

# XMS® Threat Detection Software Suite

## Automated Checkpoint Threat Detection EU Type C LEDS Certified



Liquid Threat Detection | Bottle Detection | Firearm Detection



### New Threats Require New Solutions

Responding to the latest threats at the checkpoint, in particular liquid threats, requires a new perspective.

The XMS® evolves the common checkpoint X-ray equipment of today into a precise automated threat detection system. The XMS® Threat Detection Software Suite, a next generation decision support solution, complements imaging systems at the checkpoint to automatically detect liquid explosives and other liquid threats, bottles, firearms and firearm parts.

XMS has been EU Type C Liquid Explosive Detection Systems (LEDS) Certified on multi-view platforms. XMS® also powers the OptoScreener® that also gained EU Type C LEDS Certification.

### XMS® Threat Detection Software

Based on a unique mix of leading edge technologies including advanced materials science, intelligent 3D computer vision, and contextual analysis, the XMS® Threat Detection Software Suite provides innovative automated liquid threat, bottle and firearm detection.

XMS discriminates between dangerous and safe liquids and other LAGs even when their physical properties are very similar, allowing for X-ray examination of virtually any size of containers up to 2 L, with no container shape or material restrictions. XMS scrutinizes multiple containers simultaneously with no requirement for containers to be opened. The software also looks for bottles

inadvertently or purposely left in cabin baggage or in personal belongings.

To identify firearms or disassembled components of a firearm, XMS leverages an unparalleled database of X-ray images of firearms and firearm parts, ranging from exotic composite guns to small automatic weapons to form the largest set of X-ray images of handguns in the world. The database works in real-time, providing simultaneous image enhancement of suspicious items.

### Checkpoint Evolution

XMS provides much needed immediate assistance at the checkpoint in the detection of contemporary threats. While complementing screeners' work with visual indications of potential threats presence and location, the XMS Suite enables reliable and consistent automated processing of items and containers, in real-time, with no secondary processes to slow throughput.

XMS is available embedded in multi-view platforms, to further enhance the performance of such multi-view systems for threat detection.

A sophisticated technology, the XMS also powers the standalone OptoScreener® system, now EU Type C LEDS Certified – a workstation connected to the X-ray machine, and a LCD touch screen. In both cases, XMS presents unique tracking capabilities allowing for security reporting and audit trail.

## Feature Highlights

### Liquid Threat Detection

- EU Certified Type C LEDs
- Real-time 3D modeling with CT-like container reconstruction
- Container volumes up to 2 L
- No container shape or material restrictions
- Suspicious containers clearly highlighted

### Bottle Detection

- No container shape or material restrictions
- Detected bottles clearly highlighted

### Firearm & Firearm Parts Detection

- World's largest 3D geometrically projected X-ray firearm database
- Detection of disassembled firearm main components
- Image enhancement of suspicious items

## The XMS® Advantage

XMS® Threat Detection Software Suite interfaces directly with the X-ray platform to provide airport operators with an innovative and reliable automated threat detection system:

### Threat detection reliability and consistency

- Inline screening of multiple containers to identify prohibited liquids without opening containers
- Automated object recognition to quickly detect firearms and bottles left in bags
- Automated decision support technology, to improve the consistency and accuracy of security across all checkpoints

### Improvement of checkpoint performance

- Single-pass firearm and liquid threat detection reducing requirements for secondary processes such as handheld devices
- Ability to network all checkpoints to enable immediate reaction, remote viewing and management, and threat database updates across all checkpoints
- Tracking system to enable security reporting and audit trail

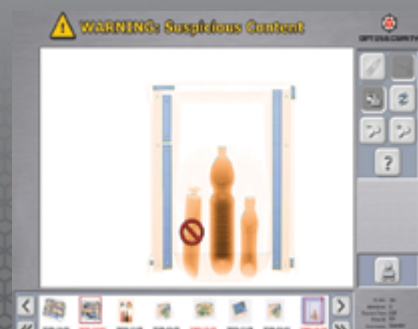
### Enhancement of existing technology and processes

- Quick integration with new or existing X-ray systems, single view or multi-view
- No changes to checkpoint layout or protocol needed
- Extraction of platform RAW data to yield optimal results
- Full control over calibration and data rendering
- Full integrity of X-ray platform and data
- Intuitive touch screen interface requires minimal training

### Scalability of the solution

- Continuous ability to update threats
- Adaptability of the solution with evolving requirements
- Platform designed to include continuous value-added software services and data analysis

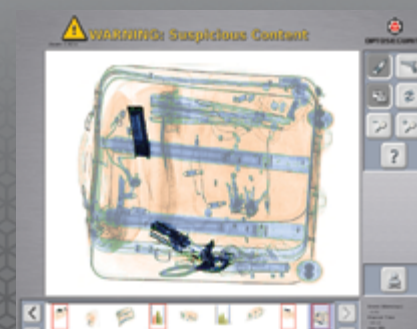
### LIQUID THREAT DETECTION



### BOTTLE DETECTION



### FIREARM DETECTION



<b>Operating Temperature</b>	5°C to 35°C (41°F to 95°F)	<b>Relative Humidity</b>	20% - 80% Non-condensing	<b>Weight</b>	16.9 kg (37.4 lb)	<b>Altitude</b>	Up to 3,000 m (10,000 ft)
<b>Storage Temperature</b>	-20°C to 60°C (-4°F to 140°F)	<b>Size</b>	44.51cm x 16.53cm x 44cm (17.5" x 6.5" x 17.3")	<b>Power Consumption</b>	460 W typical	<b>Display</b>	17" touch screen monitor, 1280 x 1024 resolution

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