



# Itemiser DX<sup>®</sup>

## TSA-qualified dual-mode Narcotics and Explosives Trace detection System

**Art.-No. 170605**

**TSA-Qualification: TSA25-04-00759**

*The Itemiser DX is the technological re-definition of the proven Itemiser<sup>3</sup><sup>®</sup> concept.*

*The design is based on a number of new steps and problem approaches.*



Rear side view

### Special features

Individual & simultaneous detection and identification of explosives and narcotics

- Weighs only 12 kgs
- Warmup-time (total) : 30 Min. max.
- Operated via 110/220 V AC or 11-16 V DC
- Up to one hour of battery-operated uninterrupted power supply
- Maintenance-free regenerative dryers

Operates under Windows XP, allows use of common printers, USB drives, applications and bar code scanner

- Radioactive Ni63 Source
- On-board printer
- Foldable touch screen
- No membrane
- On screen keyboard
- Robust casing

Allows extension of library by trained user

Remote monitoring capability

Independent substance libraries available

- **Configurable auto verification process**
- Configurable maintenance reminder
- Configurable instructed random sampling
- Configurable nightly auto clean
- Diagnostic logging
- History logging (advanced)
- Integrated video-help
- Trap removal warning
- Foreign languages
- Optional substance code labeling

Due to the technical development and further requirements in air transportation policies over the last years the „ItemiserDX“ was developed using the proven „Itemiser3“ as a platform.

The detector of „ItemiserDX“ has been re-designed and is not using a membrane anymore. This allows utilization of the drift tube in both direction resulting in even higher sensitivity and selectivity. Proven functions of the Itemiser3 design are still kept. Therefore there is no need for additional training.

Modern Software and larger memory allow for simplification of memory intensive user and diagnostic functions, defaults and video-help.

The system can be used to check people, baggage, cargo, vehicles, money, drivers' licenses, tickets, time cards and workplaces for microscopic particles and vapors of controlled explosives or narcotics.

„ItemiserDX“ is designed to detect all of the commonly used explosives or controlled drugs and to sound an audible alarm when any programmed substance is detected. The system's patented sampling technique is extremely sensitive and fast, with an average response time of 4-10 seconds per sample.

Extensive use of the latest microprocessor and computer technology in the design of „ItemiserDX“ has produced a method that requires no user intervention or interpretation. Consequently, users can concentrate on obtaining good samples. A user needs only sample an item and place the sampled Trap in the vapor desorption unit's detection slot to trigger analysis.

ITEMISER3 has established itself as the instrument of choice at airports, ports, prisons, law enforcement and police crime labs, and commercial facilities throughout the world.

**System specification**

<b>Detector-Type</b>	ITMS® (IonTrap Mobility Spectrometer)
<b>Sensitivity</b>	Nano-/Picogram for Drugs and Explosives (Certified by: TSA, HOSDB)
<b>Analysis time:</b>	8 s per sample
<b>Sampling</b>	Wiping of surface
<b>Warm-Up time</b>	30 minutes, max., after total switch-off suited for cont. operation
<b>Connections</b>	4 V DC-Outlet (10 A max.), Win-keyboard
<b>Interfaces</b>	2 x USB, LAN, RS232
<b>Integrated Computer</b>	Windows XP RAM 512 Mb Hard disk >120 G
<b>Signal processing</b>	Output in four different displays: <ul style="list-style-type: none"> <li>• Bar-graph,</li> <li>• Plasmagram,</li> <li>• Signal intensity</li> <li>• Signal-3D-;</li> </ul>
<b>Substance libraries</b>	
<b>Explosives:</b>	Dynamite, Semtex, Ammonium nitrate, PETN, C4, RDX, HMX and many others
<b>Narcotics:</b>	Cocaine, Heroin, Methamphetamine, PCP, LSD, THC, MDMA and many others.
<b>Dimensions:</b>	
<b>Weight:</b>	12 kg
<b>Length:</b>	457 mm
<b>Width:</b>	476 mm
<b>Height:</b>	172 mm

**Sampling**

Samples are collected from surfaces suspected of being contaminated by microscopic traces of contraband with a specially designed material (patent pending) known as a "sample trap." This trap can be used by itself or with sampling devices and optional attachments specifically designed to accommodate various sampling scenarios and surfaces.



Sample wand



Sample wand with vacuum attachment

The sample wand comes standard with each detection system (see figure above - left) and is ideal for sampling flat or hard surfaces that are better accessed with an extension, which permits the operator to not come into direct contact with the surface area.

An optional vacuum attachment fits easily onto the sampling wand (see figure above - right) and is ideal for accessible surfaces and fabrics. Using this method allows both vapors and particles to be efficiently collected for more thorough sampling.

**Data Display**

"Itemiser3 enhanced" provides four views for displaying data. SelectScan and plasmagram views are accessible to all users, whereas Intensity Map and 3-D- view are accessible to the supervisor level and higher.

*In SelectScan view, six substances can be displayed on the touch-screen at one time. If a substance not initially displayed in the bar graph is found and selected for detection, the identified substance is displayed at the bottom of the bar graph*



*This graphic feature requires no interpretation and provides the fastest sampling through-put. The plasmagram is the alternative display (above), showing the full spectrum of analysis results in a histogram format.*

Specifications are subject to change without notice!