

# SPX-300

## AUTOMATIC, TRACE EXPLOSIVES DETECTOR



### Advantages

- Negligible false positives
- Indicates range of explosive found
- Low toxicity chemicals - safe to use
- Fast response time (some explosives <5 seconds, all if desired, <1 min)
- Trace level detection (low ng range)
- Large dynamic range (ng - bulk)
- NO overload problem or carryover after bulk run
- NO costly maintenance or lengthy downtime
- Not affected by moisture, heat, altitude, cigarette smoke, household or petroleum products or other interferences to conventional systems

The new SPX 300 Explosives Detector is a cost effective automatic device with high sensitivity that can test for all known explosives (including tetryl, nitrocellulose, TNB, DNB, all formulations of military and homemade explosives, nitro methane, gun propellants, mining explosives, liquid peroxides and liquid chlorates).

Using swipes or swabs, the SPX 300 produces rapid and reliable colorimetric detection using a patent pending technology and has data acquisition and storage capabilities.

The solutions have undergone extensive testing by a number of government agencies – references are available on request by authorized potential users.

## **Technology**

The innovative technology improvements embodied in the SPX 300 uses a patent pending combination of benign solutions applied automatically to the sample that is then subjected to a rapid, controlled heating cycle.

Data acquisition is initiated automatically and results are electronically displayed in a simple, easy to read format. A constant visual of the swipe is displayed adding a second level of comprehensive assessment. The automated process indicates the presence or absence of explosives, as well as a time and date stamp that is stored in memory for later download. The system will detect and distinguish liquid peroxide, perchlorates, and chlorates from benign liquids (drinks, lotions, hygiene products, contact lens solutions, etc.) and can detect nitrites within a 7 second time frame.

## **Test Solutions**

The formulations are designed to be safe for the operator. The solutions are manufactured by Sigma-Aldrich Corporation. Solutions are in 20 ml hermetically sealed, crimp top vials. The vials can perform approximately 400 tests. They are inserted into the colour-coded detector slots and each can be viewed for liquid level as necessary. The detection process selected will automatically dispense the correct solution at the appropriate time and with the correct rate. Unlike other equipments this technology does not use concentrated battery acid and DMSO.

## **Operating Instructions**

To run a sample simply place the swipe onto the receiving tray, close the tray, and press “start” for automatic processing and analysis. Any colour change to the white swipe indicates the presence of explosives or energetic materials (seen visually and displayed automatically). Therefore, memorisation of colours is unnecessary.

Select 1 of the following detection protocols:

1. Military and homemade explosives to include ANFO, black powder, nitromethane, gun propellants, and mining explosives.
2. Liquid or solid peroxide chlorate, and perchlorate explosives.

## Applications

- Proven fast reliable detection of all known homemade and military explosives
- Simple test cycle for all units – do not have to limit materials being searched for
- Alternative to conventional IMS Systems for – PROVIDES LOWER FALSE ALARM RATES IN 'REAL WORLD' SITUATIONS

## Benefits

- Low cost per test
- User friendly and automated
- Lightweight and compact
- Can be used as portable system
- Easy setup

## Specifications

- Size: 3.4" x 9.1" x 15.7"
- Weight: <5kg
- Power: 12 AA batteries for emergency operation. AC/DC for recharging tablet PC or for non-remote applications.

For more Info & Price Quote, Please Contact:

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