-02 Gasless Low Background Smear Counter                  | \$1,600 | \$4,000 |
| Tennelec LB 5100 Low Background Smear Counter                              | \$1,400 | \$3,500 |
| Thermo NITON XL3t Hand-held X-Ray Fluorescence (XRF) Analyzer              | \$1,100 | \$2,750 |
| Air Samplers   |         |         |
| F&J HV-1 V.2 High Volume (3-12 CFM) Pump                                   | \$50    | \$125   |
| F&J LV-1 Low Volume (0-100 LPM) Pump                                       | \$50    | \$125   |
| F&J LV-14M Low Volume (0-100 LPM) Goose Neck Pump                          | \$60    | \$150   |
| HI-Q CF-901 High Volume (0-12 CFM) Pump                                    | \$70    | \$175   |
| HI-Q 1023CV Low Volume (0-200 LPM) Pump                                    | \$80    | \$200   |
| HI-Q PSU Low Volume (0-200 LPM) Mobile Cart Pump                           | \$120   | \$300   |
| RADeCO H-809V High Volume (0-8 CFM) Pump                                   | \$66    | \$165   |
| RADeCO H-810 High Volume (0-9 CFM) Pump                                    | \$66    | \$165   |
| Environmental Housing for Air Sampler (5' Doghouse)                        | \$60    | \$150   |
| Air Samplers   |         |         |
| F&J D-550 Range is 5 to 50 CFM, 140 to 1400 LPM                            | \$120   | \$300   |
| F&J D-812 Range is 0.5 to 4 CFM, 14 to 115 LPM                             | \$120   | \$300   |
| F&J D-814 Range is 2 to 14 CFM, 56 to 400 LPM                              | \$120   | \$300   |

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