

Serstech Arx mkII

Simplicity. Speed. Precision.



Experience simplicity, speed and precision with Serstech Arx mkII designed for and with field operators. With one-hand and single-button operation, the pocket-size Arx mkII is your reliable solution for precise chemical identification.

Determine what's in front of you in seconds, without complexity. With more than 24000 substances divided in Narcotics, Explosives, TICs, CWAs and Pharma libraries - Serstech Arx mkII delivers fast and accurate results.

Built for precision in the field. Our algorithms reduce fluorescence in difficult substances, and the Deep Scan™ feature identifies even small traces of chemicals in complex mixtures.

Use ChemDash Mobile to connect Serstech Arx mkII wirelessly and send case reports instantly from the field. For secure operations, Wi-Fi and Bluetooth can be disabled as needed.

Serstech Arx mkII is the only handheld Raman device compatible with military networks via ATAK. Designed for ease and speed. The interface is straightforward, optimized for use with tactical gloves. A dedicated night vision mode works with most night-vision goggles.



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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	785 nm
Laser output power	Max 300 mW, user adjustable
Barcode reader	Yes, QR and most common barcode formats
Max spectral range	400 cm ⁻¹ to 2300 cm ⁻¹
Auto-focus	Yes, 0-4 mm
Spectral resolution	8-10 cm ⁻¹
Detector type	Linear CMOS
Display	3.5" Transflective TFT with LED backlight, Night-vision mode
Internal memory	More than 100 000 measurements
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)
Start-up time	Less than 20 sec. in room temperature
Relative humidity	5-90%.
Scan time	Most substances less than 5 sec
Exposure	Auto-exposure 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

Type of samples	Solid, liquids, powders, and tablets
Mixture analysis	Yes
Deep scan	Enables identification of very small quantities within complex mixtures
Fluorescence reduction	Built-in algorithms reduce fluorescence interference from challenging substances
Delay function	Yes, 1 sec to 15 min
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