

Serstech Arx mkII

Simplicity. Speed. Precision.



Small enough to fit in your pocket – big enough to redefine Raman

Experience simplicity, speed and efficiency with Serstech Arx mkII designed for and with field operators. With one-hand and single-button operation, the pocket-size Arx mkII is your go-to solution for swift and precise chemical identification in any scenario.

With all the libraries you need at your fingertips—including biotoxins—you can trust Serstech Arx mkII to deliver accurate results with ease.

Bring precision to the field. Powered by state-of-the-art algorithms, Serstech Arx mkII reduces fluorescence in challenging substances, while its Deep Scan functionality identifies even the smallest traces of chemical threats in complex mixtures.

Using ChemDash Mobile on your smartphone, Serstech Arx mkII connects wirelessly, allowing you to send case reports in seconds—on the fly.

Serstech's Arx mkII is the only handheld Raman device on the market that communicates on military networks via ATAK.

Serstech Arx mkII is engineered for simplicity and speed, allowing you to focus on the task at hand without any unnecessary hassle. Training takes only a few hours, and user errors are minimized through intuitive interaction and built-in guidance. Night vision mode ensures compatibility with most night-vision goggles.

With a five-year warranty, you can trust in the reliability and longevity of your investment. Elevate your capabilities and experience the future of chemical identification today.



Instrument Specifications

Instrument type	Handheld Raman spectrometer
Weight	590 g (1.3 lb)
Size	160 mm x 85 mm x 28 mm (6.2 x 3.3 x 1.1)
Laser excitation wavelength	785nm
Laser output power	Max 300mW, user adjustable
Barcode reader	Yes, QR and most common barcode formats
Max spectral range	400 cm ⁻¹ to 2 300 cm ⁻¹
Auto-focus	Yes, 0-4mm.
Spectral resolution	8-10 cm ⁻¹
Detector type	Linear CMOS
Display	3.5" Transflective TFT with LED backlight, Night-vision mode
Data export formats	txt, .csv, .jcamp
Connectivity	USB-C, Wi-Fi (2.4 GHz), Bluetooth 5.1
Battery	Rechargeable - more than 12 hours of typical use
Operating temperature	-20°C to +50°C (-4°F to 122°F)
Storage temperature	-30°C to +50°C (-22°F to 122°F)
Relative humidity	5-90%
Start-up time	Less than a minute
Scan time	Most substances less than 5 sec
Exposure	Auto-exposure, Multi or manual exposure, 0.001 - 60 sec
MTBF	50 000h
Approvals	CE, IEC 60529 IP67, MIL-STD-810G 514.6 (vibration), MIL-STD-810G 516.6 (functional shock), SWGDRUG category A compliant for presumptive testing, g, 21 CFR part 11 compliant (Instrument and ChemDash), ATAK



Accessories and Optional Components

Included accessories	Vial holder, watertight case, protective cap with calibration target, sample vials, USB-C cable, AC adapter 5 VDC/1 A USB for charging
Software included	ChemDash Lite. Optional software: ChemDash Pro and ChemDash mobile (iOS & Android)
Available libraries	Explosives, Narcotics, Chemical Warfare Agents, Hazardous materials, Pharmaceuticals, Biotoxins, User defined libraries. Total number of substances more than 24 000

Functionality and Features

Types of samples	Solid, liquids, powders, and tablets
Types of substances	Organic and inorganic chemical compounds
Container type	Clear glass, brown glass, transparent plastic containers
Mixture analysis	Yes
Delay function	Yes, 1 second to 15 minutes
Deep scan	Enables identification of very small quantities within complex mixtures
Fluorescence reduction	Built-in algorithms reduce fluorescence interference from challenging substances
Features	Auto-focus, QuickScan, User authorization, Event logging, Scan delay, User-defined libraries, User-added substances and Night-vision mode.
Supported languages:	Arabic, Chinese, English, French, German, Indonesian, Italian, Japanese, Korean, Polish, Romanian, Spanish, Swedish, Ukrainian, and Vietnamese. Additional languages on request.