

| Company Site (1)  | Phone                        | Contact  | Portable Personnel (2)(3) | Fixed Personnel (3) | Portable Vehicle (4) | Fixed Monitors (5) | Rad Detection (6) |
|---|------------------------------|--|---------------------------|---------------------|----------------------|--------------------|-------------------|
| <a href="#">Arktis</a>  | 571-478-0575                 | <a href="mailto:info@arktis-detectors.com">info@arktis-detectors.com</a>     | X                         |                     | X                    | X                  | γ, n              |
| <a href="#">Bertin Environics</a>   | 386-310-360                  | <a href="mailto:BE-Sales@bertin.group">BE-Sales@bertin.group</a>             | X                         |                     | X                    | X                  | γ, n              |
| <a href="#">Hamamatsu</a>   | 908-231-0960                 | <a href="#">Online Form</a>  |                           |                     |                      | X                  | γ, n              |
| <a href="#">Leidos/Exploranium</a>  | 855-863-4367<br>866-723-8726 | <a href="mailto:sectrans@leidos.com">sectrans@leidos.com</a>                 |                           |                     | X                    | X                  | γ, n              |
| <a href="#">Ludlum</a>  | 800-622-0828<br>325-235-4672 | <a href="mailto:sales@ludlums.com">sales@ludlums.com</a>                     | X                         | X                   | X                    |                    | β, γ, n           |
| <a href="#">Mirion</a>  | 800-243-3955 ext. 1          | <a href="https://www.mirion.com/contact">https://www.mirion.com/contact</a>  | X                         | X                   | X                    | X                  | α, β, γ           |
| <a href="#">S.E. International Inc</a>  | 931-964-3561                 | <a href="mailto:radiationinfo@seintl.com">radiationinfo@seintl.com</a>       |                           |                     | X                    | X                  | γ, n              |
| <a href="#">Polimaster</a>  | 703-525-5079<br>703-953-3280 | <a href="mailto:info@polimaster.us">info@polimaster.us</a>                   | X                         | X                   | X                    | X                  | γ, n              |
| <a href="#">RadComm Systems</a>   | 219-476-9037                 | <a href="https://www.radcommsystems.com">https://www.radcommsystems.com</a>  |                           | X                   |                      | X                  | γ, n              |
| <a href="#">Radiation Solutions Inc</a>   | 423-721-6455<br>905-890-1111 | <a href="mailto:Sales@radiationsolutions.ca">Sales@radiationsolutions.ca</a> |                           |                     | X                    | X                  | γ, n              |
| <a href="#">Rapiscan/OSI Systems</a>  | 978-262-8700                 | <a href="mailto:Sales@as-e.cpm">Sales@as-e.cpm</a>                           | X                         | X                   | X                    | X                  | γ, n              |
| <a href="#">Symetrica</a>   | 508-718-5610                 | <a href="mailto:Sales@symetrica.com">Sales@symetrica.com</a>                 | X                         | X                   | X                    | X                  | γ, n              |
| <a href="#">Technical Associates</a>  | 818-883-7043                 | <a href="mailto:Sales@tech-associates.com">Sales@tech-associates.com</a>     | X                         | X                   | X                    |                    | γ, n              |
| <a href="#">Thermo Fisher Scientific</a>  | 800-274-4212                 | <a href="#">Customer Service</a>   | X                         | X                   | X                    | X                  | α, β, γ, n        |
| Footnotes   |                              |  |                           |                     |                      |                    |                   |
| (1) This list does not include all companies that sell portal monitors, particularly foreign manufacturers.   |                              |  |                           |                     |                      |                    |                   |
| (2) All Portable Personnel Monitors can be set up to detect 1 uCi of Cs-137 per FEMA REP-21 Guidance          |                              |  |                           |                     |                      |                    |                   |
| (3) Primarily used for Emergency Response, Power Plants, Preventive Rad/Nuc Detection, and Medical Facilities |                              |  |                           |                     |                      |                    |                   |
| (4) Portable Vehicle monitors primarily for Emergency Response/Preventive Rad/Nuc Detection.                  |                              |  |                           |                     |                      |                    |                   |
| (5) Fixed Portal monitors for passenger vehicles, large trucks, cargo, rail, ships, and scrap metal.          |                              |  |                           |                     |                      |                    |                   |
| (6) Most portal monitors detect γ via large NaI detectors, n detection is typically an add on option.         |                              |  |                           |                     |                      |                    |                   |

| Company Site  | Phone  | Contact  | Rad Detection | Type of Detector (2)  | Size of Instrument (3)         | Communication   | N42.34 Compliant (4) | Radioisotope Library  |
|---|--|--|---------------|---|--------------------------------|---|----------------------|---|
| <a href="#">Berkeley Nucleonics Corporation (BNC)</a>   | 800-234-7858<br>415-453-9955                 | <a href="mailto:info@berkeleynucleonics.com">info@berkeleynucleonics.com</a> | γ, n          | NaI, LaBr, CeBr, He3, CLLBC, CLYC   | Handheld                       | USB, Wi-Fi, Bluetooth, CBRNResponder interface  | X                    | ANSI 42.34, typically ~88 isotopes, expandable to ~100-125, plus user custom capability.                            |
| <a href="#">Bertin Environics</a>   | 386-310-360                                  | <a href="mailto:BE-Sales@bertin.group">BE-Sales@bertin.group</a>             | γ, n          | NaI, LaBr, CeBr, He3, Li <sub>6</sub> F/ZnS   | Portable(Backpack)             | Wi-Fi, 4G, USB and Ethernet   | X                    | Extensive library but can customized with manufacturer support.   |
| <a href="#">H3D</a>   | 713-661-6416                                 | <a href="#">H3D Contact Form</a>   | γ, n          | CZT   | Handheld                       | Wi-Fi, USB, Ethernet  | X                    | ANSI 42.34, Selectable from manufacturer-provisioned master library   |
| <a href="#">Kromek</a>  | 724-352-5288                                 | <a href="mailto:sales@kromek.com">sales@kromek.com</a>                       | γ, n          | CLLBC   | Handheld                       | USB, BT, Wi-Fi  | X                    | ANSI 42.34 + 8 isotopes: Eu152, F18, I123, Lu177, Mo99, Np237, Na22.  |
| <a href="#">Ludlum</a>  | 800-622-0828<br>325-235-4672                 | <a href="mailto:sales@ludlums.com">sales@ludlums.com</a>                     | γ             | NaI(Tl)   | Portable (connected to laptop_ | USB   | X                    | Peak analysis software.   |
| <a href="#">Mirion Technologies</a>   | 800-243-3955 ext. 1                          | <a href="#">Mirion Contact Form</a>  | γ, n          | NaI(Tl), LaBr3:Ce   | Handheld                       | USB, Wi-Fi, CBRNResponder interface   | X                    | Mirion supplies the libraries containing 80 nuclides and can load user-specific/engineered libraries.               |
| <a href="#">Ortec/Ametek</a>  | 865-482-4411                                 | <a href="#">Ortec Contact Form</a>   | γ, n          | NaI, LaBr, <sup>3</sup> He for Neutron detection<br>Geiger-Müller for dose rate measurement | Compact, Handheld, Portable    | USB, Wi-Fi, Bluetooth, LAN  | X                    | Standard library contains 60 nuclides, expandable through special order. Libraries include SNM, IND, MED, and NORM. |
| <a href="#">Polimaster</a>  | 703-525-5079<br>703-953-3280                 | <a href="#">Contact — Polimaster</a>   | γ, n          | CsI(Tl), LiF6/ZnS   | Compact                        | USB   | X                    | Adjustable radionuclide libraries.  |
| <a href="#">RadComm</a>   | 800-588-5229<br>905-829-8290                 | <a href="mailto:rcsales@radcommsystems.com">rcsales@radcommsystems.com</a>   | γ, n          | NaI(Tl)   | Handheld                       | Bluetooth   | X                    | Fixed Library but RadComm will work with customer to modify the library.  |
| <a href="#">Radiation Solutions INC</a>   | 423-721-6455<br>905-890-1111                 | <a href="mailto:Sales@radiationsolutions.ca">Sales@radiationsolutions.ca</a> | γ, n          | NaI (Tl), BGO, He3  | Handheld, Portable             | USB, WiFi   |                      | Fixed Library, factory will work with customer to modify the library.   |
| <a href="#">Rapiscan/QSI Systems INC</a>  | 978-262-8700                                 | <a href="mailto:Sales@as-e.cpm">Sales@as-e.cpm</a>                           | γ, n          | NaI (Tl), BGO, LaBr, He3  | Handheld                       | WiFi, Bluetooth   | X                    | ANSI N42.34 plus additional nuclides, total 70 nuclides.  |
| <a href="#">Symetrica</a>   | 508-718-5610                                 | <a href="mailto:Sales@symetrica.com">Sales@symetrica.com</a>                 | γ, n          | NaI (Tl), Li <sub>6</sub> F/ZnS   | Handheld                       | Wi-Fi, 4G, USB and Ethernet   | X                    | Exceeds ANSI N42.34 library standard. Vendor support required to add radionuclides.                                 |
| <a href="#">Technical Associates</a>  | 818-883-7043                                 | <a href="mailto:Sales@tech-associates.com">Sales@tech-associates.com</a>     | α, γ, n       | NaI(Tl), BF3, HE3   | Portable                       | USB, Ethernet, Flashdrive   |                      | Tailored to Customer request.   |
| <a href="#">Teledyne FLIR</a>   | 865-963-2980<br>239-898-6713<br>865-276-2850 | <a href="mailto:Detection-Sales@flir.com">Detection-Sales@flir.com</a>       | γ, n          | CsI(Tl), CLLBC, NaI(Tl), LaBr3, NaI, He3, ZnS   | Compact, Handheld              | USB, BT (BLE 5.0), Wi-Fi, App   | X                    | Over 60 nuclides including all of the shielding templates FLIR support required to modify/add radionuclides.        |
| <a href="#">Thermo Scientific</a>   | 800-274-4212                                 | <a href="#">Thermo Scientific Contact Form</a>                               | γ, n          | NaI(Tl), CLYC, LaBr   | Compact, Handheld              | Wi-Fi, App CBRNResponder interface  | X                    | More than 45 different isotopes included in Library with user ability to add new libraries and isotopes.            |
| Footnotes   |  |  |               |   |                                |   |                      |   |
| (1) This list does not include all companies that sell portal monitors, particularly foreign manufacturers. |  |  |               |   | (3) RIID Size                  | Compact/Pocket- Discreet Inspection/quick screening typically 4-6 inches long, 1-2 pounds |                      |   |
| (2) Type of γ Detector  | Material/Crystal                             |  |               | Energy Resolution(Approx)   |                                | Handheld - Field use by responders and RAD staff, 6-11 inches long, 3-4 pounds            |                      |   |
| BZO   | Bismuth Germanate                            |  |               | 10-12%  |                                | Portable - Backpacks and larger devices, 10-50+ pounds                                    |                      |   |
| CeBr <sub>3</sub>   | CeriumBromide                                |  |               | 2-6%  | (4) Calibration                | Most RIIDs conduct sourceless stabilization and auto energy calibration. Manufacturers    |                      |   |
| CLLBC   | Cesium Lanthanum Lithium BromoChloride       |  |               | 3-3.7%  |                                | recommend an annual check with an external source.  |                      |   |
| CsL (Tl)  | Cesium Lithium doped with Thallium           |  |               | 6-7%  |                                |   |                      |   |
| CYLC  | Cesium Lithium Yttrium Chloride              |  |               | 4.5-5.5%  |                                |   |                      |   |
| CZT   | Cadnium Zinc Telluride                       |  |               | 0.025   |                                |   |                      |   |
| LaBr <sub>3</sub> :Ce   | Cerium Doped Lanthanum Bromide               |  |               | 0.026   |                                |   |                      |   |
| NaI(Tl)   | Sodium Iodide doped with Thallium            |  |               | 7-8%  |                                |   |                      |   |
| NaI   | Sodium Iodide with Lithium                   |  |               | 6-7%  |                                |   |                      |   |
| HPGe  | High Purity Germanium                        |  |               | 0.1-0.2%  |                                |   |                      |   |