

SABRE[™] 5000

HANDHELD TRACE DETECTOR FOR EXPLOSIVES, CHEMICAL AGENTS AND TOXIC INDUSTRIAL CHEMICALS OR NARCOTICS



Feature Highlights

- Smallest, lightest tri-mode (Explosives, Narcotics, CWA/TICs) detector available
- Optimized detection of peroxides (used in home-made explosive devices and Improvised Explosives Devices) in vapor mode
- Continuous automatic vapor sampling in both positive and negative modes for CWA/TIC detection
- Self-diagnostics with maintenance alerts and onboard troubleshooting
- Faster clear down with truncated alarm

The SABRE 5000 is the smallest, lightest tri-mode handheld system available for detecting trace amounts of explosives, chemical warfare agents, toxic industrial chemicals or narcotics. With its ability to detect a wide range of threats, it is a cost effective instrument for security professionals and military agencies that require portability and flexibility to perform their duties.

Using Smiths Detection's proven Ion Mobility Spectrometry (IMS) technology the SABRE 5000 is programmed to detect and identify over 40 threat substances in approximately 20 seconds. Threats such as common peroxide-based, volatile and unstable chemicals often used to construct Improvised Explosive Devices (IED), and ammonium nitrate commonly used in home-made explosives.

Additional features include automatic self-calibration with no calibration consumables or related procedures required to save time and money, onboard diagnostics for simple troubleshooting assistance, a truncated alarm feature for faster clear down, and an onboard library that is user-expandable to program new substances as new threats emerge.

With a start time of 15 minutes and weighing approximately 7lbs. (including the four hour battery), the SABRE 5000 is a small, powerful ally in the war on terror and drug trafficking.

Ion Mobility Spectrometry (IMS) Technology

The SABRE 5000 uses Smiths Detection's IMS technology—known for its sensitivity and reliability for both the detection and identification of an extensive library of military and commercial explosives and

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SABRE 5000

narcotics. This technology has been proven at military bases, border crossings, airports and other critical security checkpoints around the world.

Particle and Vapor Trace Detection

The versatile SABRE 5000 is capable of analyzing either trace particle or vapor samples, expanding the range of threats the system can detect. The operator can select the best analysis method for the suspected threat to yield the most accurate analysis results. Switching between sampling modes takes only seconds.

Auto-Switching Vapor (ASV) Modes

The ASV-Explosives mode offers an optimized detection in both negative and positive mode for an increased range of explosives detection from single sample. To detect CWA/ TIC substances, the ASV-CWA/TIC mode

offers Emergency Responders flexibility to continuously sample vapor without the need for switching between positive and negative modes. When the system is used in a fixed location the display screen can easily be rotated 180° for easy viewing.

Automatic Self-calibration

The SABRE 5000 monitors its environment, senses changes that would affect its accuracy and re-calibrates accordingly. There are no calibration consumables or related maintenance procedures for calibration, saving time and money.

Onboard Diagnostics

The SABRE 5000 features onboard diagnostics to assist the operator with maintenance procedures and simple system troubleshooting for error resolution.

The USB port allows for convenient downloading of alarm data for further detailed analysis, programming the instrument or printing alarm results with the included Instrument Manager Software.

NRC Exemption

No periodic radiation leak tests are required in the United States. Operators outside the United States should check with their radiation safety agency for local requirements.

Technical Data ____

General Specifications

Technology Radiation source Sample collection Operating modes Explosives detected Drugs detected

Chemical warfare agents detected Toxic industrial chemicals detected

Sensitivity False alarm rate Input voltage Alarm type Display Language Ready time Analysis time

Battery operating time

Weight Size

Operating temperature range

Operating humidity

Options

Ion Mobility Spectrometry (IMS)

⁶³Ni, sealed 15 mCi Trace particle and vapor

Explosives, Narcotics, Chemical warfare agents/Toxic industrial chemicals RDX, PETN, TNT, Semtex, TATP, NG, Ammonium Nitrate, H₂O₂ and others

Cocaine, Heroin, THC, Methamphetamine and others

Nerve and blister agents such as Tabun, Sarin, Soman, Cyclosarin, Agent VX and Vx

Hydrogen Cyanide (HCN), Phosgene, SO, NH and others

Particle: low nanogram range; Vapor: low parts per million range

Less than 1%

12VDC. 110 VAC / 220 VAC. 50-60 Hz

Audio and visual, with substance identification

8.89cm (3.5in) TFT color display English, French, German and Spanish

Under 15 minutes

Detection in 10 seconds, complete analysis in 20 seconds

4 hours

3.2kg (7lbs.) with the 4 hour battery 36,3 x 11 x 13cm (14.5 x 4 x 4.5in) 0° to +40°C (32° to 104°F) 0 to 95% non-condensing

Protective cover with shoulder strap

2 hour battery



