SERSTECH
Chemical intelligence solutions

Making chemical identification easier

■ **Handheld and portable on to the field.**
It's important that you can start collect information without delay. Often, the conditions are wet, dirty and messy, you need an instrument that can withstand. The Indicator is reliable even in difficult circumstances.

■ **Easy to use**
Most users in the field are neither chemists nor computer experts. They need easy-to-use solutions that give them better answers to make better decisions.

■ **Connected**
Manage your devices, measurements and spectras, online, across your organisation with ChemDash cloud based management tool.

■ **Custom-made design of spectral databases and libraries**
Constantly keep up with new chemical substances in new combinations. Create your own libraries from your own measurements and ChemDash Spec Store.

With one instrument, you are able to screen, verify and identify substances

Screen method This is ideal for screening a sample for the presence of a restricted substance. The Indicator will analyse the sample and search for a match in the stored spectra. If a match to a restricted substance is found, you will be alerted by the substance receiving a red screen.

Verify method Similar to the Screen method, but in this case you only search for a match to one specific substance rather than several. To measure, you first choose a substance from the spectra databases. The Indicator then analyses the sample and compares it with the chosen reference. If there is a match, you receive a green "Pass" message.

Identify method This is the most common of the three measuring modes. The goal is to identify all the unknown substances in a sample, rather than singling out one or several substances. This is not category matching like that used in the Screen method.

Serstech 100 Indicator Technical Specifications

Part No	IND-1001
Instrument type	Handheld Raman spectrometer
Laser Excitation Wavelength	785nm, Stability <0.01 nm, Linewidth <0.1 nm
Laser Output Power	Max 300mW
Max Spectral Range	450 cm^{-1} to 2 300 cm^{-1}
Spectral Resolution	10 cm^{-1}
Detector Type	Linear CCD Array
Display	3.5" transmissive color TFT with LED backlighting
Memory	Enough for 20 000 measurements (8 GB)
Data Formats	Text; .txt, .csv
Connectivity	USB 2.0
Battery Rechargeable	Li-ion, capacity 7,22 Wh, >4 hrs Continuous Operation, non-user replaceable
AC Adapter	5 VDC/1 A USB for Charging
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 +40 °C
Storage Temperature	-30 °C to +50 °C
Included accessories	Instrument, watertight case, shoulder strap, USB cable, laser aperture cap with polystyrene target, sample vials, point-and-shoot adapter, vial holder, 90° angle adapter, attachment point
Exposure	Manual mode (0.001 – 60 sec) and automatic mode
Additional Features	User authorisation, Event logging, Scan Time Delay
Basic Database	>100 substances with compound data. Wide range of categories represented, e.g.
Additional databases	Upgrade to Explosives Database, Narcotics Database, Chemical Warfare Agents Database, Commercial Chemicals Database (14 000 substances)
Warranty	1 year standard, users can buy two additional years
MTBF	50 000 h
Relative humidity	5-90%
Approvals	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)
Multilanguage	Chinese, Danish, English, French, German, Japanese, Russian, Swedish
Software	ChemDash, cloud based management tool

Serstech 100 Indicator ■ Basic

- Serstech 100 Indicator, Handheld Raman Spectrometer
- Demo database,100 substances
- Adapters
- ChemDash Connection Kit
- Calibration cap
- and more …

Serstech 100 Indicator ■ Extras

- Add-ons – Explosives Accessories Kit, Hazardous Materials Accessories Kit
- Database upgrades – Explosives, Narcotics, Chemical Warfare, etc…
- Accessories – Demo Kit, Sample Kit, etc …
- Spare parts

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