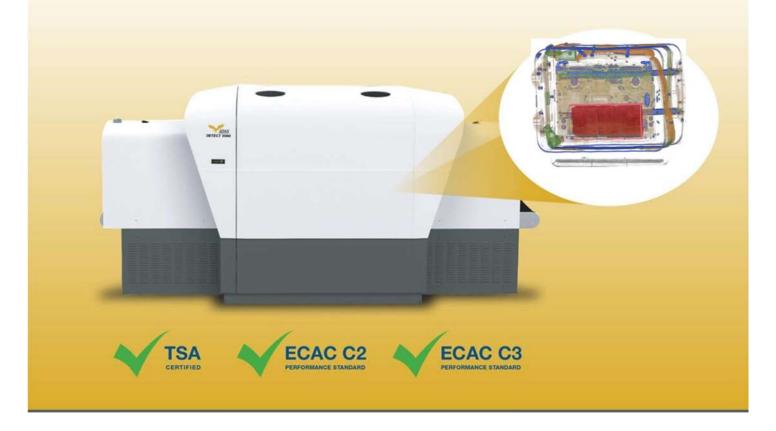


# IDSS DETECT™ 1000

**Advanced Cabin Baggage - Explosives Detection System** 



Developed by the team that has been developing and deploying advanced security technology for over twenty years, the **DETECT™ 1000** <u>D</u>ual-<u>Energy Tomographic Examination for</u>

Concealed <u>T</u>hreats is the latest in Advanced Checkpoint Baggage Screening. As a company, IDSS is focused on Customer Satisfaction through:

- > Passionate Development of the Most Advanced Solutions Available
- A Commitment to the Success of Our Customers
- > A Level of Quality that Provides Consistent and Reliable Operational Performance
- Responsive Solutions to Address the Evolving Threats and Needs of Our Customers

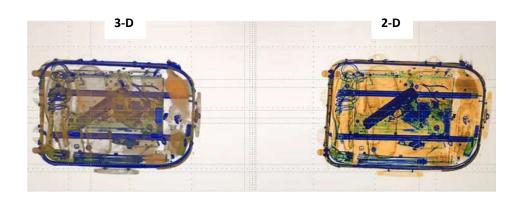
At IDSS, We Aim to Maintain a Reputation for Responsive Customer Service Above All Others.



Developed by the team of security technology experts responsible for much of the advanced screening systems in use today, the DETECT<sup>TM</sup> incorporates a patent-pending, revolutionary *True Dual-Energy Computed Tomography (CT)* to deliver High Resolution, Fully Rotatable 3-D images along with patent-pending *Dynamic Flow Throughput* technology that offers the Highest Passenger Throughput available while maintaining full Radiation Safety Compliance with back-to-back baggage and tray flows. Presently as high as 540 Trays per Hour or 415 Passengers per Hour using ECAC C3 ConOps. The DETECT<sup>TM</sup> 1000 captures and analyzes every object in a bag at the submillimeter level, obtaining the accurate Density (ρ) and Effective Atomic Number (Zeff) measurements while displaying the highest resolution images for Restricted Items identification.

The DETECT<sup>TM</sup> 1000 is TSA and ECAC C3 Certified, offering automated screening and allowing all passengers to leave their electronics and liquids in their carry-on luggage. Eliminating the need to divest items from the bag reduces screening time, as well as the time required to scan, analyze and search each bag. This reduces the number of security agents required!

The DETECT™ 1000 Offers Both Three and Two Dimensional Images with a Number of Customizable Operator Review Features in TriMat or Restricted Item Review Mode



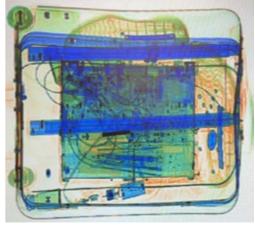
#### **System Features**

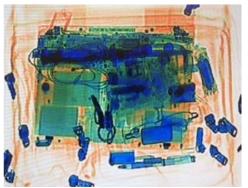
- Operational throughput in excess of 540 bags per hour equaling up to 415 Passengers per Hour throughput when using the ECAC C3 certified software and maintaining EU radiation compliance while sustaining maximum baggage throughput
- Unprecedented Detection with low false alarms per independent testing
- High-quality submillimeter 3-D images, far superior to any security scanner ever deployed
- Independently-tested by airports to achieve 98.5% accurate Restricted Item detection
- User-friendly On-screen tools for threat analysis and secondary search station
- \$30M in advanced threat algorithm funding from TSA and DHS Science and Technology
- Automated Weapons Detection/Restricted Items software for 2019 Deployment
- Fully-compliant size, weight and power for airport checkpoint installations
- High-reliability and system availability in continuous operation
- Integrated with Automated Tray Return Systems from Vanderlande, Scarabee and MACH
- Cost-effective design for an easily definable return on investment and total cost of ownership
- 2019 Manufacturing capacity of 40 systems per month (Expandable)

The DETECT<sup>™</sup>1000 Difference: Fully-Automated Explosives Detection in Electronics at the Highest Passenger Throughput Available and Fully Radiation Safety Compliant

#### **Traditional X-Ray System Images**

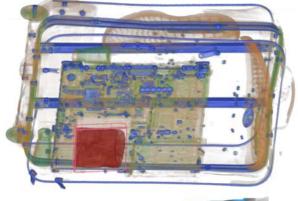
**DETECT<sup>TM</sup> 1000 Images** 





Identical bags as seen on-screen from a widely deployed x-ray system versus the same bag imaged by the DETECT™ 1000.

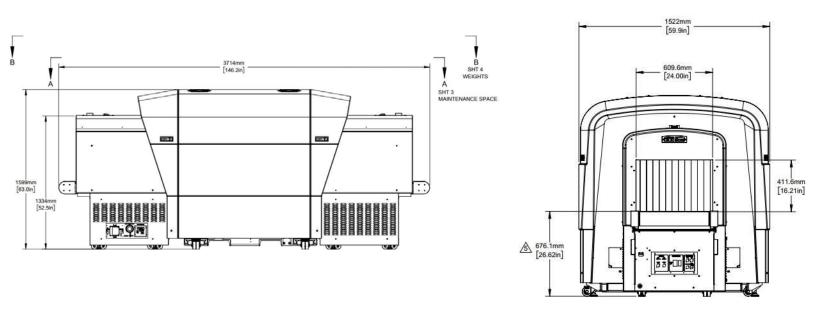
DETECT™ 1000 images shown in 2-D but are 3-D rotatable.





# **Key Technical Specifications**

Technology Type	Patent-Pending Dual Energy Computed Tomography (DECT)
Performance (Explosives Detection)	Fully-Automated with Low False Alarm Rate
Dimensions (LxWxH)	3714 x 1521 x1599 mm (146.2 x 59.9 x 63 in.)
Weight	2136kg (4710 lbs.)
Point Load Weight	379 kg/m² (78 lbs/ft²)
Power Requirement	195-266VAC 25 Amps (30 Amp Breaker) 50/60Hz
Maximum Size Bag	41 x 61 cm (24 x 16 in)
Maximum Bag Length	Artificially limited at 1M
Belt Speed	0.15 m/s plus Dynamic Flow Technology
Maximum Baggage/Article Weight (Conveyor Load)	160kg (352lbs) distributed
Operational Throughput (bags/hour)	> 540 BPH = 415 Pax/Hr. with <u>Full Radiation Safety</u>
Operating Noise Level @0.5m (dB)	<65dB
Operating Temperature	0-45°C
UL/CE Compliant Certification	Yes
U.S. / E.U. Radiation Safety Standards Compliant	Yes
Image Processing Time	<2 sec
Image Transfer Size (Average)	250MB
Image Format	DICOS-2
Communications Platform (e.g. OPC UA)	TCP/IP V4
Threat Image Projection (TIP)	Yes, Both CTI and FTI
TSA Certified	Yes
DHS/TSA Funding of US \$30M	Next Generation Threat Detection and Applications
ECAC EDSCB C1	Yes
C2	Yes
С3	Yes
TSA and EU Airport Operational Deployments	Yes
Integrated with Smart Lane / Tray Return Systems	Yes
Mean Time Between Failures (MTBF)	3000 hours
Mean Time to Repair (MTTR)	2.5 hours
System Availability (Ao)	>98%
In-Country Spares and Maintenance Staff	Yes
Remote Diagnostics / System Fault Detection	Yes
2019 Base Manufacturing Capacity	40 Systems per Month (Expandable)
Operational Life Span	15 Years



## **Minimum Checkpoint Lane Footprint Shown with IDSS AutoDiverter**

