OptEX Explosives Trace Detection System

SECURITY DETECTION
METAL DETECTORS X-ray MACHINES

Slim. Smart. Sensitive.
Introducing a breakthrough in explosives trace detection

Detect virtually any explosive in less than four seconds—without a reference library. The OptEX desktop explosives trace detection system detects any explosive, whether a newly created compound or a previously documented substance.

L-3's innovative energetic materials detection (EMD) technology introduces a paradigm shift to the global security community for screening trace amounts of explosives. Departing from conventional ion mobility spectrometer (IMS) detection devices, L-3's EMD-based explosives trace detection products do not require carrier gases or dryer consumables, radioactive sources, or reference libraries. This technological breakthrough results in immediate operator benefits, including significantly lower operating costs, an inherently safer product that does not require radioactive wipe testing, and an intrinsic capability to detect new or evolving explosive compounds without having to update reference libraries.

OptEX safely indicates the presence of TATP, EGDN, NG, TNT, PETN, RDX, NC, nitrates, and other explosives. This slim, easy-to-operate unit efficiently analyzes explosives in four seconds, and offers reusable sample traps that significantly reduce the cost of consumables associated with other trace detection systems.

Featuring a rapid automatic startup, OptEX is ready for operation in less than two minutes and easy for operators of any skill level to use. Virtually any object that can be touched can be analyzed for trace amounts of explosives.

Easily deployed to checkpoints or remote locations, OptEX helps strengthen security at airports, seaports, border crossings, embassies, and critical infrastructure facilities.

EMD technology—The L-3 approach

All explosive materials, regardless of the amount, decompose exothermically after being supplied with sufficient activation energy. The subsequent decomposition process results in an intense release of heat to the environment surrounding an explosive particle, producing a localized, sharp increase in temperature followed by a sharp decrease in temperature after the energetic material is consumed. These unique heat signatures, analyzed with embedded proprietary detection algorithms, indicate the presence of explosives.

Quickly confirm the presence of explosives:

1) Operators wipe target surfaces with a sample trap
2) The trap is inserted into the detector, which analyzes the sample
3) Results are displayed in four seconds

System Highlights

- Universal explosives detection
- Reduced total cost of ownership
- Reusable sample traps; no conduits to clean
- No dryer, carrier gases, or radioactive sources required
- Reduced analysis time
- No explosives libraries to update
- No bake-out or long clear-down sessions for system contamination
- Automated calibration
- Integrated touch screen and built-in printer
- Internal data storage with optional USB and FireWire connections for exporting data
- Space-saving design and easily transported

Rapid analysis allows operators to resolve threats quickly while keeping bags and passengers moving

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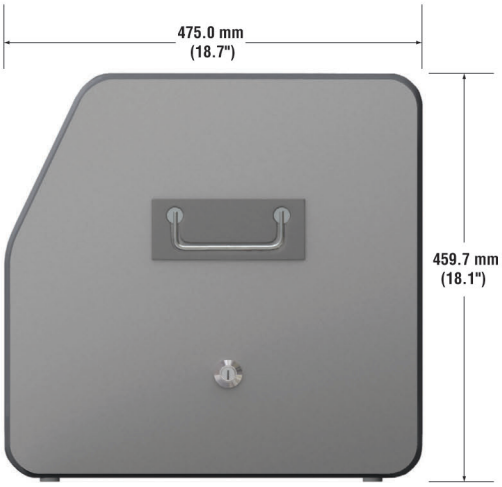
SPECIFICATIONS:

Explosives Detected:	Any explosive exhibiting an exothermic decomposition including TATP, EGDN, NG, TNT, PETN, RDX, NC, nitrates, and others
Detection Limit:	Designed to meet TSA sensitivity requirements
Alarm Notification:	Visual
Analysis Time:	< 4 seconds
Start-Up Time:	< 2 minutes
Cooling:	Fan-forced air
Data Storage and Communications:	Hard drive, two USB ports, RS-232 port, internal printer, USB keyboard
Operator Interface:	VGA touch screen, optional USB and FireWire connections
Power:	110/220 VAC 50/60 Hz; less than 10/5 Amps
Environment:	Operating: +5 to +35°C
Storage:	-20 to +60°C
Dimensions:	281.9 mm (11.1") x 459.7 mm (18.1") H x 475.0 mm (18.7") D
Weight:	25 kg (55 lbs)

Front View



Side View