

ULTRA-COMPACT 620 MM BY 420 MM TUNNEL CHECKPOINT SECURITY SCREENING SYSTEM FOR CRITICAL INFRASTRUCTURE PROTECTION

SUPERB IMAGE QUALITY

HIGHLY RELIABLE

ULTRA-COMPACT

STANDARD FEATURES

- Full Spectrum Imaging
- View Previous/Next Bag
- Image Archive
- Configurable Image Processing Keys
- Baggage Counter
- Date / Time Display
- Search Indicator
- Flat Panel Monitor

STANDARD IMAGE PROCESSING FUNCTIONS

- Crystal Clear
- SINERGY
- Black and White
- Organic / Inorganic Stripping
- Inverse Video
- High Penetration
- Low Penetration
- Pseudo Color
- Variable Edge Enhancement
- Variable Color Stripping
- Variable Gamma
- Variable Density
- Dynamic Continuous Zoom & Panning
- Fixed Zoom (64x)

sales@rapiscansystems.com
www.rapiscansystems.com



TUNNEL OPENING (W X H):
620 X 420 MM (24.4 X 16.5 IN)

THE NEW 620XR ve IS A DUAL MODE, DUAL ENERGY 620 MM BY 420 MM TUNNEL ULTRA-COMPACT X-RAY SECURITY SCREENING SYSTEM WITH SUPERB IMAGING PERFORMANCE.

The 620XR ve implements Rapiscan's proprietary X-ray imaging technique allowing the system to extract information about the object's atomic composition and material discrimination, resulting in superior image quality.

By providing a small footprint and low weight, the compact 620XR ve is ideal for screening small to medium size parcels, briefcases and packages at high threat locations including event security, prisons, government buildings, schools and commercial buildings.

DETECTION OF EXPLOSIVES AND NARCOTICS ALERT

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

EASE OF USE PROVIDING HIGHEST THROUGHPUT

With over 14 image processing tools, the feature-rich software allows the operator to more easily and accurately search for contraband.

SINERGY

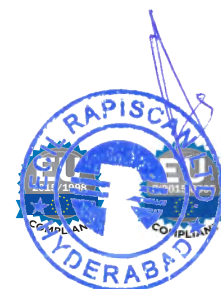
Rapiscan's latest proprietary image enhancement tool, utilizes the new innovative Dual-Mode X-ray imaging Technique (DMxT) to emphasize the detail in specific regions of images by enhancing the visibility of thin metal therefore increasing operator recognition of potential threats in cluttered images.

SUPER COMPACT, HIGH PERFORMANCE

With a small footprint and a low weight of under 373kg, 620XR ve is ideal for security sensitive areas with limited space for placement of security equipment while providing excellent imaging performance.

REGULATORY COMPLIANCE

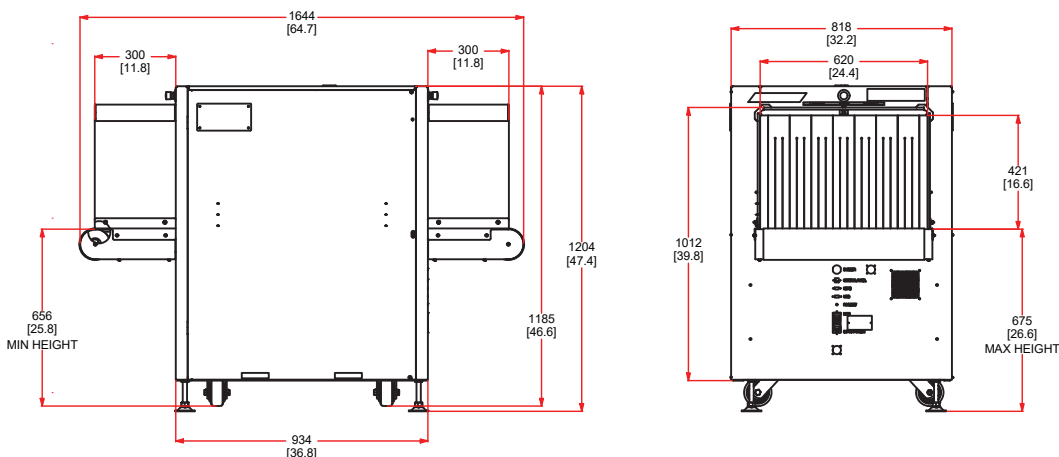
620XR ve is in full compliance with the European Union regulations (EC) No. 300/2008, (EU) No. 2015/1998 and Commissions Decision C-(2015)8005.



620XR ve

Rapiscan®
systems

An OSI Systems Company



PHYSICAL SPECIFICATIONS

Dimensions:	Length: 1,644 mm (64.8 in.) Width: 818 mm (32.2 in.) Height: 1,185 mm (46.7 in.)
Tunnel Size:	620 mm (W) x 420 mm (H) (24.4 x 16.5 in.)
Conveyor Speed:	0.28 m/sec (55.11 ft./min)
Conveyor Load (Max):	165 Kg (364 lbs) evenly distributed
Conveyor Height (Approx.):	675 mm (26.6 in.)
Weight (Approx.):	Net: 373 Kg (822.3 lbs) Gross: 482 Kg (1062.6 lbs)
System Power:	115/230 VAC ±10%

X-RAY GENERATOR AND IMAGE PERFORMANCE¹

Steel Penetration:	35 mm standard
Wire Resolution:	42 SWG standard
Cooling:	Sealed oil bath with forced air
Anode Voltage:	160 kV Generator, Operated at 145 kV
Orientation:	Diagonally Upward

OPERATING ENVIRONMENT

Storage Temperature:	-20°C to 50°C
Operating Temperature:	0°C to 50°C
Relative Humidity:	5 to 95% non-condensing

PROTECTION CLASS

System:	IP20
Operator Control Panel:	IP43 ²

HEALTH & SAFETY

Rapiscan® Systems' cabinet X-ray products comply with all applicable U.S. FDA and equivalent international regulatory agency requirements, contained in the cabinet X-ray radiation safety performance standard [21 CFR 1020.40] and the general performance standard [21 CFR Part 1010] as well as IEC standard 61010-2-091.

Rapiscan® baggage and parcel inspection systems radiation emission leakages are well below the required regulatory limits with less than 1 µSv/hr at 10 cm from all surfaces of cabinet X-ray.

SOFTWARE

- OS600
- 64-bit Operating System

OPTIONS AND ACCESSORIES

- Density Threshold Alert (DTA)
- Threat Image Projection (TIP)
- Automatic Image Archiving
- Operator Training Program (OTP)
- Explosives Detection Alert (Target™)
- Narcotics Detection Alert (NARCScan™)
- Universal Printer Support
- Foot-mat
- Power Conditioner
- Rollerbed Accessories

¹ Stated performance as measured by Rapiscan® Imaging Validation Test Kit.

² With optional replaceable cover.

With continual development of our products Rapiscan® Systems reserves the right to amend specifications without notice. Product pictures are for general reference. Please note that due to US laws and regulations, not all Rapiscan® products are available for sale in all countries without restriction. Please contact your Rapiscan® Systems sales representative for more information.

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Certified to
AS9100C



Procedury Right.

Rapiscan® Systems is AS9100C:2009 and
ISO 14001:2004 + Cor. 1:2009 Certified

sales@rapiscansystems.com
www.rapiscansystems.com





केस फाइल नंबर Case File Number: TS-97401-CP-SU-CP-E-001

जारी करने की तिथि Issuance Date: 12/09/2025

दस्तावेज नंबर Document Number: 22-COMSUPPTA-837602

समाप्ति की तिथि Expiry Date: 12/09/2028

**CONSUMER PRODUCTS AND SCANNING FACILITY में प्रयुक्त X-RAY BASED BAGGAGE INSPECTION SYSTEM के लिए टाइप अनुमोदित उपकरण
TYPE APPROVED EQUIPMENT FOR X-RAY BASED BAGGAGE INSPECTION SYSTEM USED IN CONSUMER PRODUCTS AND SCANNING FACILITY**

यह आपके दिनांक 02/09/2025 के आवेदन सं. 25-1611213 का संदर्भ है। परमाणु ऊर्जा अधिनियम, 1962 की धारा 16 तथा 17 जो भी लागू हो के तहत प्रदत्त शक्तियों का प्रयोग करते हुए, परमाणु ऊर्जा (विकिरण संरक्षण) नियम 2004 के नियम 3 को पढ़ें, परमाणु ऊर्जा नियामक परिषद् (एईआरबी) एतद्वारा RAPISCAN SYSTEMS PRIVATE LIMITED, India द्वारा निर्मित X-ray based baggage inspection system यूनिट मॉडल 620XRve के लिए रेडियोलॉजिकल संरक्षा दृष्टिकोण से भारत में बिक्री, स्थापना, संचालन, सर्विसिंग और रखरखाव के लिए अनुलग्नक-I में दिए गए तकनीकी विनिर्देशों के साथ टाइप अनुमोदन को नवीनीकृत करता है।

This has reference to your application no. 25-1611213 dated 02/09/2025. In exercise of the powers conferred under Section-16 & 17 as applicable of the Atomic Energy Act, 1962 read Rule 3 of the Atomic Energy (Radiation Protection) Rules 2004, the Atomic Energy Regulatory Board (AERB) hereby renews Type Approval from radiological safety view point for the X-ray based baggage inspection system Unit Model 620XRve manufactured by RAPISCAN SYSTEMS PRIVATE LIMITED, India with technical specifications given in Annexure-I for sale, installation, operation, servicing and maintenance in India.

नियम एवं शर्तें TERMS AND CONDITIONS

- इन नियमों और शर्तों को आपूर्तिकर्ता के प्राधिकरण के नियमों और शर्तों के साथ पढ़ा जाना चाहिए। संभावित उपयोगिता को इस टाइप अनुमोदन और आपूर्तिकर्ता प्राधिकरण की एक प्रति प्रदान की जाएगी। These terms and conditions to be read in conjunction with terms and conditions of the Supplier's Authorization. A copy of this type approval and suppliers authorization shall be provided to prospective utility.
- यदि मॉडल में विकिरण सुरक्षा को प्रभावित करने वाला कोई परिवर्तन किया जाता है तो इस टाइप अनुमोदन अमान्य हो जाता है। This type approval becomes invalid if any change/s is/are made in the Model, affecting radiation safety.
- इस टाइप अनुमोदन की समाप्ति के बाद उक्त मॉडल की आपूर्ति इसके पुनः सत्यापन पर सशर्त है। The supply of the said model after expiry of this type approval is conditional upon its re-validation.
- इस टाइप अनुमोदन को परिचालन अनुभव फीडबैक के आधार पर समीक्षा और संशोधन के अधीन किया जा सकता है। This type approval may be subjected to review and modification based on operational experience feedback.
- इस टाइप अनुमोदित उपकरण की आपूर्ति अधिकृत आपूर्तिकर्ता(ओं) द्वारा उस उपयोगकर्ता को ही की जाएगी जो उपरोक्त उपकरण की खरीद के लिए एईआरबीसे अपेक्षित अनुमति प्राप्त की है और जैसा लागू हो, केवल अधिकृत



परिसर में ही स्थापित किया जाना है। This type approved equipment shall be supplied by authorized supplier(s) to the user who has obtained requisite permission from AERB to procure the above equipment and to be installed only at authorized premises, as applicable.

6. आपूर्तिकर्ता The supplier shall,

- a) आयात, आपूर्ति, स्थापना के लिए जिम्मेदार होगा, जिसमें लागू होनेवाले उपकरणों की गुणवत्ता आश्वासन, सर्विसिंग और रखरखाव, पुर्जों की आपूर्ति, स्रोत प्रतिस्थापन, यूनिट का डीकमीशनन/हटाना और विकिरण स्रोत के सुरक्षित प्रबंधन के लिए उपयोगकर्ता की सहायता करना शामिल है। be responsible for import, supply, installation including performing quality assurance of equipment as applicable, servicing and maintenance, supply of spares, source replacement, decommissioning/dismantling of the unit and assisting the user for safe management of radiation source.
- b) उपयोगकर्ता को सभी प्रासंगिक दस्तावेज जैसे ऑपरेटिंग मैनुअल, टाइप अनुमोदन प्रमाणपत्र और घटकों के अंशांकन प्रमाणपत्र (जैसा लागू हो) प्रदान करें। दस्तावेज अंग्रेजी और/या क्षेत्रीय भाषा में होने चाहिए। provide all the relevant documents such as operating manual, technical catalogue, user manual, QA procedures, servicing and maintenance manual, type approval certificate and calibration certificates of components (as applicable) to the user. The documents should be in English and/or in regional language.
- c) सभी संबद्ध कर्मियों को विकिरण सुरक्षा और उपकरणों के संचालन प्रक्रियाओं पर प्रशिक्षण प्रदान करने के लिए जिम्मेदार होंगे। be responsible for providing training on radiation safety and operating procedures of equipment to all the associated personnel.
- d) किसी भी दुर्घटना/घटना के बारे में एईआरबी को तत्काल सूचित करें, जिसमें विकिरण सुरक्षा निहितार्थ हो, जो पूरे विश्व में इसके उपयोग के दौरान उपकरण के साथ हुआ हो। inform immediately to AERB about any accident/incident, having radiation safety implications, occurred with the equipment during its use all over the world.
- e) यूनिट के आयात, आपूर्ति और स्थापना के बारे में एईआरबी को आवधिक स्थिति रिपोर्ट प्रस्तुत करें। submit the periodic status report to AERB about the import, supply and installation, of the unit.

जारीकर्ता प्राधिकारी **Issuing Authority**

DR. P. K. DASH SHARMA
Head, RASD

MR. RAGHUNATH POCHIRAJU
RAPISCAN SYSTEMS PRIVATE LIMITED
PLOT NO 17 B IP HARDWARE PARK SY NO 1/1, IMARATH KANCHI, RAVIRYALA VILLAGE
MAHESHWARAM MANDAL
RANGA REDDY-500005,
TELANGANA



केस फाइल नंबर Case File Number: TS-97401-CP-SU-CP-E-001

जारी करने की तिथि Issuance Date: 12/09/2025

दस्तावेज नंबर Document Number: 22-COMSUPPTA-837602

समाप्ति की तिथि Expiry Date: 12/09/2028

अनुलग्नक ANNEXURE-I

विवरण Details	
उपकरण का प्रकार Type of Equipment	X-ray based baggage inspection system
मॉडल Model	620XRve
स्रोत Source	NA
महत्तम गतिविधि Maximum Activity	NA
महत्तम वोल्टेज रेटिंग (kV) Maximum Voltage Rating (kV)	145
महत्तम करंट रेटिंग (mA) Maximum Current Rating (mA)	0.7
महत्तम फोटोन ऊर्जा (MV) Maximum Photon Energies (MV)	NA
महत्तम इलेक्ट्रॉन ऊर्जा (MeV) Maximum Electron Energies (MeV)	NA
मूल उपकरण विनिर्माता Original Equipment Manufacturer	RAPISCAN SYSTEMS PRIVATE LIMITED, India
मूल उपकरण आपूर्तिकर्ता Original Equipment Supplier	RAPISCAN SYSTEMS PRIVATE LIMITED, India

जारीकर्ता प्राधिकारी Issuing Authority

DR. P. K. DASH SHARMA
Head, RASD



TEST REPORT

Test Report Issued To:

RAPISCAN SYSTEMS PRIVATE LIMITED

PLOT NO.- 17-B,IP,HARDWARE PARK,SY. NO.
-1/1,IMARATH KANCHA,
RANGA REDDY, TELANGANA - 500005,
INDIA

Test Report No: D211009044/D211009044-10

Date of Issue: 21-Oct-2021



Sample Booking/Receipt Date: 09-Oct-2021

Date of Start of Testing: 12-Oct-2021

Date of Completion of Test: 12-Oct-2021

Customer Relationship Number

66206

Sample Description :

X-RAY BAGGAGE-SCANEER



Customer Reference No :

Kind Attention : G SHARADA DEVI

E-Mail: g.sharada@ecilrapiscan.com

Contact No: 9100991304

Sample Condition : Good

Sample Quantity (Approx) : 1

Sample Size (Approx) : NA - mm

SAMPLE COLLECTED BY OUR LABORATORY. THE RESULTS RELATE ONLY TO THE ITEMS TESTED

Report Issued by

Authenticity of report can be verified by mail at verification@spectrolab.in

This is a Digitally Signed Report and hence doesn't require Physical Signature.

Spectro Analytical Labs Limited S-1, GNEPIP, Surajpur Industrial Area,Phase-V, Kasna, Greater Noida-201308 (India)

Phone : +91-120-2341252,2341251 || URL : www.spectro.in || Email: care@spectro.in

BIS & DDA Approved, ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory

Please refer to our Website <http://www.spectro.in/spectro-policies.html> for Terms & Condition



TEST REPORT

Page 2 of 5

Report No. D211009044/D211009044-10

BRIEF

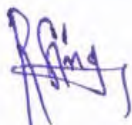
Job ID No. : **D211009044 - 1**

Sample Collection Address : **Cargo Terminal – 1
IGI Airport, New Delhi, India**

Report on : **Film Safety Inspection Reports
for X – Ray Baggage Scanner of maximum
operating voltage of 200 kV and
operating current 1 mA**

Report for : **Rapiscan Systems Private Limited.
Plot No.-17/B, Survey No.-1/1, Kanchan
Imarat, Hardware Park, Raviryal Village
Maheshwaram Mandal
Ranga Reddy – 500005, India**

Date of Investigation : **12-10-2021**


Analyst Signature




Authorised Signatory

TEST REPORT

Page 3 of 5

Report No. D211009044/D211009044-10

CONTENTS

1. PRINCIPLE
2. METHOD
3. LIST OF ITEMS RECEIVED AFTER PASSING THROUGH SCANNER
4. FILM SAFETY TEST REPORT


Analyst Signature




Authorised Signatory

TEST REPORT

Page 4 of 5

Report No. D211009044/D211009044-10

1. PRINCIPLE:

- X – ray Scanners are Used at airport, Railways, Bus stand, Government offices, critical infrastructures, transportation, border operations where screening of parcels, bags & mail is required and other places for baggage control operate at very much lower energy and give rise to radiation levels very much lower than radiation sources used in food irradiation facilities. It is very difficult, if not impossible to detect changes to food once it has been through an X – ray scanner.
- The radiation dose typically received by objects like food & other materials scanned by a X – ray scanner system is 1 milliard or less.

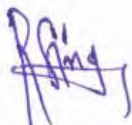
2. METHOD:

• For Film Safety:

- ▶ Scan the sample of photography film through the X - ray scanner according to set scanning parameters.
- ▶ Take another unexposed photography film sample.
- ▶ Perform the test for density variation in exposed photography film & and unexposed radiography film.
- ▶ Prepare the report

3. List of items received after passing through scanner

SL.NO.	ITEMS	NET WEIGHT/SIZE	QUANTITY
01.	Radiography Film, Make - Carestream	(12 X 3) inch	02 Nos.


Analyst Signature




Authorised Signatory

TEST REPORT

Page 5 of 5

Report No. D211009044/D211009044-10

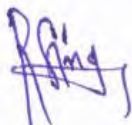
FILM SAFETY TEST REPORT

REPORT/JOB ID NO.	D211009044 - 1	DATE OF TESTING	12-10-2021
ARTICLE NAME	X-ray Baggage Scanner	METHOD	Radiation Detection
NAME OF THE MANUFACTURE	M/s Rapiscan Systems Private Limited, Hyderabad.	SAMPLE NAME	Radiography Film
QUANTITY	01 No.	TUBE VOLTAGE	200 KV (Maximum)
TEST METHOD	ASA/ISO - 1600/33 DIN and ASA/ISO 800	TUBE CURRENT	1 mA (Maximum)
		CONVEYOR SPEED	0.20 m/s

OBSERVATION

OBSERVATION	No changes observed in density or contrast of Radiographic film due to radiation exposure, even after 10 times passes through X-Ray baggage scanner.
REMARK	Provided Radiographic films are safe after passing through X-Ray baggage scanner.

-- End of Test Report --


Analyst Signature




Authorised Signatory



क्रम सं. / SL NO. : 563 A 56236

विआप्रोबी / बीएआरसी वाशी कॉम्प्लेक्स,
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नवी मुंबई / Navi Mumbai-400 703
www.britatom.gov.in

भारत सरकार / GOVERNMENT OF INDIA

परमाणु ऊर्जा विभाग / DEPARTMENT OF ATOMIC ENERGY

विकिरण एवं आइसोटोप प्रौद्योगिकी बोर्ड / BOARD OF RADIATION & ISOTOPE TECHNOLOGY

रेडियोसक्रियता परीक्षण प्रमाण-पत्र / RADIOACTIVITY TEST CERTIFICATE

Page 1 of 1

RADIOANALYTICAL LABORATORY

Ref: BRIT/RAL/D/733-34/MISC/644-45/21-22
TO
M/S. RAPISCAN SYSTEMS PRIVATE LIMITED
PLOT NO. 17-B, IP, HARDWARE PARK, SURVEY NO.1/1,
IMARATH KANCHI, RAVIRYALA VILLAGE,
MAHESHWARAM MANDAL,
RANGA REDDY DISTRICT, HYDERABAD,
TELANGANA-500005, INDIA

NOV 05, 2021

This is regarding the Food samples sent for radioactivity analysis vide your letter dated nil with the following details, as shown in italics :

NAME OF APPLICANT : RAPISCAN SYSTEMS PRIVATE LIMITED
PLOT NO. 17-B, IP, HARDWARE PARK, SURVEY NO.1/1,
IMARATH KANCHI, RAVIRYALA VILLAGE, MAHESHWARAM MANDAL,
RANGA REDDY DISTRICT, HYDERABAD, TELANGANA-500005, INDIA

NAME OF THE PRODUCT : X-RAY BAGGAGE SCANNERS

SR. NO.	FOOD ITEMS	TYPE	QUANTITY
1.	FOOD PACKET CONSISTING OF BREAD, VEGETABLE BIRYANI, RAW VEGETABLES LIKE SHIMLA MIRCHI, BEANS, CARROTS & LEMON	PASSED THROUGH THE X-RAY BAGGAGE SCANNER OF MAXIMUM TUBE POTENTIAL 200KV MAXIMUM OPERATING WITH TUBE CURRENT OF 1 mA FOR 10 TIMES THROUGH SCANNER	1 KILO
2.	FOOD PACKET CONSISTING OF BREAD, VEGETABLE BIRYANI, RAW VEGETABLES LIKE SHIMLA MIRCHI, BEANS, CARROTS & LEMON	WITHOUT SCAN (CONTROL)	1 KILO

Date of receipt of sample: 29.10.2021

Date of completion of test: 02.11.2021

The samples were analyzed by HPGe gamma spectrometry in the energy range 100 – 3000 keV. Presence of man-made radionuclide is not detected in the sample, above background level. The food samples are fit for human consumption from radiological point of view.

NOTE :

- This report pertains to the given samples only.
- This report shall not be reproduced except in full, without written approval of this laboratory.
- Sampling is not done by this laboratory.

Checked by:

Authorized Signatory :

****End of Report****

अजय एन. ठमके / Ajay N. Thamke
प्रभारी अधिकारी / Officer-In-Charge
रेडियोवैश्लेषक प्रयोगशाला / Radioanalytical
विकिरण एवं आइसोटोप प्रौद्योगिकी
परमाणु ऊर्जा विभाग, भारत सरकार
नवी मुंबई - 400 703



To Whom So Ever It May Concern

DECLARATION ON FOOD AND FILM SAFETY

We the original equipment manufacturers of Baggage Scanners with the brand name Rapiscan Systems do hereby declare the following on food and film safety of X-ray baggage inspection systems.

“X-ray baggage inspection systems manufactured by Rapiscan Systems do not cause any radiation related damage to the food items and camera film while screening through the systems. They are quite safe to food and film.”



Varti Vartanian
Director of Global Regulatory Compliance/
Corporate Radiation Safety Officer
Rapiscan Systems, Inc.

Date: September, 2014

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