3DX-RAY

3DX-ARX

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

The 3DX-Arx is a revolutionary instrument, introducing SharpEye™ – a patented autofocus technology for handheld Raman instruments. 3DX-Arx makes it easier to identify unknown substances and to make decisions.

The 3DX-Arx and SharpEye™ give a precise result since SharpEye automatically finds the most optimal spot when making a measurement. It can detect the difference between the container and the actual substance, giving an improved measurement result. The autofocus makes it possible to detect and minimize fluorescence from containers.

3DX-Arx is built on a modern software platform, putting usability and algorithms in focus. The brand new graphical user interface is easy to navigate and new features such as Guided Scan™ and the Quick Access™ feature make it possible to get precise results, faster. 3DX-Arx is lighter and smaller compared to other models on the market and yet - even more powerful. 3DX-Arx lets users get focused on what is important and take decisions based on reliable measurement results – wherever they are.

Libraries:
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. Blister, blood, nerve and choking agents, and their precursors.
Pharmaceuticals. Tailormade library developed for and together with pharmaceutical companies.

Key features

- Autofocus - SharpEye™
- Intuitive user interface
- Management and reporting software included
- No consumables, no maintenance cost
- Create libraries and add your own substances
- Wi-Fi
- Quick scan
- Workflows
- Barcode reader
- 5 year warranty

3DX-ARX

Instrument type	Handheld Raman spectrometer
Laser excitation wavelength	785nm
Barcode reader	Yes, QR and most common barcode format
Laser output power	3 levels, max 300mW
Max spectral range	400 cm-1 to 2,300 cm-1
Autofocus	SharpEye™ technology (0-4mm)
Spectral resolution	8-10 cm-1
Detector type	Linear CCD Array
Display	3.5" Transflective TFT with LED backlight
Memory	More than 100,000 measurements
Data formats	.txt, .csv, .jcamp
Connectivity	USB C, Wi-Fi
Battery	Rechargeable - more than 12 hours of typical use
Weight	590 g (1.3 lb)
Size	160 mm x 85 mm x 28 mm (6.2 x 3.3 x 1.1")
Operating temperature	-20°C to +50°C (-4°F to 122°F)
Storage temperature	-30°C to +50°C (-22°F to 122°F)
Included accessories	Vial holder, 90° angle adapter, watertight case, protective cap with calibration target, sample vials, USB C cable, AC adapter 5 VDC/1 A USB for charging
Optional accessories	SERS kit to identify low concentration and fluorescent samples
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.
Optional libraries	Explosives, incl. precursors; Narcotics incl. cutting agents, masking agents & precursors; Chemical Warfare Agents, incl. simulants; Hazardous materials, incl. toxic industrial chemicals; Pharmaceuticals with a wide range of active pharmaceutical ingredients. Total number of substances is more than 14,000
Warranty	5 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), SWGDRUG category A compliant for presumptive testing
Supported languages	Chinese, Danish, English, French, Indonesian, Italian, Japanese, Korean, Polish, Russian, Spanish, Swedish and Vietnamese. Additional languages on request.
Software included	ChemDash Lite. Optional software: ChemDash Pro
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, workflows