

Find Mail Threats That other Screening Technologies Miss



Quick, accurate detection of all 9 of the DHS designated CBRNE substances.

The MailSecur® T-ray imaging solution fills a critical gap not addressed by traditional X-ray screening technology – the ability to detect the most elusive mail threats. Traditional methods of mail screening, like X-ray or chemical detection, are not sensitive enough to effectively detect threats like liquids, powders, and chemically treated paper. MailSecur uses safe T-rays to “see inside” letters and packages, with live, 3D imaging. It detects all 9 of the DHS designated substances compared to only 3 out of 9 for X-ray. Remote screening capabilities are built-in with around-the-clock access to former military explosive ordnance disposal (EOD) experts.

Non-invasive T-ray imaging system for CBRNE threat and contraband detection

- ✓ Exclusive 3D real-time video of concealed contents within unopened objects
- ✓ Non-ionizing T-ray technology allows user hands-on interaction with scanned items
- ✓ Most affordable complete mail screening solution
- ✓ Scalable, for quick and easy deployment across multiple sites
- ✓ Eliminates the need for radiation licensing, management, and safety programs
- ✓ EODSecur service with 24x365 remote connectivity to former military and law enforcement experts on demand for threat resolution and support

DHS DESIGNATED CBRNE SUBSTANCES	MAILSECUR®	X-RAY SCANNERS
Explosives	✓	✓
Illicit Items	✓	✓
Contraband	✓	✓
Powders	✓	✗
Liquids	✓	✗
Chemicals	✓	✗
Biological	✓	✗
Radiological	✓	✗
Nuclear	✓	✗



4 OF THE 5 LARGEST
US COMPANIES ARE PROTECTED BY

MAILSECUR®

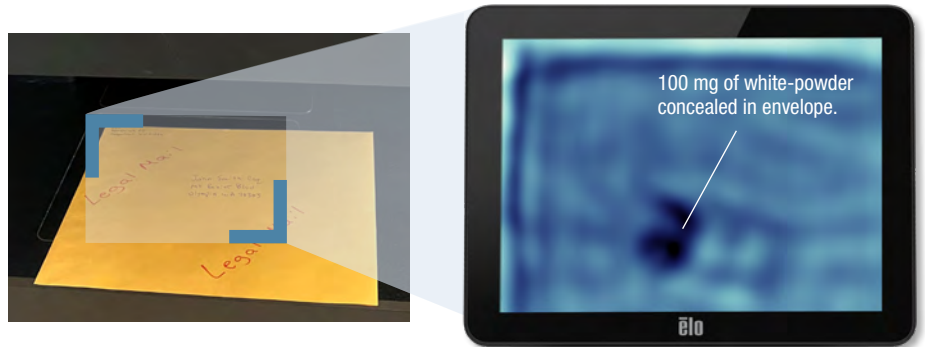
Weapons

A handgun is clearly displayed by the MailSecur scanner. The T-ray technology can penetrate a variety of cases, including hard side, lockable vessels. Given the 4D, live video capability, an operator can rotate the object to get an alternate perspective of the firearm, zoom in on specific features, and determine whether any other substances may be included.



Powders

The small quantity of powders placed in envelopes makes it difficult or impossible for other technologies to detect. With the live 4D video provided by MailSecur, an operator can physically move the envelope and see the actual grains of powder moving within the mail item.



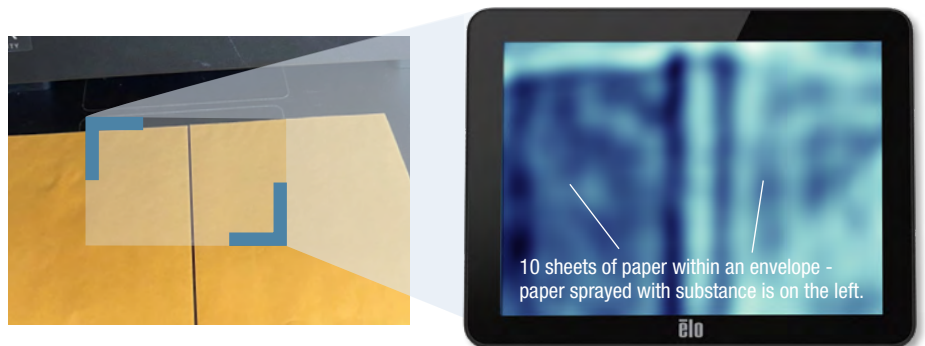
Liquids

In the same manner as powders, while an X-ray scan may pick up the outline of the substance, it cannot discern the movement. Yet, the MailSecur operator can manipulate the items and easily determine a liquid substance even in much smaller quantities than can be detected by X-ray.



Laced Papers

Paper sprayed with a toxic or narcotic substance and allowed to dry may be imperceptible to the human eye. MailSecur detects the changes that occur to the paper and displays the affected areas as a darker color gradient, making it easy to detect chemically-altered papers, even concealed within envelopes and packaging.

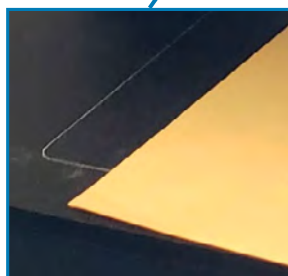


Intuitive Operation

MailSecur scanners have 10x greater resolution than conventional mmWave scanners used in airports. It is also superior to X-ray machines for mail scanning, detecting more threat types, including powders and liquids with 300x higher image sensitivity.

- ✓ There are two scanning areas for dual mode T-ray imaging:
 - Wide-format large field of view
 - 3x optical zoom for detailed inspection
- ✓ Adjustable monitor and touch screen user interface.
- ✓ Integrated radiation and metal detectors.

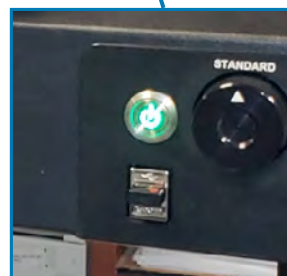
- ✓ Designed as a compact tabletop unit weighing 85 pounds, and standard power requirements.
- ✓ Because the T-ray technology is safe operators can touch and manipulate the item during screening to gain a real-time view of concealed items from all angles.
- ✓ Image and video capture capabilities allow operators to save findings for auditing or reporting needs.
- ✓ Network capabilities enable 24x365 remote EODSecur expert support in real-time.



Main Screening Deck



Touchscreen Monitor

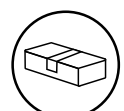


Zoom Selector

Typical Items Scanned



Letters



Parcels



Magazines



Newspapers

Detects All DHS Listed CBRNE Substances



Biological



Chemical



Contraband



Dangerous Items



Explosives



Nuclear



Radiological



Suspicious Powders



Threatening Content

Technology

- ✓ Exclusive 3D Real-time T-ray Imaging combined with machine vision.
- ✓ Detect and identify the smallest and hardest to find threats such as powders, liquids, and explosives that are concealed in small envelopes or packages.
- ✓ Software imaging toolkit supports multiple imaging modes, color mapping and image enhancements, including AI updates.
- ✓ Leverages T-ray technology that is 10x more sensitive than the millimeter wave technology currently used in airport scanners.
- ✓ MailSecur is the only all-in-one mail scanner that can detect all nine of the threats listed in the Department of Homeland Security (DHS) Mail Screening Guidelines.
- ✓ DHS Safety Act Designated Qualified Anti-Terror Technology.
- ✓ Included deck camera for visualization and recording of screened items.

Experts On-Demand Remote Support When You Need It

RaySecur's EODSecur service boosts customers' detection capabilities with 24x365 on-demand access to a team of highly-trained experts with extensive military and law enforcement backgrounds in identifying and remediating dangerous substances, including drugs, explosives, contraband, weapons, and hazardous materials. With a simple phone call, a EODSecur team member will walk you through validation and provide guidance on how to address with the goal of keeping your operations and staff safe from harm.

EODSECUR™

Desktop Mail Scanner Technical Specifications

Terahertz (T-ray) Technology	Safe, non-ionizing , active T-ray (THz) Imaging System Supports real-time user interaction with screened items
Frequency Range	280GHz nominal with 10GHz sweep range
Imaging Systems	Multi-pixel, real-time T-ray camera for non-invasive imaging of screened items HD 1080P optical camera for external imaging of screened items
Zoom	3X Optical zoom
Field of View	Dual zone supports standard and zoom +/- 10% nominal Standard field of view: 9.25" x 6.75" (23.5cm x 17.15cm) Zoom field of view: 2.75" x 2.5" (6.99cm x 6.35cm)
Image Processing	Multiple imaging and color mapping modes Drug-laced paper enhancement Image Adjustment: Brightness, Standard and Enhanced Contrast
Enhanced Detection	Compatible with updates for image processing, machine vision- and AI- based enhanced detection
User interface Display	Touchscreen with 1920 x 1080 resolution (16.9:1 aspect ratio)
Data Recording	T-ray and optical video and images
Metal Detection	Variable sensitivity handheld wand with visual and audible alert
Radiation Detection	BETA and GAMMA radiation including visual and audible notification
Network Connectivity	Ethernet, Wifi, LTE capable
Peripherals	USB, external DisplayPort
Setup Time	Typically < 30 minutes
Dimensions	19.5 in x 32 in x 31.5 in (49.5cm x 81.3cm x 80cm)
Weight	85 Pounds (38.55 kg)
Power	Standard 110/220V AC, 5/3A, 50/60Hz with various plug options available
Certifications and Designations	ETL/CE/ROHS/WEEE USDHS SAFETY Act Designated Qualified Anti-Terror Technology (QATT)

RAYSECUR®

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