

# ITEMISER<sup>®</sup> 4DX

NON-RADIOACTIVE-BASED EXPLOSIVES AND NARCOTICS DETECTION



Using a non-radioactive ionization source and simultaneous, dual-mode detection, Itemiser<sup>®</sup> 4DX can detect a broad range of current market threat explosives and narcotics without the use of a radioactive source, thereby eliminating the need for annual wipe tests and licensing while reducing shipping challenges. The portable, ergonomic desktop unit features automated internal calibration to help decrease consumables cost, optimize ongoing equipment operation and increase detection accuracy.

## Benefits

- Simultaneously detects and identifies explosives and narcotics from a single sample in approximately eight seconds
- Non-radioactive ion source eliminates shipping restrictions and licensing requirements
- Automated internal calibration removes the need for calibration traps required for manual calibration
- Increased usability, improved operational and detection accuracy
- Remote monitoring capability via Remote Connect
- Schedulable, automated maintenance at the push of a button
- Regenerative dryer — a patented Morpho innovation — reduces maintenance downtime and consumables costs by eliminating the need for dryer material replacements

**Cost Effective**

- Automated internal calibration eliminates cost of purchasing and managing calibration traps
- Folding monitor screen automatically shuts off backlight to extend life of display
- Regenerative dryer increases uptime and eliminates cost of dryer material replacements
- Decreases labor required to initiate and manage maintenance

**Reliable**

- Simultaneous dual mode detection eliminates the need for two detectors, which significantly decreases the possibility of mechanical failure associated with two detector systems
- Built on Ion Trap Mobility Spectrometer (ITMS™) technology, patented by Morpho and proven over 15 years of successful field experience
- Maintains a low, stable humidity level in the detector, allowing for consistent and reliable detection results
- Automatically saves test results, preventing deletions
- Optional maintenance reminders for all preventive requirements
- Advanced diagnostics to ensure maximum availability and performance
- Fast clear-down after alarm

**Ease of Use**

- Non-radioactive ionization source removes shipping restrictions and licensing requirements
- Built in printer for fast hard copy results or printing later
- Quick analysis and results in approximately 8 seconds
- On-board software keypad and help files
- Automated maintenance can be scheduled in advance, or executed with a single push of a button
- Easily accessible maintenance items
- Ability to create custom substance libraries
- Video tutorial software available

**Easy-to-Use Operator Interface**

- Results require minimal interpretation, allowing operators to concentrate on sample acquisition
- Onboard computer automatically logs all data, including time, date, sample analysis and system status
- A comprehensive history of saved data and alarm files can be recalled and printed
- A 10.4 in color and tilting touch screen for better visibility

**Portability**

- Lightweight (28.5 lb/12.93 kg) with built-in handle for easy transport
- Internal, one-hour battery allows instrument relocation without shut off, eliminating warmup time

**TECHNICAL SPECIFICATIONS**

<b>Dimension (display opened)</b>	Height: 14.9 in (38 cm) Display Clearance: 16.3 in (41 cm) Width: 18.9 in (48 cm) Depth: 19.8 in (50 cm)
<b>Dimension (display closed)</b>	Height: 7.1 in (18 cm) Width: 18.9 in (48 cm) Depth: 18.0 in (46 cm)
<b>Weight</b>	28.5 lb (12.93 kg)
<b>Detector Type</b>	Ion Trap Mobility Spectrometer (ITMS)
<b>Analysis Time</b>	Default 8 seconds
<b>Sample Acquisition</b>	Surface wipe
<b>Warmup Time (Cold Start)</b>	Allow approximately 30 minutes for system to stabilize
<b>Operating Temperature:</b>	0 to 55°C (32 to 131°F) IP20 protection rating
<b>Storage Temperature</b>	0 to 55°C (32 to 131°F)
<b>Power</b>	External AC to DC Power Supply: 100-240 VAC, 47-63 Hz input
<b>Battery Backup</b>	Up to 60 minutes of standby time for transport
<b>Computer</b>	Hard Drive: 120 gigabytes
<b>Display</b>	10.4 in (26.4 cm)
<b>Signal Processing</b>	Recognition on multiple peaks and explosives; output to 4 different display types, including bar graph display or time-of-flight plasmagram display
<b>Detection Modes</b>	Explosives and Narcotics Detection or Dual Mode Detection
<b>Data Transfer Capability</b>	Two USB 2.0 ports; Ethernet port

**Morpho Detection**

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