

Handheld Gamma Ray Spectroscopy Devices ¹

Notes of December 2009

| <u>Firm / www site</u> | <u>Contact / e-mail</u> | <u>Phone</u> | <u>Model</u> | <u>Batt. Hrs</u> | <u>Wt. Lbs</u> | <u>Alternative ² Electr. Gamma Detectors</u> | <u>Libr. ³ Nr. Spectra x Nr. Ch.</u> | <u>Gamma Dose Rate</u> | <u>Other ² Detector Options</u> |
|--|--|----------------------|---|------------------|-----------------|---|---|----------------------------|--|
| Berkeley Nucleonics berkeleynucleonics.com | Robert Corsetti robert.corsetti@berkelynucleonics.com | CA 415/453-9955 x250 | SAM 940 SAM 935 | 8 8 | ~5 5 | LaBr, NaI NaI | 10,000 250 x 1024 | Total & ROI Total & ROI | Li n counter, GPS ³ He n counter, GPS |
| Berthold Mark Berthold.com | Morgan mark.morgan@berthold.com | TN 865/483-1488 | LB-125 | 10 | 2 | NaI | 30 x 1024 | (no) | (no) |
| Bubble Technology bubbletech.ca | Scott Edelmans TN scott@pulcir.com | 800/862-1390 | Microspec-3 | 9 | 7 | NaI | >72 x 256 | Total & ROI | x, β, n, GPS |
| Canberra Jim canberra.com | Pearsall cisales@canberra.com | TN 800/243-3955 | InSpect.-1000 ⁴ Falcon-5000 | 9 8 | 4 34 | NaI HPGe, BGO | 256 x 2048 C Total | Total & ROI | ³ He n counter ³ He n counter |
| ICx Technologies icxt.com | Pat Call pat.call@icxt.com | VA 877/692-2120 | Identifinder ⁴ Raider | 10 >6 | 2.7 1.4 | NaI, LaBr CZT 10,000 | 100 x 1024 | Total (GM) Total | ³ He n counte ³ He n counter |
| Ludlum Dru ludlums.com | Carson dcarson@ludlums.com | TX 800/622-0828 | Model 702 Model 703 Model 711 | 8 8 8 | 5 7 5 | NaI NaI LaBr | 10,000 10,000 10,000 | Total Total Total | (none) (none) (none) |
| Ortec (Sales) ortec-online.com | ortec.info@ametek.com | TN 865/482-4411 | Detective microDetective | ~3 >3 | 26 16 | HPGe HPGe | >1,000 >1,000 | Total Total | ³ He n counter, GPS ³ He n counter, GPS |
| SAIC / Exploranium saic.com/products/security | (contact through web site) | | GR-135 Plus ⁴ | 12 | 5 | NaI, CZT | 185 x 1024 | Total | Li glass n Det. & n dose |
| Thermo-Fisher Mark thermo.com/rmp (Fmr. Bicon, Eberline, Saint-Gobain) | Deacon NM mark.deacon@thermofisher.com | 440/487-6427 | Interceptor Identifinder Raider | 8 8 >6 | 1 2.4 1.4 | CZT NaI, CZT, LaBr CZT 10,000 | 80 x 2048 100 x 1024 | Total Total Total | ³ He n counter, GPS ³ He n counter ³ He n counter |
| XRF Corp. xrfcorp.com | (Sales) info@xrfcorp.com | MA 781/933-1600 x 23 | ICS-4000 | 24 | 2 | CdTe | 300 x 2048 | Total (CdTe) | (none) |

1 H = Detector, MCA, power supply & readout in one weather-resistant, hand-held piece. C = Requires a separate computer or similar electronics package for readout.

2 Among the device options are vehicle mounted systems, detector crystals in different sizes, probe shields, global positioning system, IR communications and U enrichment calculation. Typical E_γ range (keV) & Resol. FWHM: NaI 25-2000, 7%; BGO 100-4000, 11%; CsI 35-3000, 8%; CZT (CdZnTe) 20-1500, 2.5%; HPGe; CdTe 10-2000, 1%; LaBr 20-3000, 2%.

3 Number of nuclide spectra stored in the hand-held device without supporting computer. Reference spectra, text, and links to other sites are on <http://www.inl.gov/gammaray/index.shtml> and assistance from KRISTIN.N.EVANGELISTA@saic.com Also see the Ortec and Canberra web sites and Gordon Gilmore's 1994 book, "Practical Gamma Ray Spectroscopy," Wiley & Son

4 Energy Solutions (Oak Ridge) rents handheld spectroscopy devices and other equipment, www.energysolutions.com Training, Instrumentation, Ph 877/462-4873.

Conference of Radiation Control Program Directors (CRCPD) www.crcpd.org

For addition or correction of information, please contact Russ Meyer (rmeyer@crcpd.org)

This information is not to be construed as an endorsement by CRCPD, of the products and services identified in this list.