ITEMISER® 3E ENHANCED

Explosives and Narcotics Detection In a Desktop System

detection

chemical & explosives

RAPISCAN® SYSTEMS FLEXIBLE, LIGHTWEIGHT DESKTOP DETECTOR SIMULTANEOUSLY ANALYZES BOTH POSITIVE AND NEGATIVE IONS, ALLOWING FOR ADVANCED EXPLOSIVE AND NARCOTIC CONTRABAND DETECTION.

The Itemiser® 3 Enhanced is the first trace detector in the world to simultaneously detect positive and negative ions, enabling the detection of a broad range of explosives and narcotics. Detection of both positive and negative ions allows for effective identification from a single sample. It delivers fast, simultaneous explosives and narcotics detection in a package that is ergonomic and portable.

- World's first simultaneous dual-mode explosives and narcotics detector
- Can detect a wide range of targeted substances
- Results in as little as 8 seconds
- Easy to learn and operate
- Expandable libraries
- A comprehensive history of saved data and alarm files can be recalled and printed

SIMULTANEOUS DUAL-MODE DETECTION

In recent years, the arsenal of explosives used by terrorist groups has expanded beyond the range of substances easily detected by instruments utilizing traditional Ion Mobility Spectrometry (IMS) technology. Traditional IMS instruments operate in either positive or negative mode, but not both modes simultaneously.

While negative mode operation detects the majority of explosives, certain explosives are detected in positive mode. Therefore to rule out the presence of all explosives, conventional IMS detectors require operators to sample and test using two separate detectors.

EASILY TRANSPORTED AND FLEXIBLE DESKTOP TRACE DETECTION

The Itemiser® 3 Enhanced was designed with portability and flexibility in mind. This unit offers a compact footprint, folding touch screen, easy-carrying handle, a 60-minute battery backup, and the potential to be relocated quickly.

- **Particle swipe:** Reusable sample traps are swiped across a surface and then inserted into the Itemiser® 3 Enhanced for analysis. Typical surfaces include baggage, cargo, vehicles, containers, tickets, and ID cards.
- **Optional vacuum sampling:** An optional vacuum sampler draws vapors into a sponge-like sample trap, which is then inserted into the Itemiser® 3 Enhanced for analysis. Applications include cargo containers, car trunks, and luggage.

EASY TO USE OPERATOR INTERFACE

Results require minimal interpretation, so operators may concentrate on obtaining a good sample. Itemiser® 3'S enhanced onboard computer automatically handles all data logging, including time, date, and sample analysis for each alarm. A complete history of saved data and alarm files can be recalled and printed at any time.
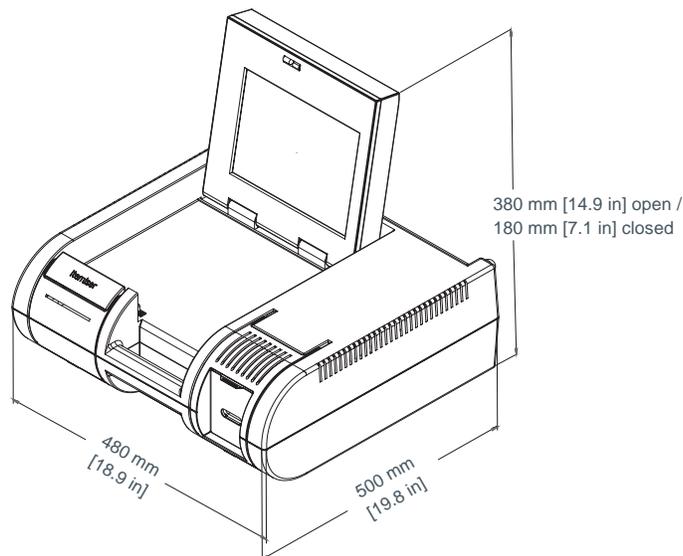
SENSITIVITY / SELECTIVITY

Patented ITMS™ technology helps increase ion population, enabling detection of microscopic traces of explosives and narcotics.
Patented switching mechanism simultaneously detects positive and negative ions, enabling the detection of a broad range of explosives, while also detecting narcotics.

VERSATILE

Remote monitoring capable.
Detects both explosives and narcotics.
Semi-permeable membrane excludes dust and dirt to allow continued operation in environments that have high traffic, humidity or contamination.
Expandable libraries to accommodate unique user requirements.
Three default user levels (operator, maintenance and administrator) for greater access control.

ITEMISER® 3E ENHANCED

380 mm [14.9 in] open /
180 mm [7.1 in] closed

480 mm [18.9 in]

500 mm [19.8 in]

PHYSICAL SPECIFICATIONS

Dimension (display opened)	Height: 14.9 in (38 cm) open / 7.1 in (18 cm) closed Width: 18.9 in (48 cm) Length: 19.8 in (50 cm) open / 18 in (46 cm) closed
Handwand Dimensions:	Height: 14.9 in. (37 cm) open/ 7.1 in. (18 cm) closed Width: 18.9 in. (48 cm) Length: 19.8 in. (50 cm) open/ 18 in. (46 cm) closed
Optional Vacuum Sampling Unit:	L x W x H: 19.8 in. (50 cm) W: 18.9 in. (48 cm) H: 14.9 in. (37 cm)
Weight	26.5 lb (12.02 kg)

TECHNICAL SPECIFICATIONS

Detector Type	Ion Trap Mobility Spectrometer (ITMS)"
Analysis Time	Default 8 seconds
Sample Acquisition	Surface wipe or optional vacuum collection
Warmup Time (Cold Start)	Allow approximately 30 minutes for system to stabilize
Operating Temperature:	32 to 104°F (0 to 40°C) IP20 protection rating
Power	AC Input: 100-120 VAC, 200-240 VAC, 47-63 Hz, 150W, 150W, 65W nominal
DC Input	11-18 VDC input,
Battery Backup:	Up to 60 minutes of standby time
Computer	Hard Drive: 80 GB
Display	10.4 in (26.4 cm) TFT-LCD monitor with resistive touch screen
Signal Processing	Recognition on multiple peaks and explosives; output to 4 different display types, including bar graph display or time-of-flight plasmagram display
Detection Capability	Explosives (optimized negative ion mode); Narcotics (optimized positive ion mode)
Data Transfer Capability	Two USB 2.0 ports; Ethernet port