Narcotics & Explosives ID



# HandyRam<sup>™</sup> II RAMAN Spectrometer

## Pocket-sized identifier of narcotics, explosives & toxic chemicals

This incredibly small Raman handheld analyzer identifies illicit narcotics, controlled drugs, explosives materials, pharmaceutical ingredients and a wide range of unknown substances. Thousands of compounds are available in FFI's spectral libraries. It also analyzes and reports the components of mixtures.

HandyRam<sup>™</sup> II is a compact, ruggedized Raman spectrometer that is incredibly powerful. It is able to analyze thousands of explosives, narcotics and toxic chemicals in seconds. Laser power is adjustable and use programmable acquisition delay when measuring energetic materials. HandyRam<sup>™</sup> II features a durable and waterproof construction yet can also be connected to a PC for detailed spectral analysis, library and record management.

HandyRam<sup>™</sup> II has tactile buttons for operation designed for use while wearing gloves.

Accessories available: pouch, shoulder strap, USB cable, laser aperture cap with polystyrene target, sample vials, point-and-shoot adapter, vial holder, 90° angle adapter, attachment point, connection kit ethernet and WIFI, AC Adapter 5 VDC/1 A USB



| Battery                          | Rechargeable Li ion battery (transportable by air)  |  |  |
|----------------------------------|---|--|--|
| Weight & Size                    | 650 gm (1.4 lb); 15.8 cm x 10.1 cm x 2.9 cm (6.2" x 4.0" x 1.1")                              |  |  |
| Environmental                    | IP67; Operating -20C to +50C, Storage: -30C to +50C; MIL-STD-810G                             |  |  |
| Display                          | 3.5" transmissive color TFT with LED backlighting   |  |  |
| Laser Power                      | Max 300mW - adjustable  |  |  |
| Wavenumber Range                 | 400 cm-1 to 2300 cm-1   |  |  |
| Resolution                       | 10 cm-1   |  |  |
| Analysis Time                    | As little as 10 seconds but not longer than 5 minutes.  |  |  |
| Spectral libraries & Data Output | Various libraries available: narcotics, explosives, etc Data Output: Text; .txt, .csv, .jcamp |  |  |
| Interface                        | Mini USB  |  |  |
| Calibration Standard             | ASTM 1840 Raman Frequency Shift   |  |  |

### SPECIFICATIONS:

### Applications:

Customs & Border Protection, Narcotics Identification, Counterfeit Pharmaceuticals, Military Intelligence, Forensics, Site Exploitation, Material Quality Control

### Approvals & Certifications:

EN 60825-1:2007 Class 3B, EN 61000-6-3:2007, AS/NZS CISPR 22, EN 61000-6-1-6-1:2007, EN 61000-4-2, -3, EN 60950-1:2006-05-29 + A1/A2/A11/AC1, EN 60950-22:2006-06-19 + C1/A11/A11C1, EN 61010-1:2010 (Third Edition), Directive 2012/19/EU (WEEE), Directive 2011/65/EU (RoHS), IEC 60529 IP67, MIL-STD-810G 514.6 (vibration), MIL-STD-810G 516.6 (functional shock)

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