



LS-ID

Liquids and Solids - IDentifier



Chemical
defense



Explosive
defense

On-Site Identification of Liquids and Solids: Drugs, Explosives, Illicit Narcotics and Hazardous Materials

The pocket size **LS-ID** is the smallest Raman spectrometer of its kind. Developed for fast identification of illicit narcotics, drugs, explosives as well as other suspicious samples.

LS-ID in Action

Designed to provide an on-site answer to unknown materials, this "pocket" spectrometer allows identifying very small quantities of samples in a simple and fast way. Provides safety beyond defined target gases by alarming on hazardous concentrations.

Seconds for your Life

Within few seconds the **LS-ID** compares the individual spectroscopic signature of the sample with the spectra stored in the library, displaying automatically the identified compound and the degree of correspondence. The particular design of the **LS-ID** offers an optimal repetitive spectra acquisition.

Smart Detection

To improve the measurement of samples there are three different sampling tools available which enable optimum spectrum acquisition under varying conditions.



Without needing to expose oneself to a direct contact with the compounds, the user can obtain an enhanced fingerprint spectrum from enclosed substances in most transparent plastic sachets or glass vials using one of the three optical collection attachments.

Advantages

An easy design and a simple menu offers the possibility of viewing the taken spectrum prior to the identification. The clear advantage is that the user may optimize the sampling and therefore also improves the identification results.

Collected field data can be analyzed at any moment using the dedicated software. Besides full instrument control and calibration, the software also allows comparing the collected spectrum with other library entries, overlapping different spectra and issuing automatic reports.



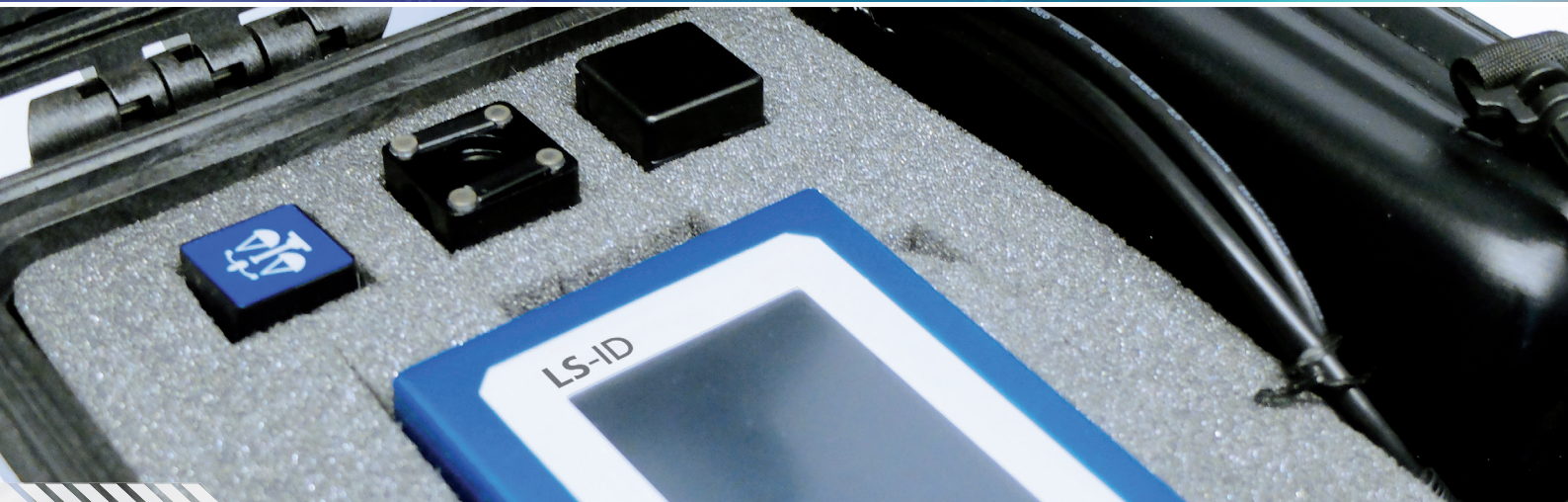
Conventional Raman uses a small spot-size for optimal spectral resolution.



Increasing the spot-size captures more materials, but lowers the spectral resolution.



ORS maintains the small spot-size, high resolution, and samples more material.



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Technical Data

Instrument specifications handheld spectrometer designed for the identification of drugs, illicit narcotics and explosives

Product Description

- Raman Spectral Range: 400 to 2300 cm^{-1}
- Laser Output Power*: 70mW at sample, adjustable
- Display: 2.8" OLED Resistive Touch Screen
- Sampling: ORS
- Sampling Method: Vials or Point & Shoot
- Size (H x W x D): 9,14 cm x 7,11 cm x 3,81 cm
- System weight: 330 g
- Power: 2 AA Batteries
- Resolution: 14 - 16 cm^{-1}
- MIL-STD-810G and IP67

* Class 3B Laser Product

Features

- Orbital Raster Scanning (ORS)
- Highly visible OLED touch screen
- Ruggedized handheld footprint
- Extended operational time

Operating temperature range

-20°C to +40°C



Three Pos. Point and Shoot Adapter



Vial Sampler holder



Calibration Standard

Some example from the law enforcement library

Explosives / Propellants	Nerve Agents	Narcotics / Controlled
RDX	GB (Sarin)	Cocaine
Silver Nitrate	GD (Soman)	Phenobarbitol (Luminal)
Ammonium bisulfate	GA (Tabun)	Diacepam (Valium)
C4	HD (Sulfur Mustard)	Ephedrine
Trinitoluene	HN1 (Nitrogen Mustard)	Barbituric Acid
Ammonium molybdate	VX	Hydrocodone
Sodium Perchlorate	...	Methamphetamine