# **3DX-RAY**

### **3DX-100 INDICATOR**



### Handheld identification made easy

The 3DX-100 Indicator identifies solid and liquid chemical substances in seconds using Raman technology. The instrument is easy to use and can easily be held with one hand. The sample does not need to be removed from its container and will not be destroyed or tampered with by the analysis.

The 3DX-100 Indicator provides instant feedback which is easy to understand. All libraries have been developed by chemists using the 100 Indicator. Every substance has relevant GHS symbols, CAS numbers and in many cases rich text explaining the properties of the substance.

The 3DX-100 Indicator weighs less than 650 grams and its small formfactor and intuitive placement of buttons make it easy to operate.

#### **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.

#### **Management and Reporting Software Included**

Manage, expand and name custom substance libraries with the included ChemDash Lite software. Create reports and export measurements for further analysis. Manage user accounts and set user privileges to secure chain-of-evidence.

## The Most Cost-Effective Raman Solution

- All-in-one solution with one instrument for chemical threat identification
- No consumable, no maintenance cost
- Updates of software and substance libraries included
- Create libraries and add your own substances
- Military-grade robustness
- · Training done in hours
- 5 year warranty

# **3DX-100 INDICATOR**

Instrument type	Handheld Raman spectrometer
Laser excitation wavelength	785nm
Laser output power	3 levels, max 300mW
Max spectral range	400 cm-1 to 2,300 cm-1
Spectral resolution	8-10 cm <sup>-1</sup>
Detector type	Linear CCD Array
Display	3.5" Transflective TFT with LED backlight
Memory	More than 100,000 measurements
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 mm x 2.9 cm (6.2 x 4.0 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	Point-and-shoot adapter, vial holder, 90° angle adapter, watertight case, shoulder strap, USB cable, laser aperture cap with calibration target, sample vials, AC adapter 5 VDC/1 A USB for charging
Optional accessories	Connection kit with Ethernet and Wi-Fi. SERS kit to identify low concentration and fluorescent samples. Optional software: ChemDash Pro
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. Warranty extension options available
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

#### www.3dx-ray.com

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#### An **IMAGE SCAN** company

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