

Responder RCI™

RAMAN CHEMICAL IDENTIFIER



Feature Highlights

- **Raman technology optimized for broadest range of unknowns including energetic chemicals**
- **Available database of approximately 16,500 spectra**
- **Offers point-and-shoot capability to sample through plastic and glass**
- **Measures a wide range of chemicals including water-based solutions**
- **Aids in mixture analysis when combined with FT-IR results**

The Responder RCI (Raman Chemical Identifier) is a lightweight, portable spectrometer that identifies unknown solids and liquids such as explosives, white powders, WMDs, and toxic industrial chemicals

The device offers both an integrated sample compartment as well as external, point-and-shoot capability to eliminate direct contact with a sample.

The Responder RCI is waterproof and ruggedized. It is simple to operate and features an integrated computer with a touch-screen interface.

Raman technology is often used as a confirmatory technique with FT-IR to aid in on-scene chemical analysis. Spectra from the Responder RCI can be wirelessly transmitted to the HazMatID™ FT-IR chemical identifier or an external laptop to aid in user interpretation between these complementary technologies.

The Responder RCI is backed by first rated service, training and support to ensure optimum product performance.

Smiths Detection is a leading worldwide provider of government regulated technology products and advanced services that detect and identify chemical, biological, radiological, nuclear and explosive (CBRNE) material and other dangerous or illegal substances.

Technical Data **Responder RCI™**

General Specifications

Technology	Raman spectrometry
Weight	6 lbs. (2.72 kg)
Size	8.75" x 7.5" x 4" (22.2 x 19 x 10.1 cm)
Sample Interface	Glass vial or external*
Environmental Features	The system is waterproof. All external parts are resistant to bleach solution.
Operational Ranges	Operational in extreme weather and temperatures ranging from -7°C to 50°C. Humidity ranging from 0 – 100%.
User Interface	The Responder RCI software is a streamlined, touch-screen application using a Windows® operating system, controlled with finger or stylus.
Input/Output Devices	Mouse and keyboard compatible
Wireless Capability	Bluetooth enabled; indoor and outdoor capability Results from the Responder RCI can be wirelessly transmitted to the HazMatID™ to aid in spectral comparison and interpretation between complementary technologies. Results between the Responder RCI and the handheld HazMatID Ranger™ can be wirelessly transmitted to an external laptop to aid in spectral comparison and interpretation between complimentary technologies.
Power	Internal battery, mains Run time and charge time is 5 hours each
External Data Storage	Full USB support Flash devices Floppy drive CD-Rs

Libraries

Included	Over 9,200 Raman spectra including WMDs, common white powders, common chemicals, explosives, narcotics, Toxic Industrial Chemicals (TICs), solvents, and chemicals used in industries such as chemical and petrochemical, food and beverage, plastics, polymers, and pharmaceutical.
Optional	ICHEM Raman Library from ST Japan Set I This library set is a more than 5,000 Raman spectra collection encompassing a broad range of chemicals including, Toxic Industrial Chemicals (TIC), solvents, and chemicals used in industries that include chemical and petrochemical, food and beverage, plastics and polymers and pharmaceutical.



*Point-and-shoot hardware contains a Class 3B laser. Avoid direct exposure to beam.



For product information, sales or service, please go to www.smithsdetection.com/locations

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