

# Integrated Checkpoint Solutions





# Redefining checkpoints for the digital airport era



**Your security challenges don't stand still — and neither do our solutions. Our checkpoint systems are upgradeable to adapt to emerging threats and operational needs, supported by ongoing investment in research and development to ensure you always have access to the latest technology and enhanced performance.**

## The Pressure on Today's Checkpoints is Intensifying

With global passenger traffic expected to more than double from 9.5 billion to 19.5 billion travellers between now and 2042, there is increasing pressure to deliver higher passenger throughput, stronger security outcomes and improved passenger experience — all within fixed infrastructure footprints and tightening operational budgets. For many, the answer is not in expanding terminal footprints or significantly increasing labour costs. It's about improving performance within existing infrastructure and operating models.

Airport security operations are being asked to do more than ever before — accommodate rising passenger volumes, respond to evolving regulatory requirements, counter increasingly sophisticated threats, reduce operational expenditure while simultaneously delivering a seamless passenger experience.

Over time, technologies that have been added incrementally create fragmented systems that limit visibility, constrain efficiency and increase operational strain. Simply introducing additional standalone equipment does not resolve these systemic challenges. What today's checkpoint demands is not accumulation, but orchestration — an intelligently integrated ecosystem where detection technologies, digital intelligence, passenger flow function as one cohesive, high-performance operation.

## Engineering Clarity in Complex Environments

At Smiths Detection, rather than layering technology into constrained environments, we design connected systems from the outset. Through advanced simulation, open architecture design and scalable digital platforms, we ensure every component works in concert, enabling airports to respond dynamically to regulatory change, operational pressure and evolving risk.

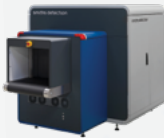
The result is not simply upgraded equipment, but a smarter checkpoint — one that increases throughput without expanding footprint, optimises workforce deployment, enhances resilience, reduces total cost of ownership and adapts with confidence to whatever comes next.

Beyond image quality alone, CT supports a smoother operating model — increasing processing capacity without expanding physical footprint and aligning seamlessly with evolving regulatory expectations.

# Integrated checkpoint solutions

Every checkpoint is different — and your operation deserves a solution designed around your specific needs. At Smiths Detection, we work with you to deliver everything from proven, ready-to-deploy screening systems to fully integrated, tailored checkpoint solutions. Whether you're enhancing throughput, strengthening security, or improving the passenger experience, we bring the expertise to make it happen. You benefit from seamless integration, dependable performance, and global service support — all from a single, trusted partner.

## ADVANCED X-RAY SCREENING

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### HI-SCAN 6040 CTiX

Next-generation Computed Tomography (CT) checkpoint scanner



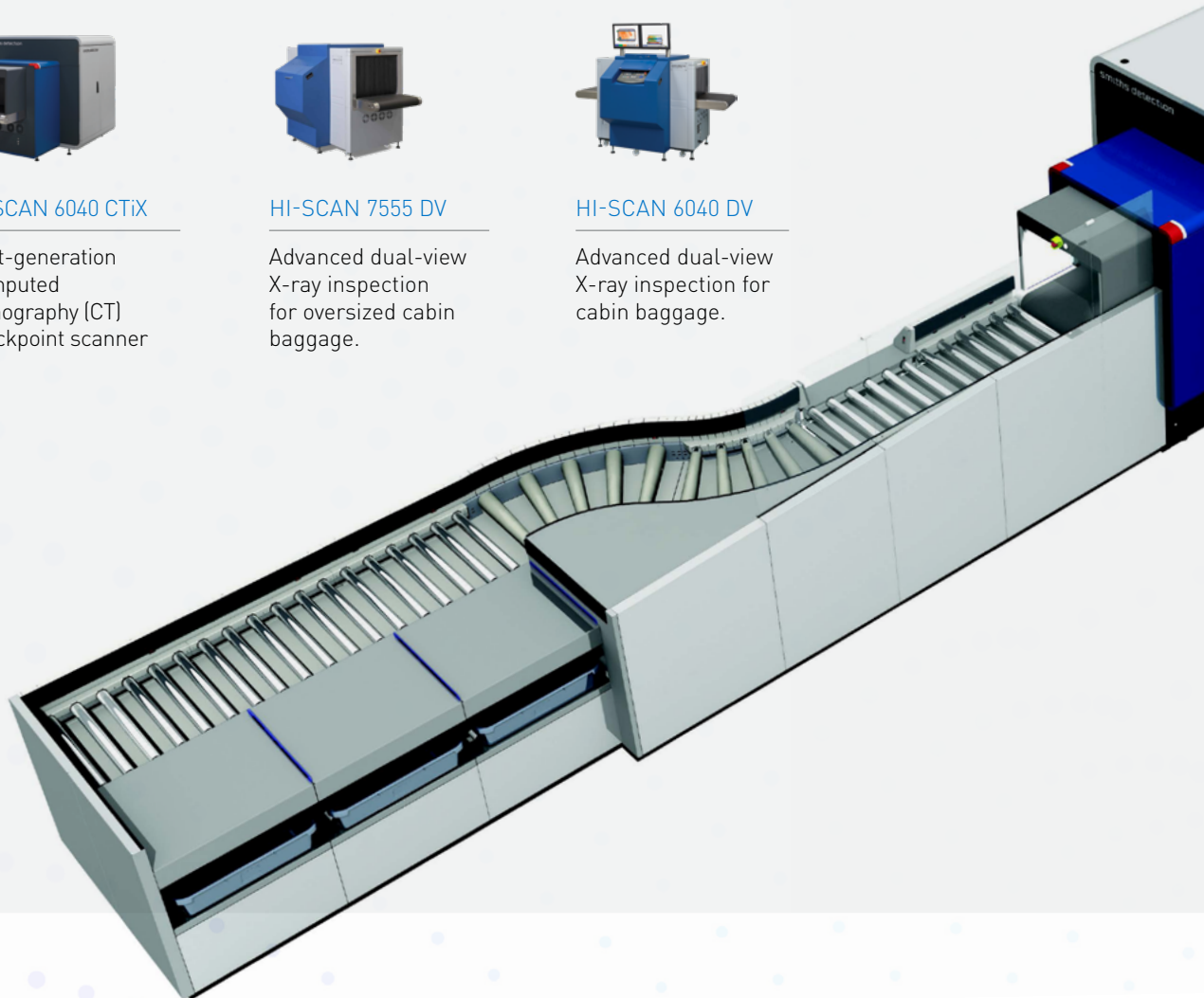
### HI-SCAN 7555 DV

Advanced dual-view X-ray inspection for oversized cabin baggage.



### HI-SCAN 6040 DV

Advanced dual-view X-ray inspection for cabin baggage.





## CONNECTIVITY & INTEGRATION

Creates an intelligent, integrated network connecting various components and aggregating data from across the entire screening area, allowing for remote screening, analysis and reporting.

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## DATA & ANALYTICS

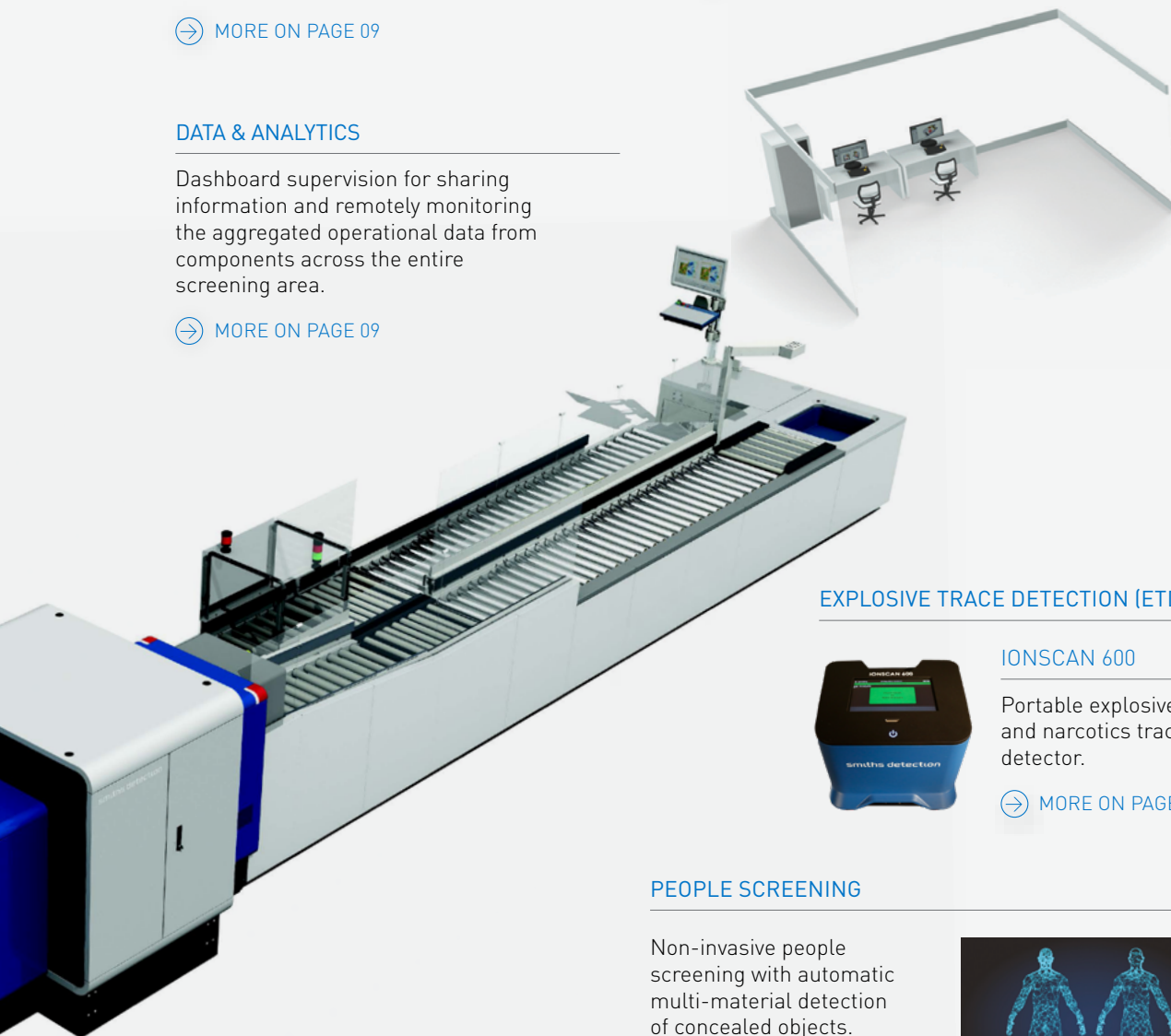
Dashboard supervision for sharing information and remotely monitoring the aggregated operational data from components across the entire screening area.

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## OPERATIONAL MANAGEMENT

Dashboard supervision for sharing information and remotely monitoring the asset health for a more complete view of the equipment's health.

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## EXPLOSIVE TRACE DETECTION (ETD)



### IONSCAN 600

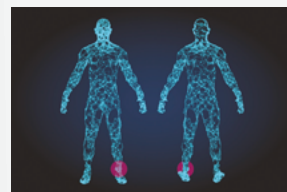
Portable explosives and narcotics trace detector.

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## PEOPLE SCREENING

Non-invasive people screening with automatic multi-material detection of concealed objects.

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## ADVANCED DETECTION

### iCMORE APIDS

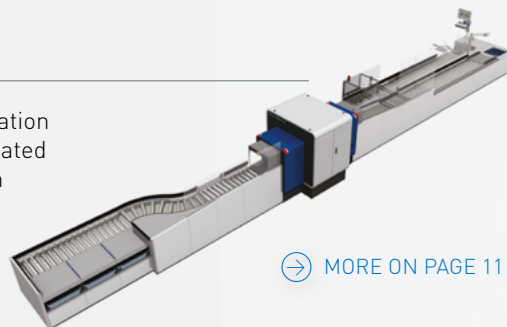
Automatic detection of prohibited items at airport security checkpoints.

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### iLANE A20

Next generation fully Automated Tray Return System.



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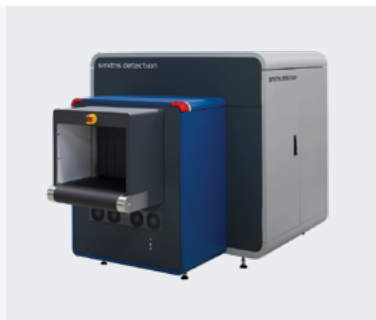
# X-ray Screening

## Computed Tomography (CT) — Performance & Flow Impact






Computed Tomography transforms both detection capability and passenger flow. By generating high-resolution 3D imagery, CT enhances threat visibility while enabling passengers to leave liquids and electronics inside their cabin baggage. This reduces divest complexity, shortens preparation time at the lane and stabilises throughput during peak periods. Beyond image quality alone, CT supports a smoother operating model — increasing processing capacity without expanding physical footprint and aligning seamlessly with evolving regulatory expectations.

## Dual-View X-ray — Flexibility & Scalability

Dual-view X-ray systems provide adaptable detection performance across diverse airport environments. Designed for scalability, they support varying passenger volumes, spatial constraints and compliance requirements without compromising reliability. Whether deployed as part of a phased upgrade programme or integrated within a broader digital architecture, dual-view solutions deliver consistent imaging performance and operational resilience — offering airports the flexibility to evolve detection capability in line with demand and regulation.






**HI-SCAN 6040 CTiX**

Next-generation checkpoint scanner featuring Computed Tomography (CT)

-  ECAC EDS CB C2/C3 & TSA APSS 6.2 Level 1 Certified
-  Screen liquids and large electronics in bags
-  Computed Tomography
-  620 x 420 mm
-  0.2 m/s






**HI-SCAN 7555 DV**

Dual-view X-ray inspection for cabin baggage

-  ECAC EDS CB C1
-  No random checks — remove liquids and electronics
-  Dual-View
-  755 x 555 mm
-  0.2 m/s

**HI-SCAN 6040 DV**



Dual-view X-ray inspection for cabin baggage

-  ECAC EDS CB C1
-  No random checks — remove liquids and electronics
-  Dual-View
-  620 x 420 mm
-  0.2 m/s

## iCMORE — The Intelligence Layer

iCMORE introduces an intelligence layer within the detection process, applying advanced algorithms and AI-powered automation directly to image analysis. By automatically identifying prohibited items and supporting alarm-based workflows, iCMORE reduces continuous manual review and improves decision consistency. This embedded intelligence enables smarter resource allocation, facilitates centralised screening models and supports the progression toward alarm-only viewing. Detection becomes not just clearer, but more operationally efficient and scalable.

## Icon key

-  COMPLIANCE
-  CONOPs (concept of operation)
-  X-RAY TECHNOLOGY
-  MAX TUNNEL SIZE
-  BELT SPEED



Digitally enabled  
checkpoints.  
Intelligent.  
Streamlined.  
Seamless.



For many travellers, airport security has long been synonymous with queues and intrusive procedures. That era is changing.

The checkpoint of the future is within reach — powered by advanced Computed Tomography (CT), AI-driven detection, biometrics and secure digital integration. By combining CT with automated threat recognition and centralised image evaluation, airports can deliver faster, smarter screening with fewer manual interventions.

Our digitally enabled checkpoints bring together data, automation and connectivity to transform performance across the entire security ecosystem. The result? Higher throughput. Lower operational costs. Reduced false alarms. And a smoother passenger journey.

Open Architecture (OA) plays a critical role in this transformation. By enabling hardware, software and algorithms from multiple vendors to work seamlessly together, OA creates a flexible framework where technologies can be added, upgraded or replaced without disrupting operations. It accelerates innovation while protecting long-term investment.

## Tailored Digital Ecosystems with Electora

Electora, our digital security management platform, integrates multi-vendor devices, applications and datasets into one scalable, cybersecure environment.

### Through a single interface, airports can:

- Manage detection algorithms and screening applications
- Monitor system performance and asset health
- Orchestrate data exchange between devices
- Maintain compliance with evolving regulatory standards

Cybersecurity is embedded at every layer — protecting sensitive operational data while maintaining interoperability and openness.





# Lane Design

Fully automated tray return systems play a pivotal role at the checkpoint. Delivering a steady flow of trays streamlines the screening process, resulting in faster throughput, lower operational costs and increased operator productivity. Innovations in lane design and function can help take the overall checkpoint solution to new levels by removing bottlenecks and simply keeping things moving. Featuring the latest developments, the iLane from Smiths Detection ensures effective throughput and supports seamless, passenger friendly screening.





## iLane A20 — The fully Automated Tray Return System

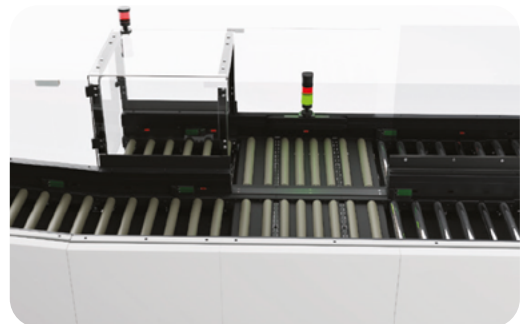
Designed to increase throughput, reduce queues and improve operational efficiency at aviation passenger checkpoints.



Last Minute Insertion

### Feature Highlights

- Modular, flexible and customisable design
- Increased throughput & operational efficiency
- Plug & Play installation
- Integration with Checkpoint Management System
- Advanced system performance and health monitoring
- Various divest modules
- Automatic recirculation of empty trays
- Optional German Design Award-winning Marcus Pedersen design cladding
- Optional UVC kits for automatic tray disinfection



Diverter and High Threat Module



Empty Tray Verification and Reclaim Unit



Operator Tray Infeed

# People Screening

State of the art people screening systems offer non-invasive, automatic detection of many different substances. Fast, targeted inspection delivers increased security and throughput — and a better experience for both passengers and operators. We have extensive experience in deploying technologies which include partner systems and enable customers to achieve layered security and operational efficiencies. Our Open Architecture approach supports easy integration of third-party devices into any current checkpoint configuration as well as into our central screening & management solutions.



## People Screening Systems

Non-invasive, automatic multi-material detection of concealed objects



### Feature Highlights

- Ensures a less intrusive screening process by reducing the need for manual searches
- Uses a generic mannequin representation of the person for full privacy
- Multi-material detection — including metals, ceramics, plastics, liquids etc.
- Minimal footprint — allows for easy checkpoint integration

# Explosive Trace Detection

The constant evolution of threats from explosives requires new and advanced trace detectors for secondary screening at passenger checkpoints. The IONSCAN 600 trace detector is highly sensitive yet lightweight and portable for desktop configuration. It is extremely efficient — in under eight seconds it accurately detects and identifies a wide range of military, commercial and homemade explosives and common illegal/controlled narcotics.

## IONSCAN 600

Portable explosives and narcotics trace detector



### Feature Highlights

- Detection and identification in less than 8 seconds
- Simultaneously detects and identifies explosives and narcotics
- Non-radioactive IMS source
- Small, lightweight and portable
- Optional integrated printer
- Single use, disposable sampling swabs
- Approved/certified by ECAC and CAAC





## Superior training for a complex security world

At Smiths Detection, training is not an add-on to equipment — it is a critical component of performance. We design and deliver evidence-based training that strengthens operator judgement, builds technical mastery, and sustains vigilance in high-pressure environments.

Because world-class technology only performs at its best in the hands of world-class people. Built around operators. Designed for reality. Our programmes are developed by subject-matter experts and certified instructors who understand the operational environment inside airports.

## We focus on:

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- X-ray image interpretation and anomaly detection
- Threat recognition and decision-making under pressure
- Human-AI collaboration and system optimisation
- Preventative maintenance and engineering capability
- Supervisor and instructor development

## Service built around people

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At Smiths Detection, service is about more than maintaining equipment. It is about sustaining operational confidence.

With the industry's largest team of service engineers and the widest global coverage, we deliver consistent support wherever our customers operate. Our scale allows us to combine global standards with strong local presence, ensuring expertise is always within reach.

Because technology protects passengers only when it performs reliably every day.

## Expert engineers. Continuously developed.

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Our engineers are supported by a dedicated expert training team that ensures their knowledge remains current and aligned with evolving technologies and threats.

Through continuous professional development, we strengthen diagnostic capability, preventative behaviours and safe, compliant working practices.

This ongoing investment in people means our engineers arrive on site prepared not only to resolve issues quickly, but to protect performance over the long term.

## Global Scale. Local Responsiveness.

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Operating across the world's major aviation markets, our service organisation delivers:

- Rapid technical support and expert troubleshooting
- Lifecycle system optimisation
- Upgrade and retrofit expertise
- Compliance support aligned with international regulations
- Data-driven performance insight

Our global footprint enables consistency. Our local teams deliver responsiveness.

## Flexible Delivery. Global Reach.

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Our global network of more than 80 training specialists, based across seven training centres and supported by a comprehensive digital learning platform, delivers over 400 course options worldwide.

To support global teams without disrupting operations, training is delivered through:

- **Online self-paced learning:** Flexible eLearning modules that learners complete independently, anytime and anywhere.
- **Instructor-led virtual sessions:** Live, expert-led training delivered remotely with real-time interaction and feedback.
- **Hybrid programmes:** Structured learning journeys that blend eLearning, live virtual and in-person practical training for maximum impact.
- **Classroom-based training:** Hands-on, instructor-led sessions delivered onsite or at our training centres for immersive, practical experience.




# Contact us

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Smiths Detection is a global leader in threat detection and security screening technologies, dedicated to making the world a safer place. We provide advanced solutions for aviation, ports and borders, urban security, defence and the circular economy. Our cutting-edge technologies ensure the safety of people and infrastructure. Backed by 80 years of experience, a global footprint, and a commitment to innovation, Smiths Detection is trusted by governments, airports, and security agencies worldwide. From tailored training to lifecycle service support, we help customers to meet their operational demands and adapt to evolving threats with precision, reliability, and integrity.

[www.smithsdetection.com](http://www.smithsdetection.com)