

# Explosives Detection Technology



## Model EL100

Nitrogen-based explosives and propellants: particulates

The E.L.I.T.E.™ is the only product sensitive to a broad range of explosives that is inexpensive enough, reliable, rugged and simple enough to be distributed to every policeman, special forces team, police and military vehicle for on-the-spot testing for trace explosives. The EL100 is currently in use with state and local police as well as the US TSA, FBI and Army; it is also used by commercial security for the protection of power plants, cruise lines, and public transportation.

**Example Scenario #1:** border patrol agents equipped with the EL100 provide a distributed explosives detection network for spot checks of illegal persons and suspicious vehicles.

**Example Scenario #2:** TSA agents use the EL100 to clear or verify alarms on IMS instruments and to conduct roving checks and screening at other than the main passenger checkpoints.

**Example Scenario #3:** school police officers use the EL100 to check the locker or hands of students who have been making threats or have created cause for concern. A positive test prevents a bombing or shooting incident through intervention.

**Summary:** A positive test results in a very visible color change; the entire test takes less than two minutes. The EL100 requires no calibration, no special storage conditions, and has a shelf life of 18 months. Please see the reverse side of this sheet for ordering information.



## Model EL200

Peroxide-based explosives: particulates and peroxide vapor

TATP ("Mother of Satan"), HMTD, and concentrated hydrogen peroxide in solution, all of these are detected by the simple and self-contained ELITE Model EL200. The EL200 is unique in that it measures suspect particles and vapors. It will detect trace amounts of peroxide-based explosives from roughly 500 nanograms and will detect hydrogen peroxide solutions above roughly 30% concentration (and much lower concentrations in contact with the suspect liquid).

• **Example Scenario #1:** during a routine search a bottle with an unknown fluid is found. The EL200 tip turns blue when held over the open mouth of the bottle (without touching the liquid), which indicates that the liquid is a highly concentrated solution of hydrogen peroxide.

• **Example Scenario #2:** taking down a suspected meth lab, officers discover a white powder scattered on a table. The EL200 tip turns blue after being touched against one of the particles, which indicates a positive for peroxide-based explosives.

• **Example Scenario #3:** a security screener notices a white powder in the bottom of a briefcase. A quick test with the EL200 reveals that the powder is likely a peroxide-based explosive.

**Summary:** The EL200 is a pocket-sized, disposable test kit that reliably detects peroxide-based explosive particulates and vapors. It can be used in conjunction with the Model EL100 and as part of various FFI Field Kits. Please see the reverse side of this sheet for ordering information.

# Explosives Detection Technology Ordering Information

## **EL100 & EL200**

**EL100-BX:** E.L.I.T.E.™ Disposable explosives detection card. Winner: R&D100 Award. Nanogram sensitivity to a broad range of nitro-aromatic, aliphatic, and nitrate-based explosives, including TNT, tetryl, RDX, ANFO, black powder, etc. One EL100-BX includes ten (10) Model EL100 detection cards - each individually foil packed and serialized.

**EL200-PK:** E.L.I.T.E.™ Disposable explosives detection pen. Detects peroxide-based explosives such as TATP and HMTD; also detects concentrated hydrogen peroxide solutions. One EL200-PK includes ten (10) Model EL200 detection cards - each individually foil packed.



The EL100 and the EL200 can be ordered on their own as the EL100-BX and the EL200-PK respectively. Both can be ordered as part of complete field kits as well.

**EL101:** E.L.I.T.E.™ Field Kit (Hard Sided). Durable and weatherproof *Storm* hard-sided carrying case includes ten (10) EL100 cards (will hold more than 20), an EL100-BPH battery-powered heater and charger, and EL100-BLH heating jig and EL100-FG Field Guide - the case will hold all included pieces.

**EL101-X:** E.L.I.T.E.™ Field Kit (Hard Sided). Durable and weatherproof *Storm* hard-sided carrying case includes ten (10) EL100s, ten (10) EL200s, an EL100-BPH battery-powered heater and charger, and EL100-BLH heating jig and EL100-FG Field Guide - the case will hold all included pieces.

**EL102:** E.L.I.T.E.™ Field Kit (Soft Sided). Nylon carrying case with shoulder strap includes ten (10) EL100 cards, an EL100-BPH battery-powered heater and charger, and EL100-BLH heating jig and EL100-FG Field Guide - the case will hold all included pieces.

**EL102-X:** E.L.I.T.E.™ Field Kit (Soft Sided). Nylon carrying case with shoulder strap includes ten (10) EL100 cards, ten (10) EL200s, an EL100-BPH battery-powered heater and charger, and EL100-BLH heating jig and EL100-FG Field Guide - the case will hold all included pieces.

**EL103:** E.L.I.T.E.™ Field Kit (Soft Sided). Belt-mountable nylon carrying pouch includes ten (10) EL100 cards, an EL100-BPH battery-powered heater and charger, and EL100-BLH heating jig and EL100-FG Field Guide. The pouch will hold all included pieces except the battery re-charger.

## **ACCESSORIES**

**EL100-BPH:** Battery-powered portable heater for use with the EL100. Includes NiMH rechargeable battery and charger (100-250VAC, 50/60Hz)

**EL100-BLH:** Heating jig for use with the EL100 and a butane cigarette lighter or other source of heat - can be used instead of the EL100-BPH.

**EL100-FG:** E.L.I.T.E.™ Field Guide. Weatherproof, spiral-bound pocket-sized guide to operation of the EL100. Includes step-by-step instructions and color chart.

**TN-RD-TST-1:** inert TNT and RDX in a gel substrate for testing and training with the EL100.

