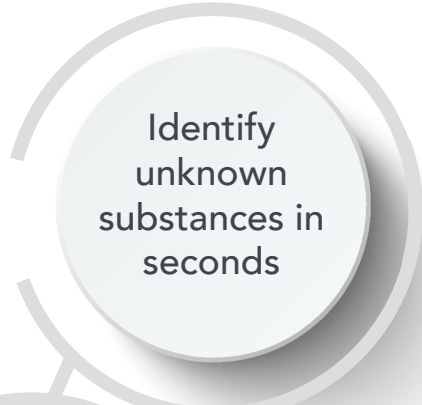# SERSTECH

SERSTECH 100 INDICATOR
Handheld Identification Made Easy

Identify unknown substances in seconds

Handheld
All-in-one
Robust

Complex Technology Made Easy

Serstech 100 Indicator will identify any solid or liquid chemical substance in seconds using Raman technology. The instrument is easy to use, truly hand-held and insensitive to water. The sample does not need to be removed from its container and will not be destroyed or tampered by the analysis.

Validated, Data-Enriched and Complete Libraries

Serstech 100 Indicator provides instant feedback which is easy to understand. This is a great tool for instant decision support.

All libraries have been created or validated by Serstech's chemists using the Serstech 100 Indicator. Every substance has relevant GHS symbols, CAS numbers and in many cases rich text explaining the properties of the substance.

Explosives. Includes military and civilian explosives, IEDs, precursors and oxidants.

Narcotics. Narcotic and psychotropic substances from the UN Yellow and Green lists, including precursors.

Hazardous Chemicals. Contains more than 2200 TICs (Toxic Industrial Chemicals) and other toxic or hazardous materials.

Chemical Warfare Agents. Identification of blister, blood, nerve and choking agents, and their precursors.

Pharmaceuticals. Tailormade library developed for and together with pharmaceutical companies.

The Most Cost-Effective Raman Solution

- All-in-one solution with one instrument for all types of chemicals
- No consumables, no factory calibration, no maintenance cost
- Updates of software and substance libraries included
- Rechargeable battery lasting more than eight hours
- Create libraries and add your own substances
- Quick and easy to decontaminate
- Training done in hours

Management and Reporting Software Included

Manage, expand and name custom substance libraries with ChemDash software. Create reports and export measurements for further analysis. Manage user accounts and set user privileges to secure chain-of-evidence. Use on a PC or in the cloud.

Low Weight, Safe and Easy to Use

The Serstech 100 Indicator makes the every-day work safer, easier and more efficient for:

- **Police authorities** ■ **Bomb squads** ■ **Border control** ■ **Hazmat teams**
- **Fire departments** ■ **CBRN readiness teams** ■ **Prison authorities**
- **Pharmaceutical companies** ■ **Environmental protection agencies**

A user interface designed to be used while wearing protective gear

Intuitive design, for quick decision making

Identify unknown substances in seconds

IP67 and easy to decontaminate

Robust and reliable under any conditions

Serstech 100 Indicator

Instrument type	Handheld Raman spectrometer
Laser excitation wavelength	785nm
Laser output power	3 levels available, max 300mW
Max spectral range	400 cm^{-1} to 2 300 cm^{-1}
Spectral resolution	8-10 cm^{-1}
Detector type	Linear CCD Array
Display	3.5" transmissive color TFT with LED backlighting.
Memory	100 000 measurements (16 GB)
Data formats	Text; .txt, .csv, .jcamp
Connectivity	USB 2.0. Wi-Fi and Ethernet (optional).
Battery	Rechargeable. More than 8 hours of typical use. Can be extended with standard mobile power banks.
Weight	650 g (1.4 lb)
Size	15.8 cm x 10.1 cm x 2.9 cm (6.2 x 4.0 x 1.1")
Operating temperature	-20 °C to +50 °C
Storage temperature	-30 °C to +50 °C
Included accessories	Point-and-shoot adapter, vial holder, 90° angle adapter, watertight case, shoulder strap, USB cable, laser aperture cap with calibration target, sample vials, attachment point, AC Adapter 5 VDC/1 A USB for Charging.
Optional accessories	Connection kit with Ethernet and Wi-Fi. SERS kit to identify e.g. heroin.
Start-up time	Less than 20 sec. in room temperature
Scan time	Most substances less than 10 sec.
Exposure	Auto-exposure or manual exposure, 0.001 – 60 seconds.
Libraries	The total number of substances is more than 14 000 and libraries provided are **Explosives**, including precursors; **Narcotics** including cutting agents, masking agents and precursors; **Chemical Warfare Agents**, including simulants; **Hazardous materials**, including toxic industrial chemicals and **Pharmaceuticals** with a wide range of active pharmaceutical ingredients.
Warranty	1 year. Additional warranty optional.
MTBF	50 000 h
Relative humidity	5-90%
Approvals	CE, IEC 60529 IP67, MIL-STD-810G 514.6 (vibration), MIL-STD-810G 516.6 (functional shock), Title 21 CFR Part 11 compliant (Instrument and ChemDash)
Supported languages	Chinese, Danish, English, French, Indonesian, Italian, Japanese, Korean, Polish, Russian, Spanish, Swedish and Vietnamese.
Software	ChemDash
Type of substances	Solid, liquids, powders and tablets.
Mixture analysis	Yes
Delay function	Yes, 1 second to 15 minutes.
Additional features	User authorisation, event logging, scan time delay, user-defined libraries, user-added substances.

Contact Us

To learn more about Serstech please visit www.serstech.com or contact sales@serstech.com

For questions regarding the Serstech Partner Program, visit our website www.serstech.com/contact or contact one of our regional sales managers.

Serstech AB, Sweden ■ www.serstech.com