



August 1, 2024

Mark Buttery, Purchasing Specialist II
504-364-2810
MButtery@jeffparish.net

Re: JEFFERSON PARISH INVITATION TO BID
Bid No. 50-00145559

Dear Mark:

LAURUS Systems is pleased to submit a bid for a Rapiscan 920CX with 4-year Maintenance Service Plan as described in the Bid No. 50-00145559 specifications. LAURUS Systems is a small, woman-owned business located in Ellicott City, MD and an authorized distributor for Rapiscan products.

One note regarding the (2) roller beds, it has been my understanding that the two roller beds will be both be installed on the exit side of the 920CX. In that case, what will be provided is a (1) meter roller bed with pop-out & back stop and a (1) meter roller bed extension. If the intent is to install a (1) meter roller bed on the entrance and exit side of the 920CX, then two (1) meter roller beds with pop-out & back stop will be provided.

Technical Specifications of the 920CX are attached and further describe the features listed below as well as the warranty and Platinum Service options requested.

920CX X-ray Scanner

- a. Compact size - dimensions fit in existing space
- b. Best in class wire resolution – Std/typical AWG - 42/44
- c. Best in class spatial resolution – Horiz/Vert(mm) – 0.8/0.8
- d. Best in class steel penetration – Std/typical(mm) - 42/44
- e. Advanced organics detection software
- f. Included additional software: Density Threat Alert & Automatic Target to highlight potential threats and accelerate the scanning process.
- g. 64-Bit Windows 10 Operating System

Rapiscan Systems Field Service Technicians, employed by Rapiscan Systems, will install and maintain the 920CX under warranty/service contract and provide “stand up” basic operator training during installation.

Sincerely,

A handwritten signature in black ink that reads "Bonnie J. Meilner".

Bonnie J. Meilner
bonnie.meilner@laurussystems.com
856-222-4730

Rapiscan ORION 920CX

High Performance x-Ray System



baggage & parcel

*inspection
technology*



The 920CX is a High Performance 620mm by 420mm tunnel checkpoint screening system with best in class image quality and excellent threat detection alert capabilities.

SPECTRUM 4-COLOR IMAGING

920CX can present images to the operator in the Classic 4-color and the new proprietary Spectrum 4-color (SP4) option providing superior image, allowing improved security by quick and accurate identification of threats and increase in throughput.

DUAL MODE AUTO Z_{EFF}

This feature aids the operator in quick identification of organic materials, either in Range Mode which highlights areas based on operator selected Z-effective values of 7, 8 or 9, or in Interactive Mode which gives the operator the option to display the Z-effective number of a selected pixel.

EXPLOSIVES AND NARCOTICS DETECTION

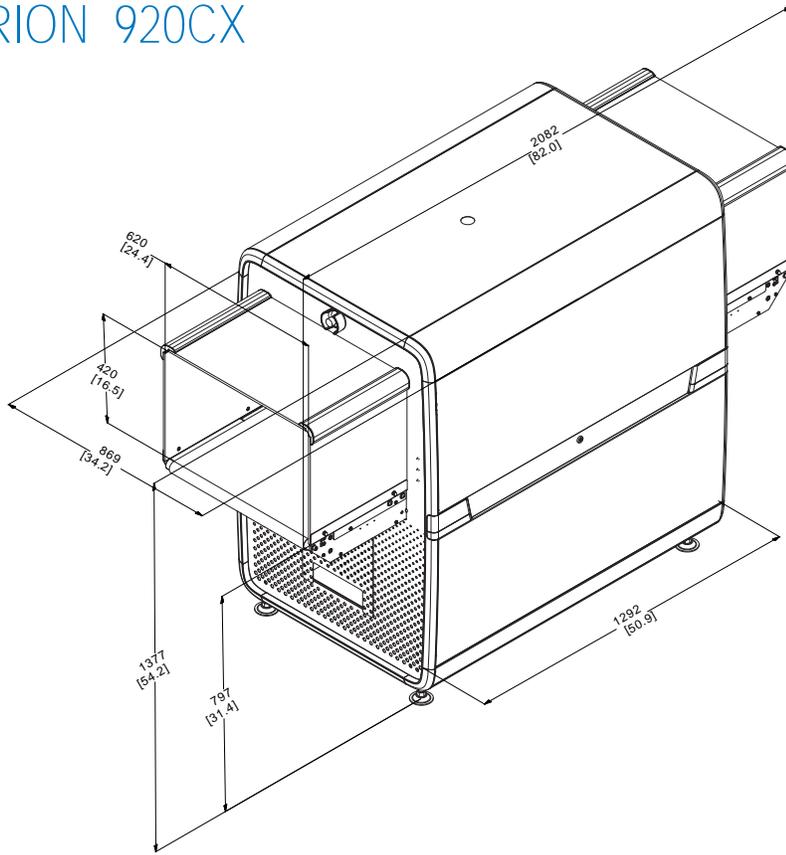
Target and NARCSan are designed to detect a wide range of explosives and narcotics respectively in real time during the scanning process by marking a potential threat on the X-ray image. Rapiscan® Systems detection algorithms are based on regulatory approved material analysis techniques.

EUROPEAN AVIATION COMPLIANCE

920CX performance is in full compliance with the mandatory regulations (EC) No. 300/2008, (EC) Implementing Regulation 1998/2015 and update 815/2017, EC Implementing Decision 8005/2015 and update 3030/2017 for aviation security in the European Union.

- Industry Best Penetration, Wire and Spatial Resolution
- Explosives and Narcotics Detection
- Low Density Image Enhancement
- Matrixing, Networking and Remote Viewing

ORION 920CX



KEY FEATURES AND OPTIONS

- Explosive threats, narcotics & density alerts
- Spectrum 4
- 17 Image processing functions
- SINERGY low density enhancement
- Dual Mode Z-effective
- CrystalClear™
- Automatic, Enhanced Image Archiving
- E.U. Approved Threat Image Projection
- Remote Status Monitoring
- Remote Archive Review
- Multi-System Alarm Resolution Network
- Multiplexing and Matrixing
- Tray Return System Compatible
- 13 Languages
- 64-bit Operating System

PHYSICAL SPECIFICATIONS¹

DIMENSIONS

L 2,082 mm (82.0 in)
W 869 mm (34.2 in)
H 1,377 mm (54.2 in)

TUNNEL SIZE

W 620 mm (24.4 in)
H 420 mm (16.5 in)

CONVEYOR HEIGHT

797 mm (31.4 in.)

WEIGHT (NET)

537 Kg (1184 lbs)

ENVIRONMENT & POWER

STORAGE TEMP

-20°C to 50°C

OPERATING TEMP

0°C to 40°C

RELATIVE HUMIDITY

5 to 95% non-condensing

SYSTEM POWER

100/110/120/200/208
/220/230/240 VAC ±10%

PERFORMANCE²

CONVEYOR SPEED¹

0.20 m/sec (39.4 ft/min)

CONVEYOR LOAD¹

165 Kg (364 lbs)

STEEL PENETRATION

44 mm typical,
42 mm standard

WIRE RESOLUTION

44 AWG typical,
42 AWG standard

SPATIAL RESOLUTION

0.8 mm vertical & horizontal

HIGH SPEED OPTION

CONVEYOR SPEED¹

0.35 m/sec (68.9 ft/min)

STEEL PENETRATION

35 mm typical,
34 mm standard

WIRE RESOLUTION

40 AWG typical,
38 AWG standard

SPATIAL RESOLUTION

0.8 mm vertical & horizontal

X-RAY GENERATOR

ANODE VOLTAGE:

160kV

ORIENTATION

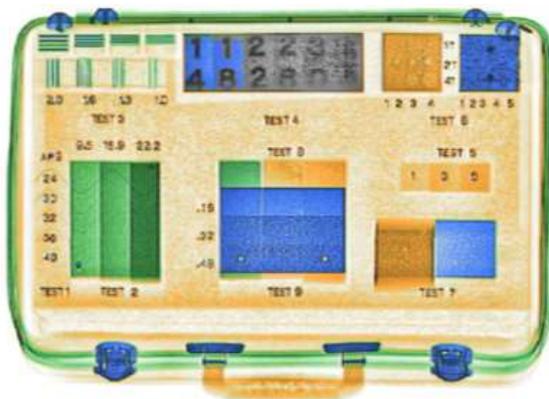
Diagonally Upward



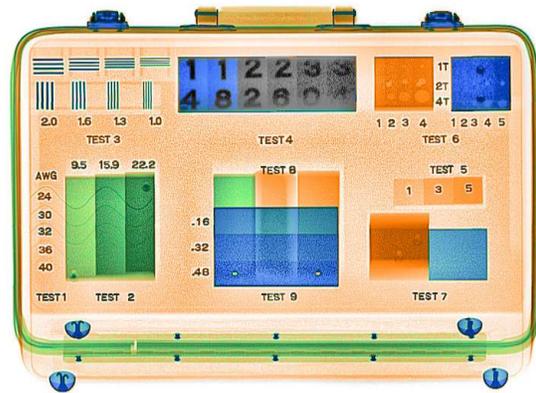


DUAL-MODE X-RAY IMAGING TECHNIQUE (DMxT)

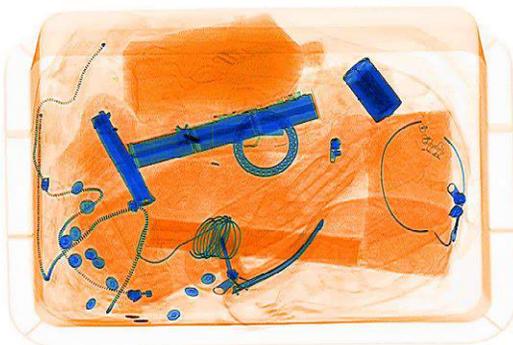
ORION™ screening systems use a dual energy, dual-mode imaging technique, combined with a new unique proprietary data collection method, resulting in best in industry imaging resolution and penetration.



620XR



920CX



Competition

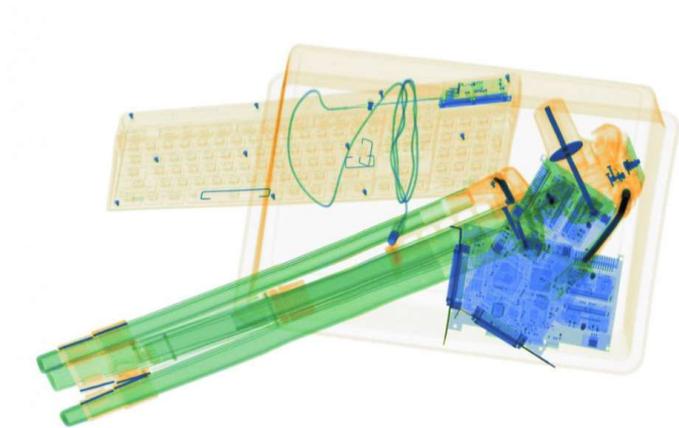


920CX



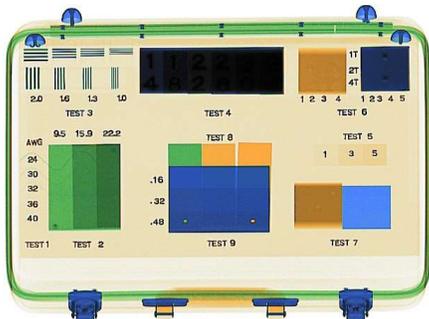
SINERGY

This advanced imaging function emphasizes detail and enriches contrast in low density Regions of the image, utilizing Rapiscan's proprietary DMxT technology.

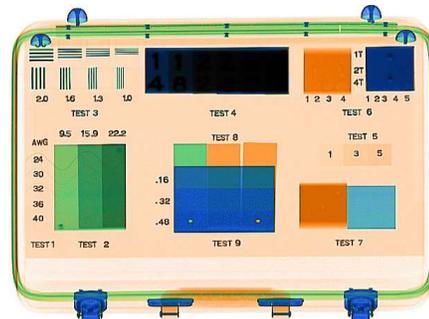


SPECTRUM 4 Color Palettes

Operators can easily change between Classic 4-color and the new Spectrum-4 color imaging option providing a better visualization of contraband material which allows faster screening leading to increased throughput and improved security.



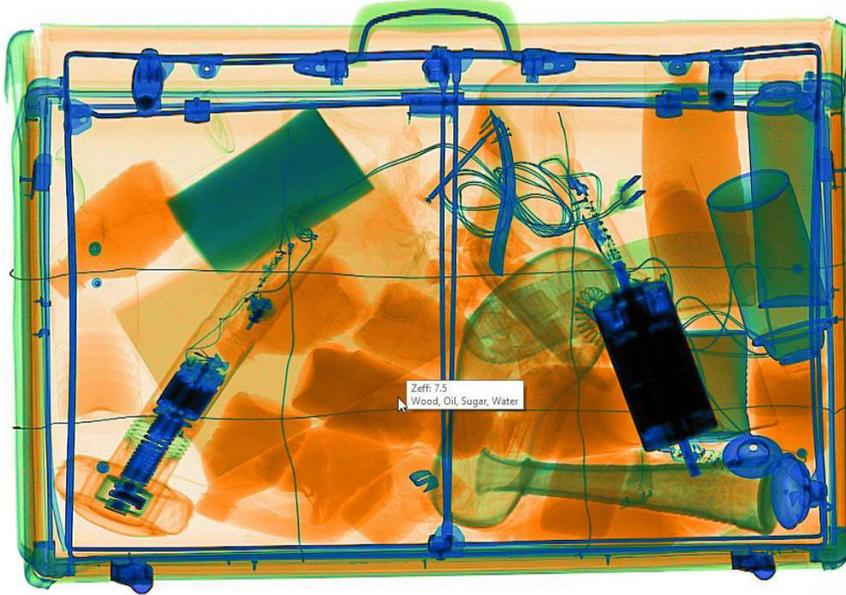
Classic 4



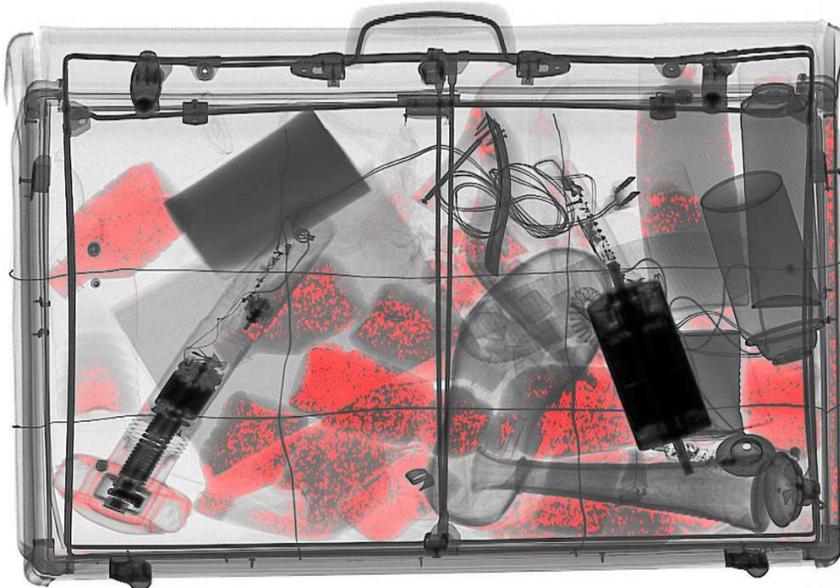
Spectrum 4

DUAL MODE AUTO Z_{eff}

This feature helps operators identify organics accurately and quickly.



THE INTERACTIVE MODE WHICH HIGHLIGHTS THE AREAS BASED ON THE PIXEL SELECTED BY THE OPERATOR

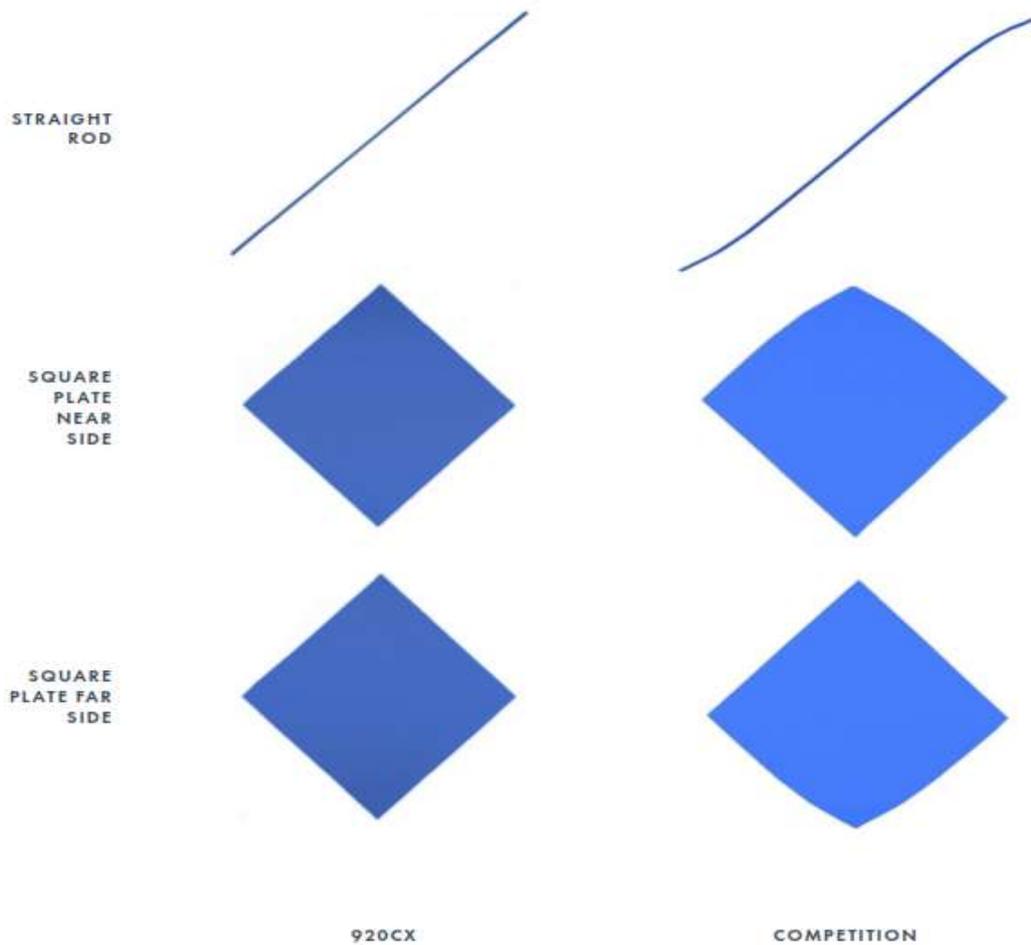


THE RANGE MODE WHICH GIVES THE OPERATOR THE OPTION TO HIGHLIGHT ITEMS BASED ON SELECTED Z_{eff} VALUE (7, 8 OR 9)



GEOMETRIC DISTORTION CORRECTION AND ADVANCED IMAGE RECONSTRUCTION

The new systems offer near perfect aspect ratio correction which ensures that the most accurate image of an object under scan is displayed, regardless of orientation and position on the belt with the correct aspect ratio.



ENHANCING IMAGE QUALITY WITH RAPISCAN SINERGY™

Overview: This white paper explains the basic functionality and benefits of Rapiscan Systems' latest image enhancement feature, SINERGY™, available on Rapiscan Systems' security screening checkpoint solutions.

Rapiscan Systems' checkpoint solution series of X-ray screening systems now offer SINERGY™, a proprietary and innovative new imaging feature that emphasizes detail and enriches contrast in low density regions of the image, therefore enhancing the resolution in the captured image.

SINERGY™ combines Rapiscan's proprietary and innovative new Dual-Mode X-ray imaging Technique (DMxT) with a unique data collection method that results in the best imaging resolution and penetration in the industry.

SINERGY™ provides a huge benefit for operators by increasing their ability to visually detect thin wires commonly used in Improvised Explosives Devices (IEDs) when they are presented with other materials, commonly known as clutter, in the background.

SINERGY™ can also be combined with Rapiscan's other imaging features such as black and white to further increase an operator's ability to distinguish between thin wires and background clutter.

SINERGY™ is optimized for checkpoint applications, where identifying potential threats in a virtual sea of clutter is the most commonly faced challenge.

Rapiscan is the only X-ray screening system manufacturer to offer an imaging feature as advanced as SINERGY™ that not only uses all the information gathered through dual energy imaging techniques but also leverages additional single energy imaging data to provide the best of all energy levels, pixel-by-pixel, across the entire image. Rapiscan's new 618XR hp, 620XR hp and 622XR hp high performance checkpoint series combine significant advancements in computer processing power with highly advanced algorithms to perform the pixel-by-pixel analysis as the object is passing through the X-ray beam.

By increasing the operator's ability to distinguish between thin wires and background clutter, security is improved, throughput is higher, and cost is reduced. The number of manual searches and re-scans are minimized resulting in higher throughput. Due to fewer personnel needed, costs are also reduced.

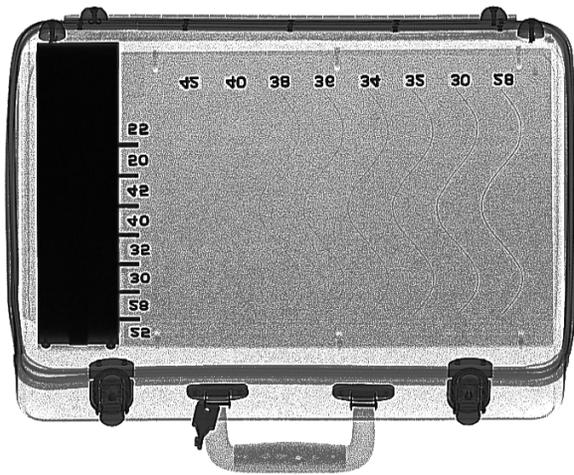


Image above without SINERGY™

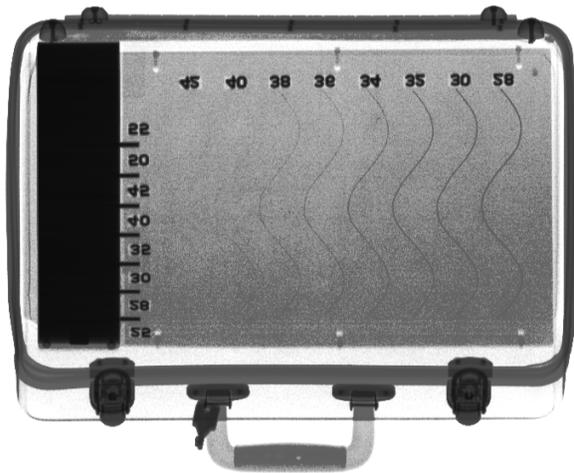


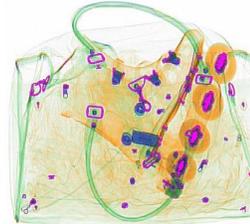
Image above with SINERGY™

DENSITY THREAT ALERT (DTA)



baggage & parcel

*inspection
technology*



With DTA



Without DTA

DENSITY THREAT ALERT (DTA) VISUALLY HIGHLIGHTS HIGH ABSORBING MATERIALS ON THE SCREEN. A USER DEFINED THRESHOLD CAUSES A VISIBLE ALARM WHEN AN OBJECT EXCEEDS THE SPECIFIED DENSITY. THIS FEATURE CAN PREVENT OPAQUE ITEMS FROM ESCAPING SEARCH.

**DENSITY
THREAT ALERT
(DTA) VISUALLY
HIGHLIGHTS
HIGH
ABSORBING
MATERIALS ON
THE SCREEN.**

DENSE OBJECT DETECTION
ALERT

BAGGAGE AND PARCEL
INSPECTION SYSTEMS

DTA is a real-time function that doesn't require the operator to stop the conveyor and prolong the evaluation time. It also does not require any operator image manipulation and processing.

The DTA function prompts a visible alarm on the screen in the form of blinking shaded magenta.

The absorption threshold and frequency of blinking alarm are programmable parameters and can easily be adjusted by the supervisor.

DTA simultaneously functions with Threat Image Projection (TIP) and Target™ (explosives detection alert) and NARCScan™ (narcotics detection alert).

FEATURES

- Detection alert of highly dense objects
- Highly visible on-screen flashing of dense items
- Real time detection without the need to stop the conveyor
- Simultaneous functionality with TIP, Target™ and NARCScan™
- Available on all Rapiscan Systems' 600 series X-ray systems.

BENEFITS

- Assists operators in identifying objects that otherwise be missed
- Increases visibility to the operator of highly dense items
- Improved security by assisting operator to identify explosives and other contraband that may be otherwise covered or not easily visible
- Increased throughput by accelerating the checking procedure
- Increase and shift operator focus on passenger behavior from continuous monitoring the screen



TARGET™



baggage & parcel
**inspection
technology**



RAPISCAN SYSTEMS' TARGET™ FUNCTION HIGHLIGHTS A POTENTIAL THREAT ON THE X-RAY IMAGE. USED AS AN AID TO ACCELERATE THE SCANNING PROCESS TARGET PROVIDES AN IDENTIFICATION OF POTENTIAL EXPLOSIVE THREAT MATERIAL.

TARGET™ HIGHLIGHTS A POTENTIAL THREAT ON THE X-RAY IMAGE.

ADVANCED OPERATOR ASSIST THREAT DETECTION

MEETS INTERNATIONAL REQUIREMENTS

BAGGAGE AND PARCEL INSPECTION SYSTEMS

TARGET™ is available as an option on the Rapiscan conventional baggage and parcel inspection X-ray systems.

Target™ algorithms have been developed to detect a wide range of explosives and have been designed to meet stringent international airport security regulations including U.S. Department of Homeland Security and Transportation Security Administration.

THE PRINCIPLE - Target™ uses a proprietary detection algorithm that performs material analysis of a scanned item. By gathering data such as atomic number, mass, size and other properties of the scanned materials and comparing this information to the known characteristics of threat items such as explosives Target is able to identify potential threats.

Rapiscan System's Target™ provides high detection and excellent false alarm discrimination as it incorporates a multi-stage approach to all the information provided by the X-ray images. The detection technology has the ability to find hard-to-detect explosive configurations.

MODES and FEATURES - Target™ can also be operated in manual or interactive mode. As each item is scanned, Target™ performs the analysis on the gathered data without the need to stop or slowing down the X-ray system conveyor. Interactive Target™ supplements Target™ by providing the X-ray system operator the ability to apply Target™ manually to the suspected objects as needed.

Target™ is available and compatible with all Rapiscan Systems' 600 conventional X-ray systems. It can also function simultaneously with other useful features like Threat Image Projection (TIP) and Density Threat Alert (DTA).

FEATURES

- Operator assist detection of potential explosive material.
- Real time detection without the need to stop the conveyor.
- Simultaneous functionality with Threat Image Projection (TIP) and Density Threat Alert (DTA).
- Available on all Rapiscan Systems' 600 series X-ray systems.

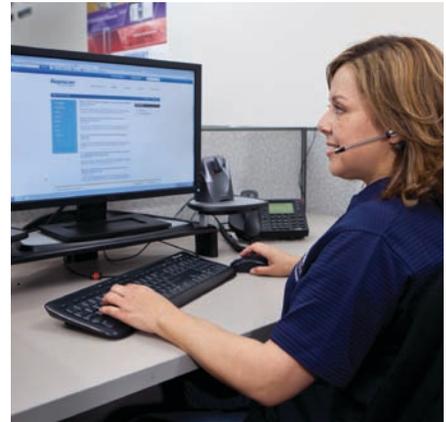
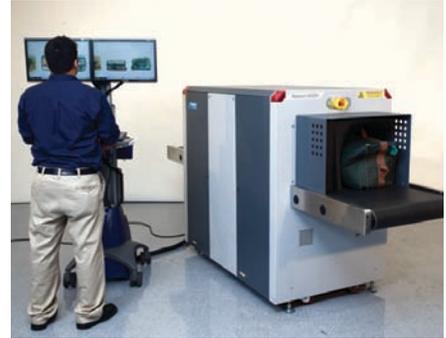
BENEFITS

- Improved security by assisting operator to identify threats that may be otherwise covered or not easily visible.
- Increased throughput by accelerating the checking procedure.
- Increase and shift operator focus on passenger behavior from continuous monitoring the screen.



Rapiscan GLOBAL SUPPORT & SERVICE PLANS

Baggage and Parcel Inspections (BPI), Explosive & Narcotics Trace Detection (ETD) - Americas Region



As a true global company, Rapiscan Systems provides the high-quality support you need - regardless of location or time zone.

With our experience and dedication, we provide innovative and dependable security solutions to customers worldwide and then back each system with the most substantive, yet flexible, maintenance and warranty plans available. In the fast-paced world of screening and inspection, you can't afford to lose time to equipment maintenance – and with Rapiscan Systems, you won't have to.

	PLATINUM SERVICE PLAN	GOLD SERVICE PLAN
On-Site Coverage	24 hours a day, 7 days a week 365 days a year.	During normal business hours Mon - Fri 8:00am - 5:00pm local time
RescueLens	✓	✗
Network Operations Center	✓	✓
Advanced Remote Tools (APPs & RescueLens)	✓	✓
24/7 Technical Phone Support	✓	✓
Corrective Repair Labor	24 Hours	2 Business Days
All Necessary Repair Parts	✓	✓
Shipment Of Replacement Parts	Express	Economy
All Required Travel Expenses	✓	✓
One Preventative Maintenance Visit	✓	✓
Level III Depot Repair- Return To Base	✓	✓

WARRANTY COVERAGE & MAINTENANCE SERVICE PLANS

		WARRANTY	PLATINUM SERVICE PLAN	GOLD SERVICE PLAN	TIME & MATERIAL
Technical Support	24 Hours, 7 Days, 365 Days Per Year	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	Mon – Fri 8:00 AM – 5:00 PM GMT	<input checked="" type="radio"/>		<input checked="" type="radio"/>	
Response Time	24 Hour Response - 7 Days, 365 Days Per Year	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	2 Business Days	<input checked="" type="radio"/>		<input checked="" type="radio"/>	
	All Necessary Repair Parts	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
On-site Repair	24 Hours, 7 Days, 365 Days Per Year	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	Mon – Fri 8:00 AM – 5:00 PM local time	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input type="radio"/>
Shipping & Freight - Replacement Parts	Express	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	Economy	<input checked="" type="radio"/>		<input checked="" type="radio"/>	<input type="radio"/>
Field Service Engineer	Includes Travel	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Product Specific	Preventative Maintenance	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	Safety Surveys	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Qualified - Discounts	Multiple Units Multiple Years	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
	No Discounts During Warranty	<input type="radio"/>			

Included

Billable Items

