IDRaman Mini Handheld System

At a Glance

Long battery life: >11 hours from 2 commercially available AA batteries

Light weight: 330 grams (11 oz.)

Compact size: 9.1 x 7.1 x 3.8 cm (3.6 x 2.80 x 1.5 in)

Great flexibility: measures both liquids (vials) and solid samples

Rugged, solid aluminum design

High visibility display: 7.1 cm (2.8 in) resistive touch display

Ease of use: intuitive user interface

Identify. Authenticate. Verify.

The IDRaman mini is the smallest, most powerful handheld Raman instrument available today. Designed to make rapid and accurate measurements that identify, authenticate and verify samples, the IDRaman mini is ideal for:

- Authentication analysis
- Counterfeit detection
- Rapid material identification
- Verification of incoming materials
- Harsh and demanding environments
- In-line or at-line testing

From rugged field measurements of chemical and explosive agents to quality assurance and quality control in the laboratory, the IDRaman mini is a truly compact choice for fast and accurate measurements.

Small. Rugged. Flexible.

Weighing just a little over 330 grams (11 oz.) and measuring 9.1 x 7.1 x 3.8 cm (3.6 in x 2.8 in x 1.5 in) the IDRaman mini fits in the palm of your hand and measures both powdered samples or vial samples. Made from solid aluminum the IDRaman mini is rugged and designed for long-lifetime operation.

Running for over 11 hours on two (2) AA batteries, the IDRaman mini offers flexibility in the field or during long manufacturing shifts where recharging batteries is impossible. A bright and easy-to-navigate interface is driven by a 7.1 cm (2.8 in) resistive touch screen that can be operated while dressed in the highest level of personal protection equipment (PPE).

Fast, Accurate Results

IDRaman uses an internal calibration routine to ensure the most accurate Raman shift data is acquired. Measuring most samples in less than 9 seconds, the IDRaman provides visual confirmation of results and displays both the sample and library spectrum with a confidence factor. Using a proprietary fluorescence rejection algorithm, the IDRaman mini minimizes both false positive and false negative results. Store a library of thousands of compounds in the IDRaman.

Sample Measurement Matters

Weak signals from unknown and non-uniform samples are a common problem for handheld Raman instruments. IDRaman mini moves beyond these systems with Raster Orbital Scanning (ROS) technology. ROS technology rapidly scans a tightly focused beam in an orbital pattern, allowing lower average power and high-integrity data from a larger area of the sample. Most importantly, ROS enables accurate data without sample ignition or damage.

At a Glance

High speed acquisition: visual confirmation in <9.0 s

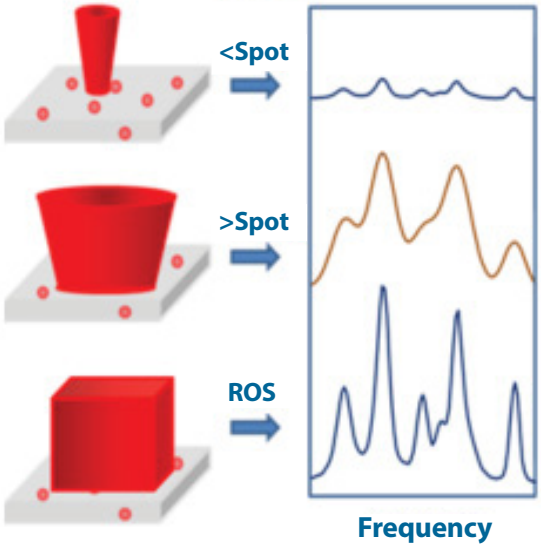
Self-calibration: includes onboard software driven calibration

Library recognition: easy to use and works with Ocean Optics software

Raster Orbital Scanning (ROS) function: allows detection of inhomogeneous samples without sample degradation

Library recognition: use of proprietary data analysis algorithm for high accuracy identification; low false positives and false negatives

ROS



A tightly focused beam may give noisy signals or miss the Raman active target completely. This leads to false negatives from unidentified samples.

Simply increasing the spot size of the laser dilutes the valuable information about the material. This leads to inconclusive matches or false identification of samples.

ROS increases the effective size of a tightly focused beam. Information is obtained with complete integrity while the IDRaman samples the large area needed for complex mixtures or irregularly shaped samples. This leads to confident identification.