

## EXPLOSIVES DETECTOR *EX-DETECT XD-2*

### Features:

- Ideal for First Responders!
- Detects over 30 different explosives and energetic materials
- One hand-held, rugged device for all explosives
- Nanogram detection
- Fully functional in any terrestrial environment
- Weighs less than two pounds
- Results in seconds
- No lengthy calibration or re-calibration
- No down time between samples
- User friendly reagents
- Not hampered with interferences
- Easily analyzes any sample, even when taken from water
- Can be used for airports, border patrol, law enforcement, military, unexploded ordinance, security checkpoints, environmental surveys, ports of commerce, health, military scrap metal, demilitarization operations, and immigration



**EX-DETECT®**, Model **XD-2**, is a new, innovative, hand-held (1.5 lbs), rugged, fast (30sec.) colorimetric screening device for many different explosives and related energetic decomposition products, i.e., nitro-, nitrate-, and nitramine-, type explosives. It is not an immunoassay device. Its unique, miniaturized design is essentially, a hand held laboratory system that is easily operated by non-technical personnel, giving them the capability to quickly analyze many hundreds of samples per day, on-site. **XD-2** is therefore, very cost-effective, fast, and efficient. It detects more types of explosives compounds than any other fieldable instrumental device. **XD-2** has an extremely large dynamic detection range for a wide variety of different explosives, from low nanogram ( $10^{-9}$  grams) to saturated milligrams levels on the swipe.

Throughout the centuries, chemistry has been based on the usage of heat and reagents to extract or identify the essence of the sample, whether particle or liquid. For over one century, the reliable nanogram detection of samples containing explosives has been conducted under laboratory settings by skilled technicians. However, detection of explosives in non-laboratory settings requires substantially greater challenges, especially for non-technical personnel under stressful conditions. **XD-2** is the perfect solution for first responders to detect explosives in all types of weather and environments. The **XD-2** hand-held explosives detection unit weighs less than 1.5 pounds, detects over 30 of the worlds most commonly used explosives in less than 10 seconds for many and 20 seconds for the rest with no false positives. The **XD-2** has no calibration down time, three different power sources, is not affected by moisture, heat, altitude, cigarette smoke, or any petroleum products. The **XD-2** is designed for the first responder; hand-held, rugged, fast, and easy to use for the nanogram detection of primary and secondary explosives, gun propellant formulations, ANFO, and black powder. This comprehensive suite is not available with any other hand-held device on the market.

<b>XD-2 Specifications:</b>	
<b>Weight:</b>	1.5 lbs.
<b>Dimensions:</b>	2.75" x 3.375" x 6.5"
<b>Battery:</b>	8 AA Batteries
<b>Power:</b>	110 AC/DC
<b>Explosives:</b>	Over 30 detected
<b>Detect Time:</b>	Instant to 30 seconds
<b>Calibration:</b>	None
<b>Swabs w/ Foils:</b>	100 each
<b>Swipes:</b>	100 each
<b>Reagents:</b>	Solution 1 & Solution 2
<b>Pelican Case:</b>	Water/Air tight

<b>Technology Comparison</b>	
<b>Ion mobility Spectrometry (IMS)</b>	<b>EX-DETECT XD-2</b>
<ul style="list-style-type: none"> <li>• Weather has to be ideal</li> <li>• Too many interferences</li> <li>• Limited kinds of explosives detected</li> <li>• Difficult to calibrate</li> <li>• Very high purchase price</li> <li>• Very susceptible to environmental background</li> <li>• Costly and specialized maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• All Weather</li> <li>• <b>NO</b> interferences</li> <li>• Over 30 kinds of explosives detected!</li> <li>• <b>NO</b> Calibration</li> <li>• Very low purchase price</li> <li>• <b>NOT</b> susceptible to environmental background</li> <li>• <b>NO</b> specialized maintenance</li> </ul>

**Some Users of the XD-2 Explosives Detector**

- Air Force, Force Protection Battle Lab
- Alcohol, Tobacco and Firearms Bureau
- Anti Terrorist Protection Force
- Applied Marine Technology (for U.S. Military)
- A-T Solutions
- Australian Federal Police (Brisbane Airport)
- Boeing Company
- Charoen Krung Engineering (Thailand)
- City of Fort Worth
- City of Fresno
- City of Topeka
- Dallah Group (Jordan)
- Edwards Air Force Base EOD
- Environmental Safety Group
- Federal Bureau of Investigation
- Fort Irwin, California
- Global Systems Technologies
- HTCI
- Lackland Air Force Base
- MDI (Canada)
- New Zealand Security
- Phoenix International Security
- Roanoke Police
- Roanoke Regional Airport
- SCS Elektronik (Turkey)
- Security Pro U.S.A.
- Special Forces Middle East
- Sytex (Military)
- Technical Support Working Group (U.S. Government)
- U.S. Army, Camp Slayer