

EntryScan® 4

Walk-through Portal for Explosives Detection



Detect Explosives In Seconds

A high-sensitivity, high-throughput “puffer machine,” the EntryScan® 4 portal can detect a broad range of explosives in seconds. Using patented technology, the portal can identify even the most challenging substances by detecting and analyzing their microscopic traces. This compact, redesigned model has been reduced in height for installations under 8 feet (2.44 meters) without sacrificing any walk-through space. Engineered to dramatically reduce maintenance time, EntryScan 4 features a quick-access panel that puts key system components within arm’s reach. Enhanced sample collection assures full-body screening, including the head and shoes. Automatic traffic control features such as a gated exit and audio/

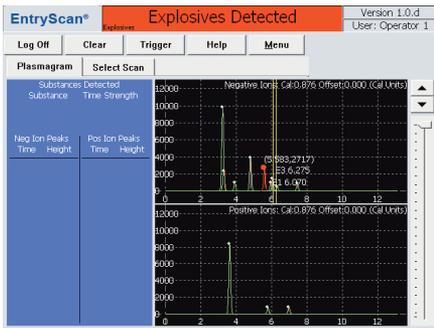
visual walk signals can optimize flow and save on operational costs. Accuracy, speed, remote monitoring, and ease of operation make this portal a fundamental part of a customer’s check-point security solution.

ITMS™ Technology Advantage

Morpho Detection’s patented Ion Trap Mobility Spectrometer (ITMS) technology can detect a wide range of explosive substances with accuracy and speed. ITMS detectors increase ionization efficiency, the main factor for determining detection sensitivity. Due to the trap and membrane design, ITMS technology allows operations in dusty, humid, and high traffic areas, maintaining its performance even in harsh “real world” environments.

Benefits

- High sensitivity in high traffic, dusty, and humid environments
- Can detect a wide range of explosives and narcotics in a single scan
- Multiple substances can be stored in the default library
- Average analysis time is 13 seconds
- Operator display can be on the left or right side
- Small footprint at 92.5 in. x 57.4 in. x 40 in. (2349 mm x 1459 mm x 1016 mm)



Colored highlights indicate the relative amount of contraband detected. Plasmagrams instantly provide more detail as needed.

Plasmagram	Select Scan
E1	Detected
E2	OK
E3	Detected
E4	OK
E5	OK
E6	OK
E7	OK
E8	OK
E9	OK

For clear, mistake-proof operation, software functions have four levels of access: operator, supervisor, maintenance and administrator. It takes just minutes to upgrade software in the field if new screening needs arise. Self-diagnostics simplify upkeep and ensure peak performance.

Leading Sample Collection Technology

The ITMS sample collection system takes advantage of the “human convection plume,” in which vapors and particles from a person’s body naturally rise. Air puffs from a large array of jets assure full-body screening, optimizing sample collection from the head, torso, and shoes. The plume is drawn in overhead for analysis, eliminating the need for a fan that would stir up dirt and contaminants. As a result, EntryScan 4 can acquire cleaner samples for higher sensitivity. This design also helps minimize moving parts, for quiet operation, lighter weight and improved long-term reliability.

Automated Operation and Traffic Control

EntryScan 4 automatically controls traffic with clear visual, audio and gated prompts. Small exit gates maintain an open feeling, and can be retracted if not in use. By automatically controlling entry and exit, the EntryScan 4 can reduce the need to monitor or re-screen. With the detection of explosives—or an early exit—an alarm sounds to speed containment. EntryScan 4 collects and logs data automatically, including time, date, substance detected, sample analysis, and sample count for each alarm. A complete history of sampled data can be recalled and printed at any time.

Easy Maintenance, Compact Size

Re-engineered and restyled, the EntryScan 4 is shorter, lighter, and has a dramatically smaller external footprint¹. While its external footprint has been reduced by 17 percent over its predecessors, the EntryScan 4 system design preserves all of the internal walk-through space from previous models for maximum comfort. A quick-access side panel puts key components within easy reach for simple, safe maintenance, reducing “ladder” maintenance time by 63 percent¹. For convenience and flexibility, the operator display console mounts on the right or the left.

Remote Monitoring with the EntryScan SecureStation™

Add on the EntryScan SecureStation option for a versatile, remote command center. It can increase security and efficiency by allowing a single operator to monitor multiple instruments at a glance or multiple operators can monitor one instrument.

Optimal Detection and Walk-through Ease

Sensitivity/Selectivity

- Patented ITMS technology increases ion population, enabling detection of microscopic traces of explosives
 - Simultaneous dual-mode detection can help improve detection of peroxide-based explosives
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Versatile

- Can detect a wide range of targeted substances
 - Semi-permeable membrane excludes dust and dirt and allows continued operation in environments that have high traffic, humidity or contamination
 - USB keyboard customized to fit in operator control panel
 - USB Flash disk functionality for fast uploading and downloading of files
 - Improved automated, visual/audio prompts with optional use of gates helps control and maintain traffic flow at desired throughput
 - Versatile operator touch screen can be located on the left or right side of the system
 - Self-contained, low-noise air system eliminates the need for separate, large air compressor
 - 10 percent smaller frame and 17 percent footprint reduction allow for use in a greater variety of settings¹
 - 18 percent faster throughput¹
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Cost Effective, Easy to Maintain

- Automated or manual standby mode can reduce power consumption by up to 40%¹
 - Patented regenerative dryer can eliminate the need for monthly dryer replacement, help to reduce maintenance downtime, and lower consumables cost
 - Quick-access side box can dramatically reduce “ladder” maintenance time and increase safety
 - Compact size with 14 percent lower weight and reduced power requirements cuts installation and operating costs¹
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Reliable

- Integrated backup battery for reliable computer/data protection during unexpected power disruptions
 - Rapid calibration assures operational accuracy
 - Patented regenerative dryer maintains a low, stable, humidity level in the detector enabling consistent and reliable detection results
 - Integrated software with four levels of user access automatically saves sample results, preventing intentional or unintentional modification or deletions
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Ease of Use

- Touch screen menus with clear graphical user interface are easy to learn and operate
 - Built-in printer for fast hardcopy results or printing at a later date for use as evidence or for record keeping
 - Quick analysis and results in as little as 13 seconds
 - Software upgrades easy to install
 - Local language options available
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People Friendly

- Clear visual/audio walk signals, hands-off screening, and simple operation give the public a comfortable walk-through experience
 - Compact portal design maximizes internal walk-through space
 - Rapid results allow for a business as usual environment
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Worldwide Locations

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Specifications

Detector Type:

Dual Mode Ion Trap Mobility Spectrometer (ITMS™)

Analysis Time:

Default 13 seconds

Sample Acquisition:

Self-contained air collection

Power:

220 - 240VAC, 20A, 50/60 Hz,
single phase

8A typical, 2.5A in Standby Mode

Computer:

Industrial grade embedded computer

Printer:

Thermal line printer

Display:

Integrated flat panel with touch
screen, 10.4 inches (264.16 mm)

Signal Processing:

Recognition of multiple peaks and
multiple explosives

Output to bar graph display or
time-of-flight plasmagram display

Dimensions

Portal

Height 92.5 in (2349.5 mm)

Width 54.3 in (1378.9 mm)

Depth 40 in (1016 mm)

Max. Depth 57.4 in (1458.7 mm)
(including bezel)

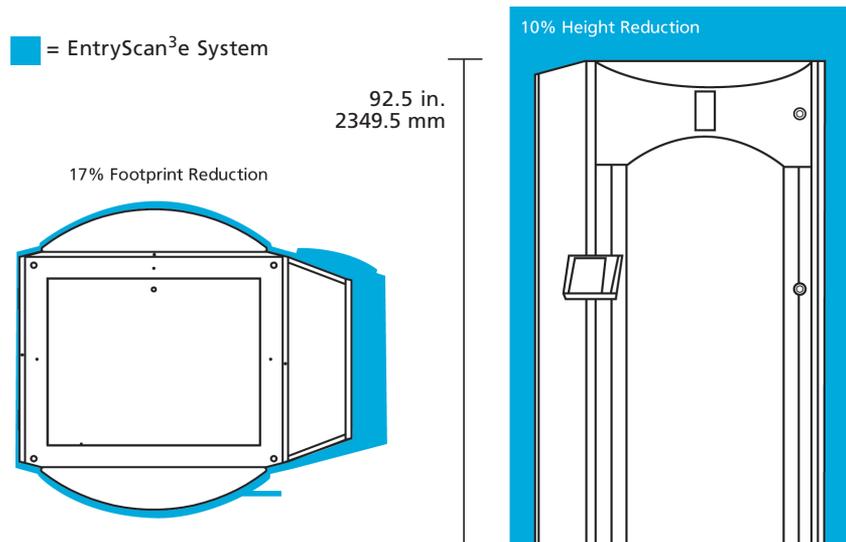
Portal Opening

Height 78.1 in (1982.9 mm)

Width 29.5 in (748.7 mm)

Shipping 752 lbs (341.1 kg)

Weight



1. Comparison between the EntryScan 4 system and the EntryScan^{3e} system.