B2 SCAN

INNOVATIVE SECURITY EQUIPMENT

#noSECRETSfromB2scan

Content

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MULTIFUNCTIONAL
HIGH-SPEED TOMOGRAPH

Multifunctional high-speed tomograph for baggage and hand luggage inspection

B2scan CTX10060

Equipment drawing

B2scan CTX10060 is a multifunctional high-speed tomograph for baggage and hand luggage inspection. It is based on the use of computed tomography (CT) technology. In combination with digital algorithms of data receiving of the dual projection system (DR), we get high-quality color images of baggage in two projections, as well as three-dimensional images with high resolution. The equipment uses the principle of spiral-cone scanning and dual-energy computed tomography technology to obtain information on the characteristics of the materials being inspected, such as the physical density of materials, optical density ratio and effective atomic number. As a result, the device has improved detection performance for various prohibited items such as drugs and explosives and a low false alarm rate.

| DR image (bottom view) | DR image (side view) | CT image in section mode | 3D image |

B2scan CTX10060 has a high scanning speed - up to 0.5 m/s and can be used as a stand-alone device, or as a device integrated into the baggage handling system (BHS).

Technical specifications

Automatic detection of explosives / drugs.

The software uses the technology of dual-energy computed tomography to obtain information on physical and optical density, effective atomic number of substances. This technology allows automatic detection of explosives (black powder, TNT, synthetic C-4, hexogen, octogen, nitrogen, emulsified explosives, dynamite, chlorate, potassium perchlorate, nitrocellulose explosives, smokeless gunpowder, nitrobenzene, PLX (double explosive, mixture of 95% nitromethane and 5% ethylenediamine), nitroglycerin, ethylene glycol dinitrate, nitromethane, etc., narcotic substances (heroin, cocaine, ketamine, crystal methamphetamine, cannabis resin, etc.), as well as their location in the inspected baggage.

- The function of automatic detection of prohibited items. By combining DR and CT images as well as using B2secure AI neural network training technology, detection of prohibited items such as knives and guns is realized automatically (optional).
- High-definition color 3D images and CT sectional images. High-definition 3D images, which can be rotated at any angle, are displayed in different colors depending on material properties. At the same time, it is possible to view two-dimensional color CT images in section mode.
- Independent dual-energy DR detection system with dual viewing angles.
- Detection of radioactive and chemical substances (optional).
- High throughput. The conveyor belt speed can reach 0.5 m/s and the throughput can be up to 1800 pieces of baggage units per hour.
- Network functions. The equipment can be used both autonomously and integrated into data collection and processing systems, it is possible to implement remote control and diagnostic functions, as well as to integrate into baggage handling systems (BHS).

X-ray source
Anode voltage (DR) - 180 kV
Anode voltage (CT) - 180 kV

Radiation safety
Dose rate of X-ray radiation (at 10 cm from the housing), not more than 2.5 μSv/h

Basic parameters	
External dimensions	L 4490 mm x W 2000 mm x H 2100 mm
Tunnel dimensions	W 1000 mm x H 600 m
Maximum load	200 kg (even distribution)
Operating temperature/ relative humidity	0°C ~ +40°C / 5% ~ 95% (without condensation)
Storage temperature	-40°C ~ +60°C / 5% ~ 95% (without condensation)
Power supply	Three-phase, 380 V AC (-15% ~ + 10%)
Power consumption	15 kVA
Operating Parameters	
Throughput	up to 1800 baggage units / hour
Resolution capacity (DR)	40 AWG
Steel penetration (DR)	46 mm
Line resolution (CT)	2 line pairs per mm
Density resolution (CT)	1%
Display unit	27-inch monitor / 1920 x 1080 resolution
ST image processing functions	Black and white mode, color inversion, edge and border enhancement, detailing, organic / inorganic removal, super penetration, pseudo-color schemes, absorbency change.
DR image processing functions	Black and white mode, color inversion, edge and border enhancement, detailing, organic / inorganic removal, super-penetration, pseudo-color schemes, absorbency changes, statistics of material values (optical, physical density and effective atomic number).
Functions for sectional image processing	Black and white mode, color inversion, edge and border enhancement, organic substance / inorganic substance removal
Functions for sectional image processing	Black and white mode, color inversion, edge and border enhancement, organic substance / inorganic substance removal
Functions for three-dimensional image processing	Super penetration, change of transparency ratio, clipping, separate display, 3D scaling, rotation.
Archive capacity	At least 100,000 images
Scaling	In the range of 1 to 64
Additional functions	Date and time display, self-diagnostics, operation log, system uptime, runtime, baggage counting, diagnostic of technical condition, image projection of hazardous objects (TIP), image search in the archive, etc.

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ARCHED
METAL DETECTORS

Arched Metal Detector

Application area

Designed for accurate detection of metal objects on the body and clothing of the person being inspected.

B2scan SD1000

Technological features

- LED indication of detected items on the display of the control unit and side panels
- Adjustable number of detection zones: 6, 12 or 18 zones
- Sound and light alarm: adjustment of the length, volume and tone of the alarm
- Providing the required selectivity, operation in mixed, ferrous or non-ferrous metal detection modes
- Automatic interference compensation
- Protection against false alarms
- Two-level protection against unauthorized access: The SW is password protected, the control unit is locked with a key
- 72 pre-installed selective detection programs, the ability to create your own programs
- Passage width: 760 mm, 820 mm, 1000 mm
- The minimum distance between detectors: 0.3 meters without the sync cable
- Ability to connect power and Ethernet cables, left, right and top of the metal detector
- «Stop/go» indicators on the front panel of the metal detector
- «Dry contacts» for connecting third-party equipment (turnstile, gateway, camera, etc.)
- Passage and alarm counters
- «Anti-throw» mode
- Built-in uninterruptible power supply for autonomous operation: optional
- Computer control module: ability to connect to a computer via USB, Ethernet, Bluetooth
- Mobile application to control the metal detector from a smartphone or tablet
- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring and control results collection using unified data transfer protocols and metadata format developed on the basis of XML
- Mains voltage: AC 100 V – 242 V, 50/60 Hz
- Signal frequency 7000-8999 Hz (adjustable)
- Power consumption: <20 W
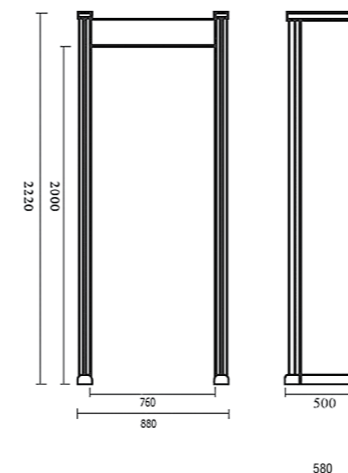
Metal detector dimensions

- Net weight: 67 kg
- External dimensions: 2220 mm (h) x 880 mm (w) x 580 mm (d)
- Internal dimensions: 2000 mm (h) x 760 mm (w) x 500 mm (d)
- Working temperature: From -25°C to + 55°C

The equipment has passed mandatory and voluntary certification valid in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.
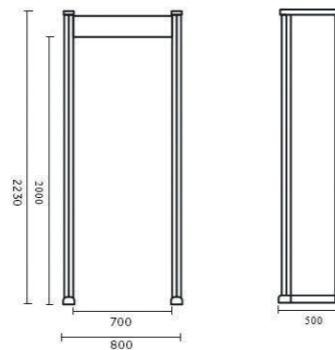
Arched
Metal Detector

B2scan SD400

Scope of application: designed to detect metal objects
on human body and clothing.

- LED indication of the location of detected metal
  objects on the side panels;
- Number of detection zones: 18;
- Sound and light alarms; Easy installation: Arched
  design. One person can quickly install or dismantle;
- Automatic compensation for external interference;
- False alarm protection;
- Two-level protection against unauthorised access:
  The software is password protected and the control
  unit is locked with a key;
- Safe for pregnant women and pacemakers;
- Digital counters

Main features

- Weight: 50kg;

- External dimensions:
  2230 mm (h) x 800 mm (w) x 500 mm (d);

- Passage dimensions:
  2000 mm(h) x 700 mm (w) x 500 mm (d);

- Operating temperature: -20°C to +45°C;

- Mains Voltage: AC 100V~242V, 50/60 Hz;

- Power consumption: <20 W

2230
2000
700
800
500

Multi-level sensitivity adjustment.
There are 300 sensitivity levels (0 ~ 299).

Broadband detection technology provides high
selectivity and can detect ferrous, non-ferrous
and mixed metals.

Arched Metal Detector with integrated radiation monitoring system

Application area
Designed for accurate detection of metallic, radioactive and fissile objects and materials on the body and clothing of a person.

B2scan SD1000-RC-09

Technological features

- LED indication of detected items on the display of the control unit and side panels
- Adjustable number of detection zones: 6, 12 or 18 zones
- Sound and light alarm: adjustment of the length, volume and tone of the alarm
- Providing the required selectivity, operation in mixed, ferrous or non-ferrous metal detection modes
- Automatic interference compensation
- Protection against false alarms
- Two-level protection against unauthorized access: SW is password protected, the control unit is locked with a key
- 72 pre-installed selective detection programs, the ability to create your own programs
- Passage width: 760 mm, 820 mm, 1000 mm
- The minimum distance between detectors: 0.3 meters without the sync cable
- Ability to connect power and Ethernet cables, left, right and top of the metal detector
- « Stop/go» indicators on the front panel of the metal detector
- «Dry contacts» for connecting third-party equipment (turnstile, gateway, camera, etc.)
- Passage and alarm counters
- «Anti-throw» mode
- Built-in uninterruptible power supply for autonomous operation: optional
- Computer control module: the ability to connect to a computer via USB, Ethernet, Bluetooth
- Mobile application to control the metal detector from a smartphone or tablet
- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format
- Mains voltage: AC 190 V – 242 V, 50 Hz
- Signal frequency 7000-8999 Hz (adjustable)
- Power consumption: <70 W.
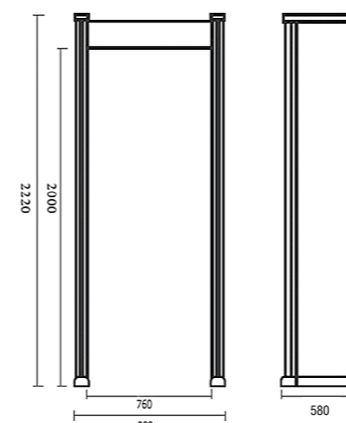
Metal detector dimensions

- Net weight: 72 kg
- External dimensions: 2220 mm (h) x 880 mm (w) x 580 mm (d)
- Inner dimensions: 2000 mm (h) x 760 mm (w) x 500 mm (d)
- Operating temperature: From 0 °C to +55 °C

Characteristics of the Radiation Monitoring Module RC-09

- LED indication of radioactive material detection on the control unit display
- Audible alarm for detection of radioactive materials
- The energy of gamma radiation detected by the device is from 0.05 to 3.0 MeV
- The frequency of false activation – no more than 0,001%
- Continuous operation – 24/7
- The change in sensitivity with a change in temperature within the operating conditions of use is no more than ±2%
- The change in sensitivity when changing the power supply voltage within the operating conditions of use is not more than ±2%

The equipment has passed mandatory and voluntary certification valid in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.

Intelligent arched metal detector

B2scan WMD100

The intelligent arched metal detector / IMDS, developed in collaboration with Huaton Technology Co. is a revolutionary system for the detection of dangerous metal objects. It is designed for faster screening of passing people, even with their backpacks, purses and bags, etc. for the detection of different prohibited metal objects, such as knives, firearms, etc.

"INTELLIGENT", is the typical characteristic relative to legacy arched metal detectors.

The metal detector is powered by Patented "Metal Classification Detection" technology. This allows the metal detector, with appropriate sensitivity settings, to display detected personal items without alarming, at the same time detect and classify prohibited metal objects and alarm only on them.

The intelligent arched metal detector consists of a patented system for detecting and classifying metal objects, a video camera, edge-computing embedded host with artificial intelligence technologies, a tablet with a monitor and a cloud control platform.

The metal detector is easily transportable and can be installed both outdoors and indoors.
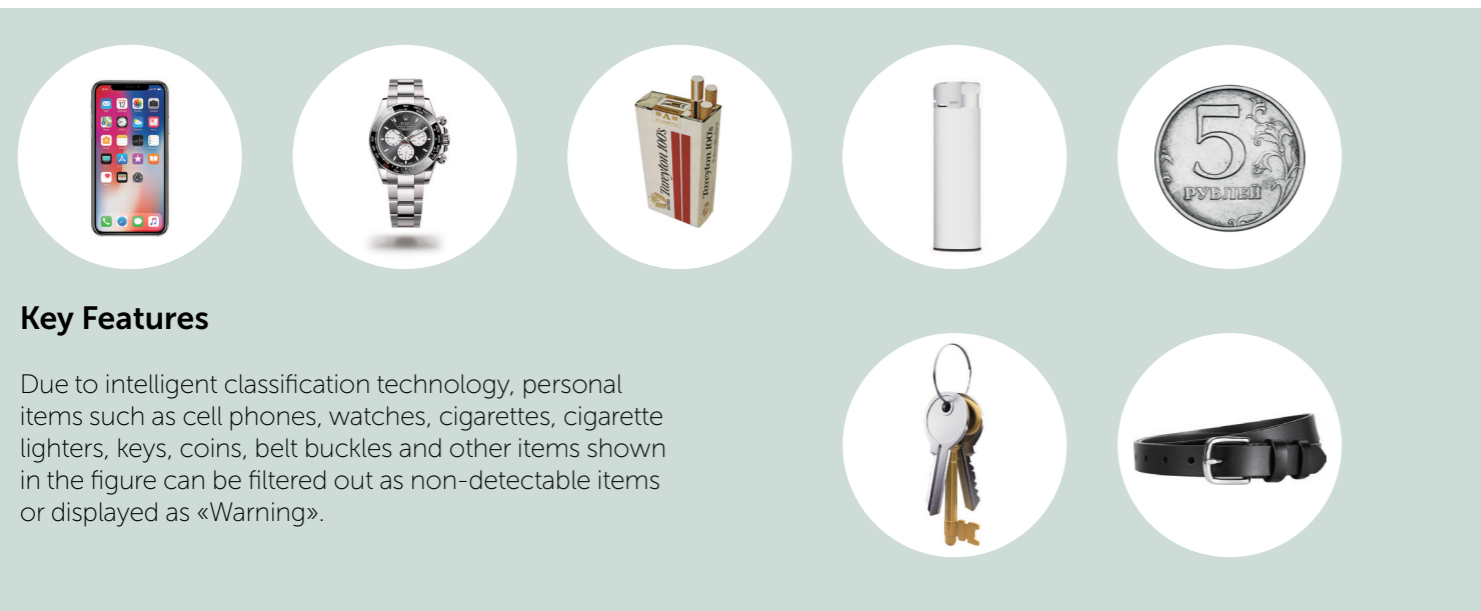
Key Features

Due to intelligent classification technology, personal items such as cell phones, watches, cigarettes, cigarette lighters, keys, coins, belt buckles and other items shown in the figure can be filtered out as non-detectable items or displayed as «Warning».
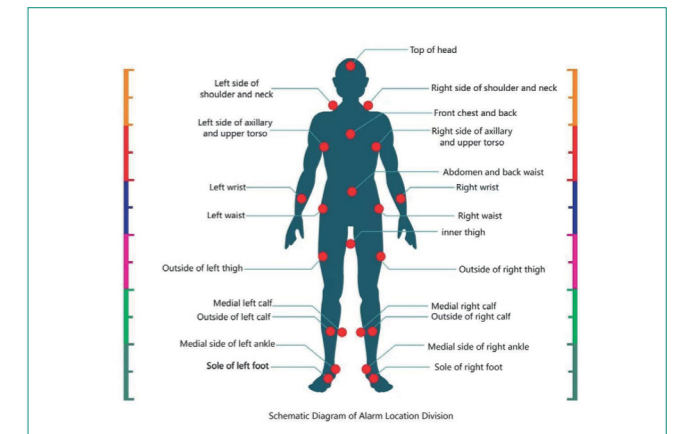
Weapon Contraband alarm based on metal classification detection and identification.

• Detected prohibited metal objects are identified and categorised into several categories. Information about the material and shape of the object is displayed on the tablet screen and/or sent to the control cloud platform.
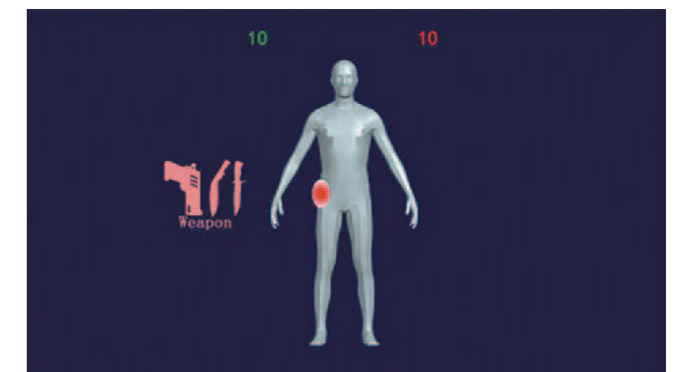
| Axe | Kitchen knife | Beer can | Aluminum tube | Iron rod wrapped in copper foil | Gun | Metal can | Belt bomb | Vest bomb |

High accuracy in detecting prohibited metal objects and low false alarm rate.

• The customer can modify the default security settings to suit their goals and objectives. There are three levels of security depending on the use case and objectives. The default setting is designed to detect firearms, knives with a blade length greater than 5 cm, and to avoid alarms on mobile phones, keys and other personal items. The number of false alarms for non-detectable items increases as the security level rises. At the maximum security level, this rate is no more than 5 %.

• Configured with 25 detection zones, the metal detector can not only identify the detection zone of a prohibited metal object, but also determine the exact location where the object is hidden - in the front or back of the body, on the inside of the thighs, foot soles, etc.

• Sound and light alarm notification, as well as an image of the shape and material and the location of the suspicious object are displayed as graphics and text on the tablet's display.

• Multi-zone alarm mode allows to simultaneously display in the interface all zones in which metal objects are detected.

Intelligent arched high precision metal detector

B2scan WMD200

The intelligent arched metal detector / IMDS, developed in collaboration with Huaton Technology Co. is a revolutionary system for the detection of dangerous metal objects. It is designed for faster screening of passing people, even with their backpacks, purses and bags, etc. for the detection of different prohibited metal objects, such as knives, firearms, etc.

"INTELLIGENT", is the typical characteristic relative to legacy arched metal detectors.

The metal detector is powered by Patented "Metal Classification Detection" technology. This allows the metal detector, with appropriate sensitivity settings, to display detected personal items without alarming, at the same time detect and classify prohibited metal objects and alarm only on them.

Key Features

NO ALARM

ALARM

High accuracy in detecting prohibited metal objects and low false alarm rate.

- The customer can modify the default security settings to suit their goals and objectives. There are three levels of security depending on the use case and objectives. The default setting is designed to detect firearms, knives with a blade length greater than 5 cm, and to avoid alarms on mobile phones, keys and other personal items. The number of false alarms for non-detectable items increases as the security level rises. At the maximum security level, this rate is no more than 5 %.

- Possibility to view real-time video, alarm information about detected metal objects on the image of the human body figure, including detection area, material and shape of suspicious objects, captured photo at the moment of passing through the metal detector, pass and alarm counter.

- The metal detector includes an embedded AI edge-computing host which supports alarm data collection and storage, photo and video recording,

- Configured with 10 detection zones, the metal detector can not only identify the detection zone of a prohibited metal object, but also determine the exact location where the object is hidden - in the front or back of the body, on the inside of the thighs, foot soles, etc.

- Sound and light alarm notification, as well as an image of the shape and material and the location of the suspicious object are displayed as graphics and text on the tablet's display.

- Changing the operating parameters of the metal detector by pressing one button. LCD display with touch panel for quick setup.

AI algorithms operation, communication with cloud storage system.

- The system configures one or two HD camera, supporting to display the real time video and photo capture of the passing person, with automatic compilation of the detection results.

- Alarm information can be sent in real time to a Security Operation Centre, tablet or mobile phone application, computer browser with cloud platform, video monitoring system, access control system, etc. Integration with third-party software is provided.

Intelligent arched cell phone detection system

B2scan WMD300

The intelligent arched metal detector / IMDS, developed in collaboration with Huaton Technology Co. is a revolutionary system for the detection of dangerous metal objects. It is designed for faster screening of passing people, even with their backpacks, purses and bags, etc. mainly for detection of various mobile devices such as cell phones, smart watches, fitness bracelets, wireless headphones, etc.
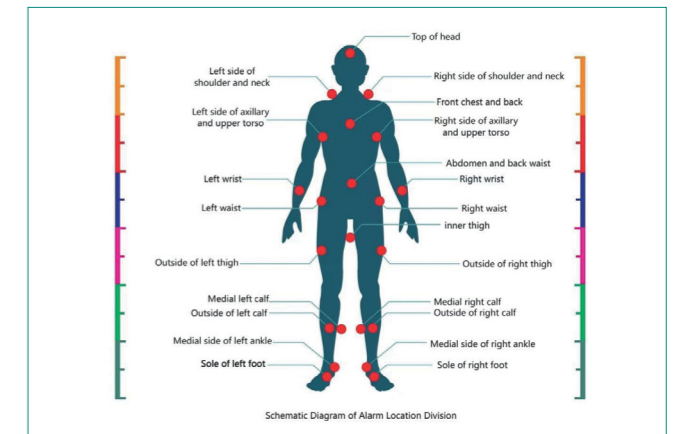
"INTELLIGENT", is the typical characteristic relative to legacy arched metal detectors.

The metal detector is powered by Patented "Metal Classification Detection" technology. This allows the metal detector, with appropriate sensitivity settings, to display detected personal items without alarming, at the same time detect and classify prohibited metal objects and alarm only on them.

Key Features

Due to intelligent classification technology, personal items such as cell phones, watches, cigarettes, cigarette lighters, keys, coins, belt buckles and other items shown in the figure can be filtered out as non-detectable items or displayed as «Warning».

Intelligent Classification Technology is the basis for the detection and identification of prohibited items.

- The detected prohibited metal objects are identified and classified into several groups. The prohibited item notification contains information about the material and shape of the metal object, is shown on the display and sent to the cloud control system.

- Changing the operating parameters of the metal detector by pressing one button. LCD display with touch panel for quick setup.

- High accuracy in detecting mobile devices such as cell phones, smart watches, headphones, etc. Low false alarm rate.

- Configured with 25 detection zones, the metal detector can not only identify the detection zone of a prohibited metal object, but also determine the exact location where the object is hidden - in the front or back of the body, on the inside of the thighs, foot soles, etc.

Possibility to view real-time video, alarm information about detected metal objects on the image of the human body figure, including detection area, material and shape of suspicious objects, captured photo at the moment of passing through the metal detector, pass and alarm counter.

The metal detector includes an embedded AI edge-computing host which supports alarm data collection and storage, photo and video recording, AI algorithms operation, communication with cloud storage system.

The system configures one or two HD camera, supporting to display the real time video and photo capture of the passing person, with automatic compilation of the detection results.
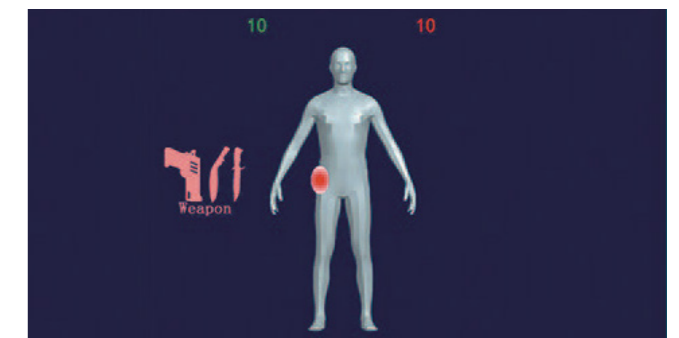
Sound and light alarm notification, as well as an image of the shape and material and the location of the suspicious object are displayed as graphics and text on the tablet's display.

Alarm information can be sent in real time to a Security Operation Centre, tablet or mobile phone application, computer browser with cloud platform, video monitoring system, access control system, etc. Integration with third-party software is provided. Multi-zone alarm mode allows to simultaneously display in the interface all zones in which metal objects are detected.

Intelligent weapon detection system

B2scan WMD500

The intelligent arched metal detector / IMDS, developed in collaboration with Huaton Technology Co. is a revolutionary system for the detection of dangerous metal objects. It is designed for faster screening of passing people, even with their backpacks, purses and bags, etc. mainly for detection of various mobile devices such as cell phones, smart watches, fitness bracelets, wireless headphones, etc.

"INTELLIGENT", is the typical characteristic relative to legacy arched metal detectors.

The metal detector is powered by Patented "Metal Classification Detection" technology. This allows the metal detector, with appropriate sensitivity settings, to display detected personal items without alarming, at the same time detect and classify prohibited metal objects and alarm only on them.

The intelligent arched metal detector consists of a patented system for detecting and classifying metal objects, a video camera, edge-computing embedded host with artificial intelligence technologies, a tablet with a monitor and a cloud control platform.

The inspection speed is 1 to 2 persons per second. The side panel display shows «Clear» if no threat is detected or «Object Detected» and the location of the detected object.

• The detected prohibited metal objects are identified and classified into several groups. The prohibited item notification contains information about the material and shape of the metal object, is shown on the display and sent to the cloud control system.
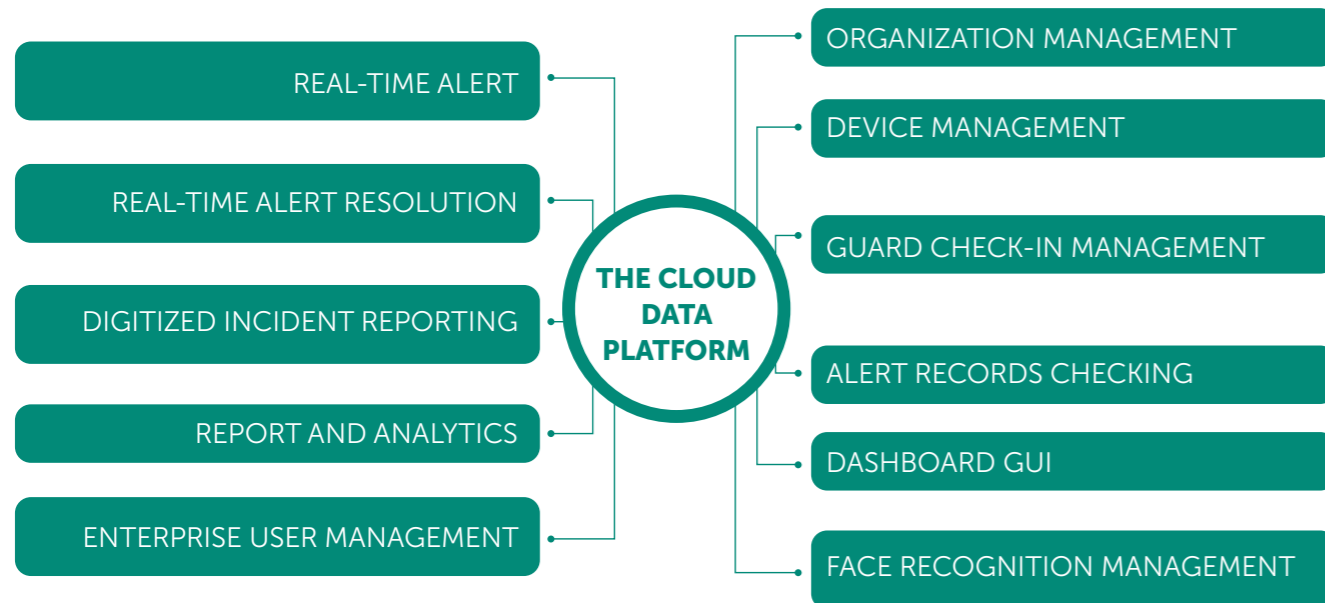

| Axe | Kitchen knife | Aluminum can | Aluminum tube | Iron rod wrapped in copper foil | Gun | Balloon | Belt bomb | Vest bomb |

Высокая точность обнаружения и низкий уровень ложных тревог.

• The customer can modify the default security settings to suit their goals and objectives. There are three levels of security depending on the use case and objectives. The default setting is designed to detect firearms, knives with a blade length greater than 5 cm, and to avoid alarms on mobile phones, keys and other personal items. The number of false alarms for non-detectable items increases as the security level rises. At the maximum security level, this rate is no more than 5 %.

• Configured with 25 detection zones, the metal detector can not only identify the detection zone of a prohibited metal object, but also determine the exact location where the object is hidden - in the front or back of the body, on the inside of the thighs, foot soles, etc

• Sound and light alarm notification, as well as an image of the shape and material and the location of the suspicious object are displayed as graphics and text on the tablet's display.

• Changing the operating parameters of the metal detector by pressing one button. LCD display with touch panel for quick setup.

Key Features

Due to intelligent classification technology, personal items such as cell phones, watches, cigarettes, cigarette lighters, keys, coins, belt buckles and other items shown in the figure can be filtered out as non-detectable items or displayed as «Warning».

- Support quick setting and parameter adjust via the "SET" LCD with touch panel.

- Through alarm monitoring tablet, the user can view the real-time video, alarm information on the body figure image including alarm zone, alarmed objects material and shape graphic, captured photo, pass and alarm count etc.

- The system configure an embedded AI edge-computing host which supports alarm data collection and storage, video input and AI algorithm running, connection with monitor tablet and cloud platform.

- The system configures one or two HD camera, supporting to display the real time video and capture the photo of passing person which will be bundled together with according detection result.

- Alert notifications can be sent in real-time to a Security Operation Center, monitor tablet or mobile phone App, computer-based browser from cloud platform, Video Management System (VMS), Access Control System, and more, the alert system can also be further integrated with other business software. Most clients choose to send proactive alerts after they have been confirmed by the guards running the system to a predetermined escalation path if someone walks in with a weapon contraband. The alert contains the location, date/time stamp, contraband material and shape, image and capture photo. Related connection devices can be linked with the system, such as Infrared temperature measurement CAM, HD surveillance IP camera, face recognition terminal and control gate etc.

- The system supports the control cloud platform.

- The edge-computing host transmits the alert data to Cloud Platform which offers analytics to help you understand your Weapon Detection System and gives you the flexibility to add 3rd parties connections.
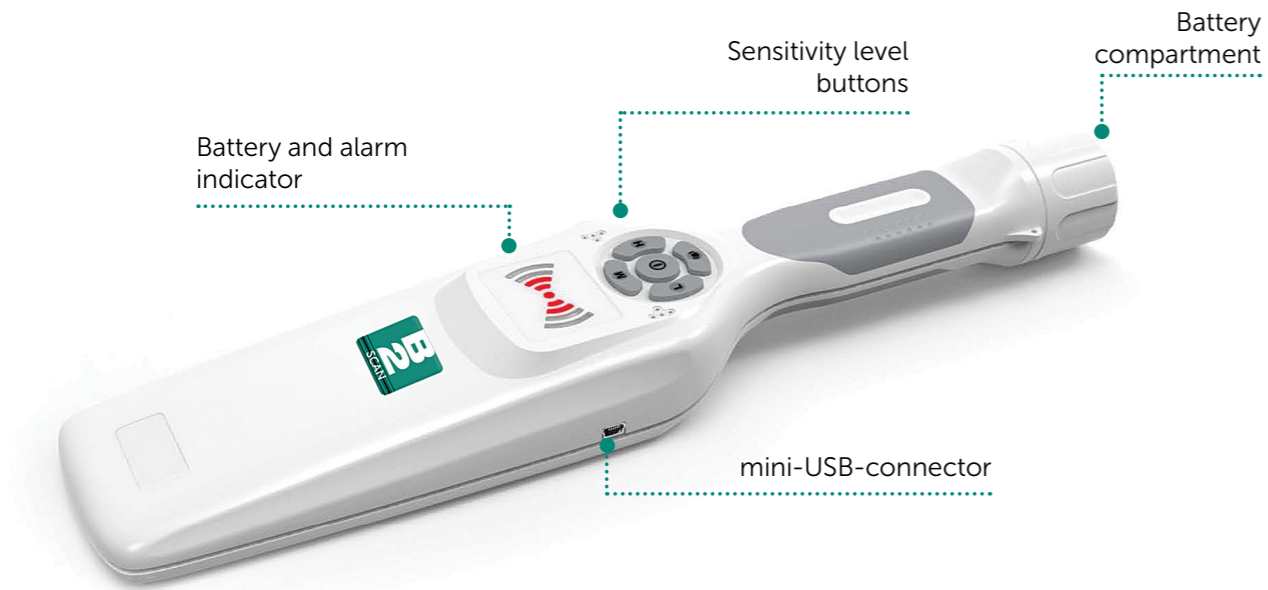
REAL-TIME ALERT

REAL-TIME ALERT RESOLUTION

DIGITIZED INCIDENT REPORTING

REPORT AND ANALYTICS

ENTERPRISE USER MANAGEMENT

THE CLOUD DATA PLATFORM

ORGANIZATION MANAGEMENT

DEVICE MANAGEMENT

GUARD CHECK-IN MANAGEMENT

ALERT RECORDS CHECKING

DASHBOARD GUI

FACE RECOGNITION MANAGEMENT

Specification

METAL DETECTION SYSTEM	Allowed Passing Speed	1-2 person(s) / second
	Detection Rate	Higher than 98%
	False Alarm Rate	Lower than 5%
	Pass Count	support
	Sensitivity Set	support
	Working Mode set	support
	Self-Diagnosis	support
	POST (Power-on-Self-Test)	support
	Setting LCD	7.0inch LCD with Touch Panel
	Physical	Physical Size: 2200 mm (H) x 850 mm (W) x 800 mm (D)
		Channel Size: Width 700 mm; Height 2000 mm; Depth 600 mm
		Weight: 120kg
		Power Supply Voltage: 110-220V; Frequency: 50/60HZ
	Processor	4cores ARM Cortex-A7; 2.0 TOPS NPU Processor
	RAM	2G
	Flash	16G
	O/S	Linux
EDGE-COMPUTING HOST	CAM	1/2 HD Cam, 1920 x 1080pixels
		FOV Diagonal: >90°, Horizon >75°, Vertical >60
	Monitor Tablet LCD	
	Interface	1 Ethernet RJ45
	Communication	4G (Optional)
	AI algorithm	Face Capture and Recognition
		Face Database Comparison
		3D Depth Analytics
	Capture Photo	Distance between two eyes is higher than 30 pixcel; Horizontal rotation angle of the face should be within ±30° Pitch angle within ±20°; tilt angle within ±30

B2
SCAN

HAND-HELD
METAL DETECTOR

Hand-Held Metal Detector
B2scan MS1000

Battery and alarm indicator

Sensitivity level buttons

Battery compartment

mini-USB-connector

B2scan MS1000 – is an advanced hand-held metal detector designed to ensure safety in public places.

The main scope of application – searching and detection of prohibited metal objects, ferrous and non-ferrous metals.

Strong noise immunity, high sensitivity. It is possible to connect headphones.

Automatic sleep mode and shutdown. Pressing any button or close location to metal automatically returns to the working state.

A dynamic beep changes the pitch depending on the mass of the object.

Indication:
• Audible
• Light
• Vibration

Technical parameters
• Overall dimensions: 360 (l) × 82,5 (w) × 42,5 (h) mm
• Weight: 270 g (without batteries / accumulators)
• Power supply: two AA type batteries (accumulators)
• Operating voltage: 2.0-3.5 V DC

Object detection distance
• PM type gun: 200 mm
• Steel plate 100 x 100 x 1 mm: 150 mm
• Knife: 150 mm

Hand-Held Metal Detector
B2scan MS2000

Speaker

Alarm light indicator

Operating mode switch

Rubber handle

Battery compartment cover

Battery charge indicator lights

Charger connector

Resistor for adjusting sensitivity

B2scan MS2000 – is an advanced hand-held metal detector designed to ensure safety in public places.

The main scope of application is the search and detection of prohibited metal objects, ferrous and non-ferrous metals.

Strong noise immunity, high sensitivity. Smooth adjustment of sensitivity.

Indication: sound, light, vibration.

Technical parameters
• Overall dimensions: 410 (l) × 80 (w) × 42 (h) mm
• Weight: 330 gr (without battery / accumulator)
• Operating voltage: 7.8-10 V DC
• Power: 6F22 battery

Object detection distance
• PM type gun: 200 mm
• Steel plate 100 x 100 x 1 mm: 150 mm
• Knife: 150 mm

B2
SCAN

VEHICLE INSPECTION
SYSTEMS

Mobile Under Vehicle
Inspection Systems

B2scan DD-M

Mobile under vehicle inspection system B2scan DD-M designed to inspect the bottom of a wide range of vehicles. It allows you quickly and accurately identify hidden and prohibited for import and export items that can be kept under vehicles. The under vehicle inspection system significantly reduces time for conducting inspection procedures, saves human resources, and due to its mobility it can be used in different conditions.
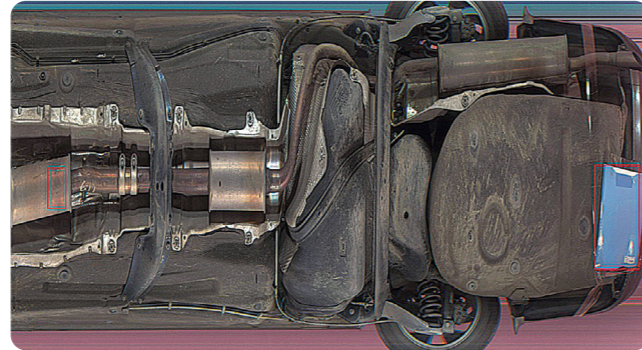
- Automatically save up to 100,000 images, and automatically delete outdated images
- Anti-fog system with bright LEDs, providing clear and complete image without any distortion
- Ability to scale, sort, select images by time and scan results
- Connection to PC, camera, turnstile (gate or barrier), collision warning systems
- Permissible speed of a passing vehicle:
  < 30 km/h with automatic license plate recognition system
  < 70 km/h without automatic license plate recognition system
- Simultaneous scanning in two directions - oncoming and in the direction of travel
- After processing the received image, it is possible to open archive images and compare current and historical data
- Remote control of the DD-M system up to a distance of 35 meters

Peculiarities

- Portable design, providing the possibility of transporting
- Assembly and installation of the mobile system in the shortest possible time
- Innovative linear scanning camera for all vehicle types up to 27,000 frames per second
- Intelligent recognition system for vehicle registration numbers
- Highlighting suspicious areas located under the bottom of vehicles

The equipment has passed mandatory and voluntary certification valid in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.

Technical parameters

Permissible load	Up to 30 tons
Effective field of view	170°
Image resolution	Up to 12000 x 2096 pixels
Width of scanned object	<4 m
Dust and moisture resistance class	IP68
Scanning device weight	16 kg
Scanning device dimensions	400 x 350 x 78 mm
Communication interface	RS232 / RS422
Temperature operation mode	-25 °C to + 60 °C
Storage temperature mode	-40 °C to + 75 °C
Power supply	AC 110-242 V, 50-60 Hz
LED backlight	100 W

Scanning module

Operator's workplace

Rubber Brake Retainers

Camera for license plate recognition

B2scan DD-S

Stationary Under Vehicle Inspection System B2scan DD-S designed to inspect the bottom of a wide range of vehicles. It allows to quickly and accurately identify hidden and prohibited to import and export items that can be hidden under the vehicles.

The under vehicle inspection system significantly reduces the time for conducting inspection procedures, saves human resources, built-in in the road surface and can be integrated into existing security systems.
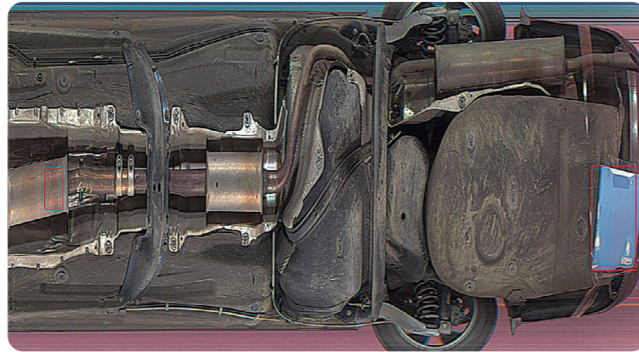
Peculiarities

- Installation and mounting in the roadbed
- Lack of braking strip, providing greater comfort for the passengers of the inspected vehicle
- There are 4 high-power LEDs providing better lighting for large cars
- Automatic pneumatic system eliminates camera misting and provides its heating
- Innovative linear scanning camera for all vehicle types up to 27,000 frames per second
- Intelligent recognition system for vehicle registration numbers
- Identification of suspicious areas under the bottom of the vehicle

- Automatically save up to 100,000 images, and automatically delete outdated images
- Anti-fog system with bright LEDs, providing clear and complete image without any distortion
- Ability to scale, sort, select images by time and scan results
- Connection to PC, camera, turnstile (gate or barrier), collision avoidance system
- Permissible speed of a passing vehicle:
  < 30 km/h with automatic license plate recognition system
  < 70 km/h without automatic license plate recognition system
- Simultaneous scanning in two directions-oncoming and in the direction of travel
- After processing the received image, it is possible to open archive images and compare current and historical data
- Operator's workplace can be located in any comfortable place.

The equipment has passed mandatory and voluntary certification valid in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.


Technical parameters

Permissible load	Up to 50 tons
Effective field of view	178°
Image resolution	12000 x 2096 pixels
Width of the scanned object	<4m
IP protection class	IP68
Weight of scanning device	180 kg
Scanning device dimensions	1200 x 350 x 210 mm
Communication interface	RS232 / RS422
Operating temperature	-40°C to + 60°C
Power supply	AC 110-242 V, 50-60 Hz
Led lighting	200 W

Electrical cabinet

License plate recognition camera

Scanning module

Operator's workplace

B2 SCAN
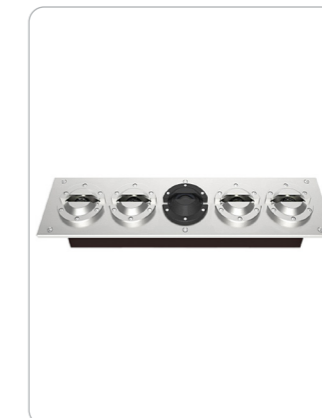
RADIO WAVE SCANNER

Radio wave
scanner

B2secure HMS-2001

Application area

Designed for non-contact inspection and accurate detection of foreign objects on the body and clothing of the inspected person

Technological features

- Safe technology of active millimeter wave
- Detection of metallic and non-metallic objects, including caustic, flammable and explosive liquids and gels
- Recognition Rate increased up to 95%
- High-speed visualization system: up to 400 people per hour
- High efficiency of inspection: objects of any material can be quickly displayed with high resolution
- 3D-visualization
- Complete privacy protection of inspected persons: when scanning the human body, the ethical privacy problem is completely solved - the system blurs the human face and intimate places and marks only suspicious objects
- «Virtual body» display technology
- The radiation dose per scan is less than 1/1000 of a standard mobile phone signal
- Data transmission over a local network using TCP / IP protocols
- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format
- Mains voltage: AC 210 V – 242 V, 50/60 Hz
- Radiation power: ≤1 mW/cm²
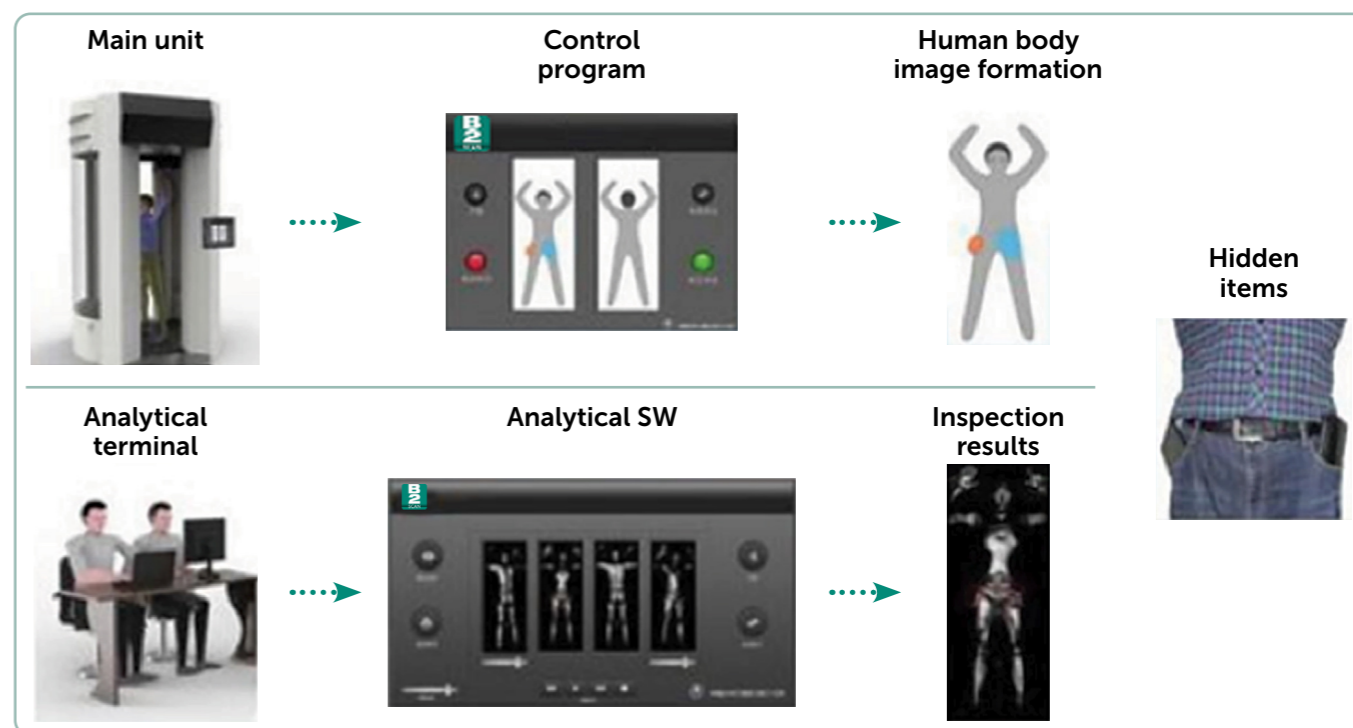- Power consumption: <2 kW
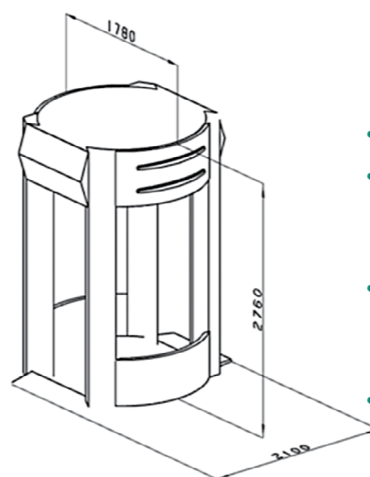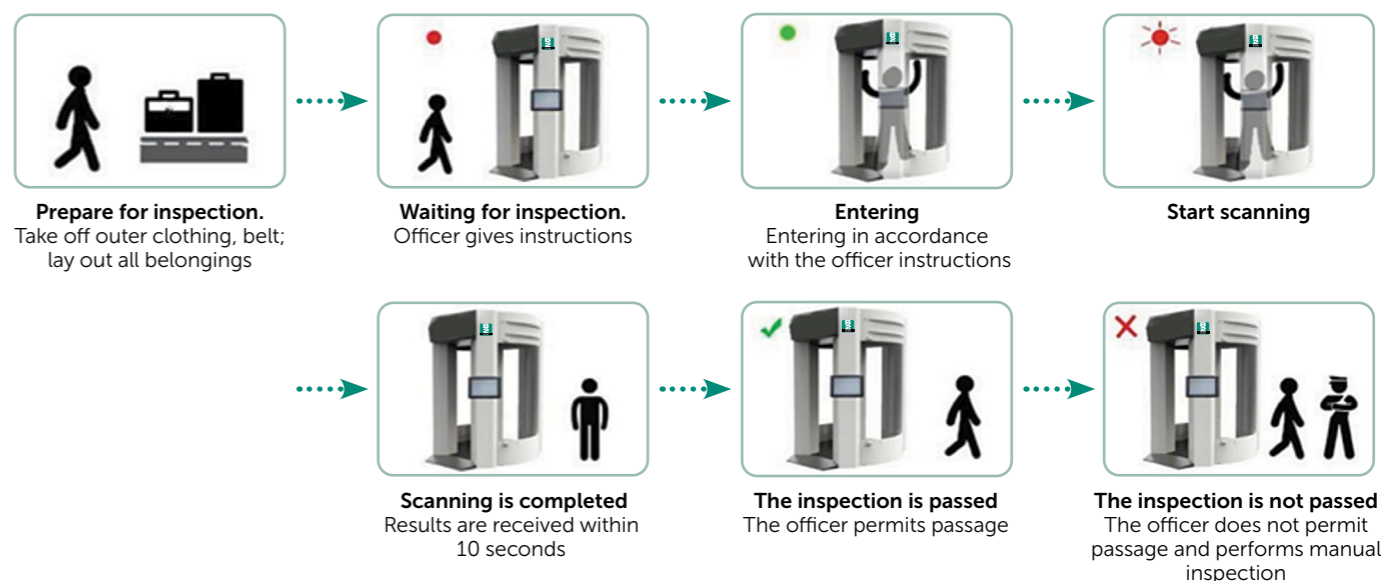
Scanner dimensions
- Net weight: 830 kg
- External dimensions: 2100 mm (d) × 1780 mm (w) × 2760 mm (h)
- Internal dimensions: 2100 mm (h) × 500 mm (w) × 2100 mm (d)
- Operating temperature: From 0 °C to + 45 °C

The scheme of system operation

Main unit

Control program

Human body image formation

Hidden items

Analytical terminal

Analytical SW

Inspection results

Inspection process

Prepare for inspection. Take off outer clothing, belt; lay out all belongings

Waiting for inspection. Officer gives instructions

Entering Entering in accordance with the officer instructions

Start scanning

Scanning is completed Results are received within 10 seconds

The inspection is passed The officer permits passage

The inspection is not passed The officer does not permit passage and performs manual inspection
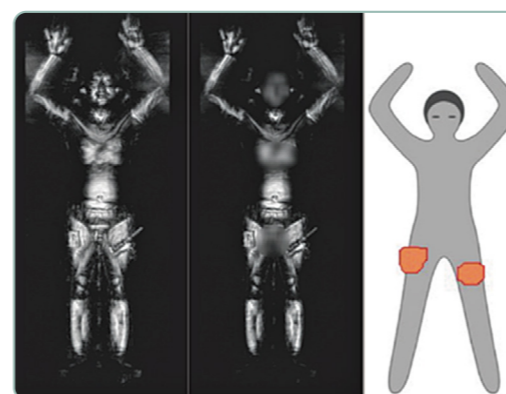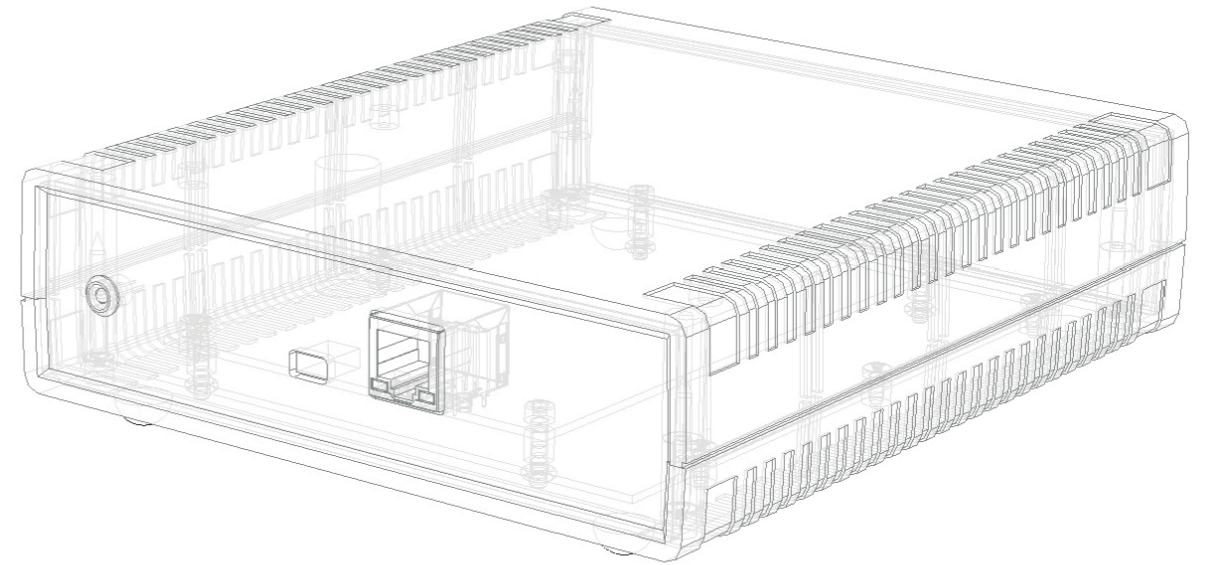
Privacy system

INTERACTION STATION WITH THE SYSTEM OF COLLECTING TECHNICAL MONITORING AND CONTROL RESULTS (SC TMC)

B2 SCAN

Interaction Station with the system of collecting technical monitoring and control results (SC TMC)

B2scan CK-1

B2scan CK-1 – is a specially developed product designed to ensure interaction of technical systems and inspection tools with the system for collecting technical monitoring and control results (SC TMC) when receiving and transmitting information to the specified system over a local Ethernet network using the TCP / IP Protocol stack, as well as for exchanging information with the CC TMK using unified data transfer protocols and a metadata format developed on the basis of XML.

B2scan CK-1 allows you to increase the level of technical inspection systems of **any manufacturer** that ensure security at transport infrastructure facilities to meet the requirements approved by the Decree of the Government of the Russian Federation of September 26, 2016 **No. 969** (paragraphs d, e)*.

*Compliance with these requirements is necessary to pass certification tests and obtain a Certificate of Conformity of technical means ensuring transport safety to the requirements to their functional features.

The equipment has passed mandatory and voluntary certification valid in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.

Technical Parameters
- **Overall dimensions:** 180 (l) × 156 (w) × 50.6 (h) mm
- **Weight:** 440 gr
- **Supply voltage:** 5 V DC
- Power consumption 1.5 VA
- Operating temperature -25°C + 55°C

Integrated External and Internal Interfaces:
- Ethernet Data Ports (1/2 pcs. depending on the technical means of ensuring transport safety)
- Engineering port of programming and USB 2.0 external power supply
- Internal Bluetooth internal adapter with support for up to 10 devices
- External Bluetooth adapters for portable devices (optional)
- Micro SD slot for saving the event log
- Programmable Dry Contact connector galv anically isolated pair for connecting external signals
- Operating status indicator

Application Area of B2scan CK-1 (technical systems and means of inspection):
- Metal Detection:
  Stationary metal detectors;
  Hand held metal detectors
- Introscopy:
  Stationary X-ray television units;
  Mobile and portable X-raytelevision units;
  Specialized X-ray systems for human inspection
- Gas analysis:
  Stationary gas analyzers;
  Portable gas analyzers
- Radiation control:
  Pedestrian radiation monitors;
  Portal radiation monitors;
  Transport radiation monitors
- Neutron sensing:
  Neutron radiation detectors;
  Fast neutron sensing units
- Detection of vapors and traces of explosives substances:
  Stationary explosives detectors EE;
  Portable explosives detectors EE
- and other technical systems and means of ensuring transport security.

B2
SCAN

X-RAY TELEVISION
SYSTEMS

B2scan 5030B

B2scan 5030B is an advanced dual-energy X-ray inspection system of hand luggage. With tunnel dimensions of 505 mm × 320 mm (W × H) it is ideal for screening hand luggage in hotels, ships, museums, offices, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 5030B** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 5030B** X-ray unit has the function of automatically highlighting suspicious areas of the image.
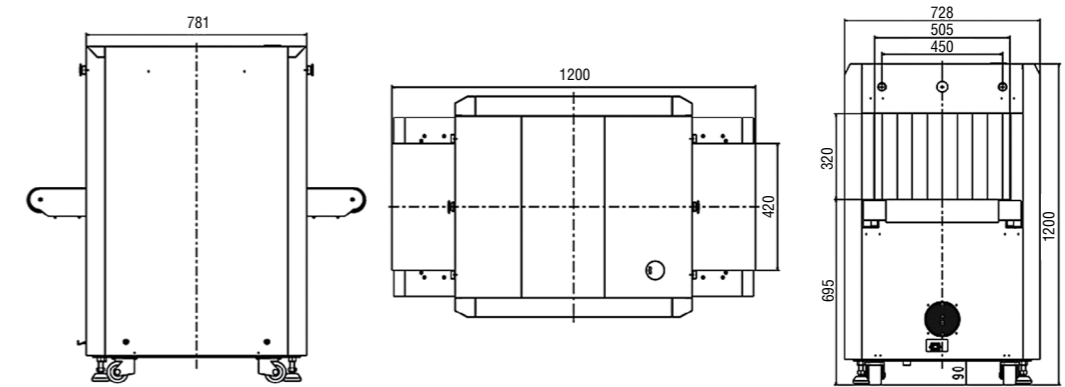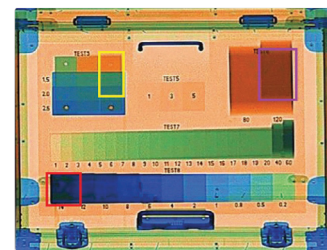
Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 32 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- Function for automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format

Equipment drawing

General specifications		Operating characteristics	
Tunnel dimensions	505 mm (W) × 320 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	32 mm
Conveyor height	695 mm		
Maximum load capacity	150 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 μSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	1200 mm (L) x 728 mm (W) x 1200 mm (H) / 300 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	0.5 kVA

B2scan 5030T

B2scan 5030T is an advanced dual-energy X-ray inspection of hand luggage. With tunnel dimensions of 530 mm × 330 mm (W × H) it is ideal for screening hand luggage in hotels, ships, museums, offices, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 5030T** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 5030T** X-ray imaging unit has the function of automatically highlighting suspicious areas of the image.
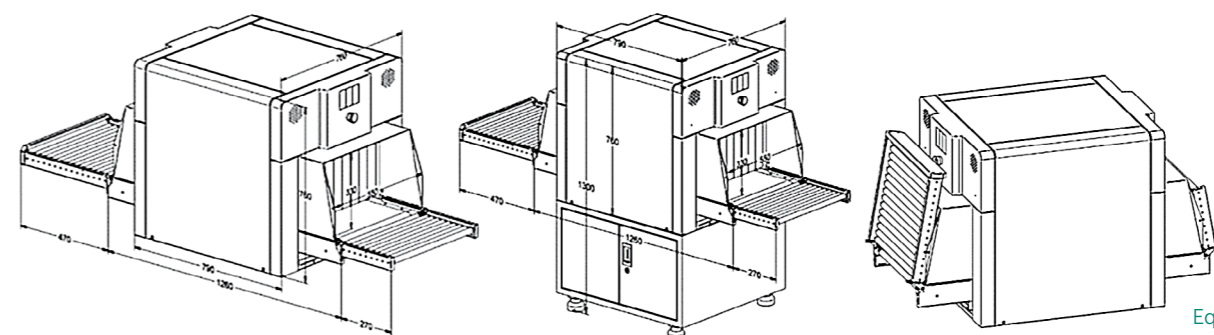
Equipment drawing
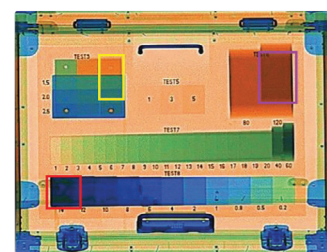
Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 14 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatically highlighting suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Additional options for X-ray TV systems are available (page 84)*.

| General specifications		Operating characteristics	
Tunnel dimensions	530 mm (W) × 330 mm (H)	Wire resolution	40 AWG / 0.08mm
Conveyor speed	0.2 m/s	Steel penetration	14 mm
Conveyor height	160 mm / 710 mm (with a pedestal)		
Maximum load capacity	120 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	1260 mm (L) × 760 mm (W) × 760 mm (H) / 160 kg 1980 mm (L) × 760 mm (W) × 1300 mm (H) / 210 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz + 3 Hz
		Power consumption	0.6 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.

Technical specifications and product configuration are subject to change by the manufacturer without notice.
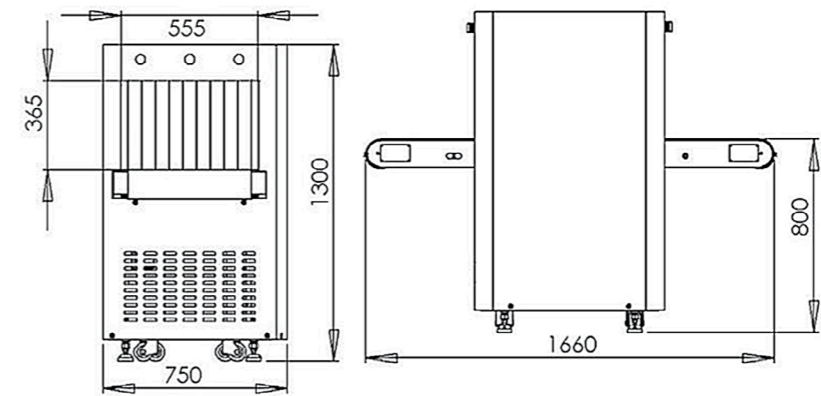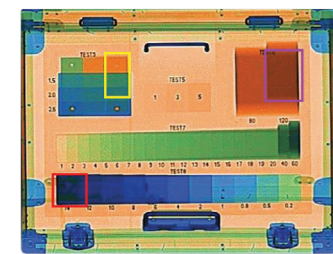
B2scan 5536B

B2scan 5536B is an advanced dual-energy X-ray inspection of hand luggage and baggage. With tunnel dimensions of 555 mm × 365 mm (W × H) it is ideal for screening hand luggage at airports, railway stations, customs posts, ports, etc

Along with unmatched ergonomics, reliability and safety, **B2scan 5536B** X-ray television systems provide excellent image quality and improved material classification.

B2scan 5536B X-ray television unit has the function of automatically highlighting suspicious areas of the image.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatically highlighting suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Additional options for X-ray TV systems are available (page 84)*.

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Equipment drawing

| General specifications		Operating characteristics	
Tunnel dimensions	555 mm (W) × 365 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	800 mm		
Maximum load capacity	150 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5μSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	1660 mm (L) x 750 mm (W) x 1300 mm (H) / 400 kg
Memory capacity	Up to 100 000 images	Storage temperature	–40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	0.6 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.

Technical specifications and product configuration are subject to change by the manufacturer without notice.
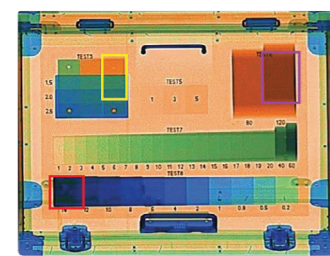
B2scan 6040B

B2scan 6040B is an advanced dual-energy X-ray inspection of hand luggage and baggage. With tunnel dimensions of 625 mm × 425 mm (W × H) it is ideal for screening hand luggage and baggage at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety B2scan 6040B X-ray television systems provide excellent image quality and improved material classification.

The B2scan 6040B X-ray unit has the function of automatically highlighting suspicious image areas.
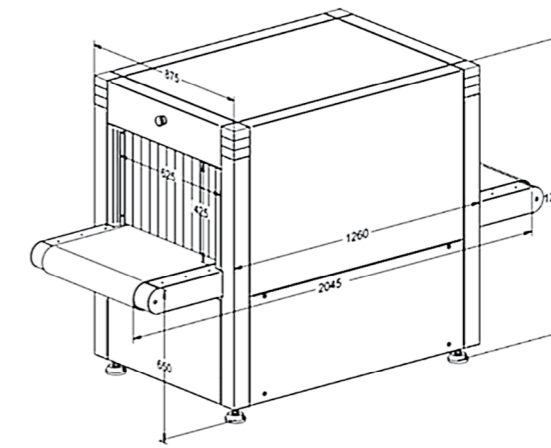
Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatically highlighting suspicious image areas

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format

Equipment drawing

General specifications		Operating characteristics	
Tunnel dimensions	625 mm (W) × 425 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	650 mm		
Maximum load capacity	160 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	2045 mm (L) x 875 mm (W) x 1255 mm (H) / 475 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz + 3 Hz
		Power consumption	0.6 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.

Technical specifications and product configuration are subject to change by the manufacturer without notice.
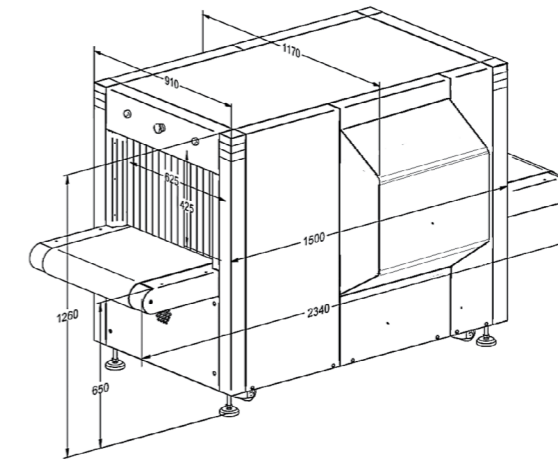
B2scan 6040D

B2scan 6040D is an advanced dual-energy X-ray inspection system of hand luggage and baggage Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 625 mm × 425 mm (W × H) it is ideal for screening hand luggage and baggage at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 6040D** X-ray television systems provide excellent image quality and improved material classification.
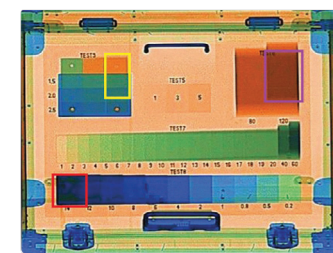
Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and, contraband hidden under the overlapping zone are more likely to be detected.

B2scan 6040D X-ray unit has the function of automatically highlighting suspicious areas of the image.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatically highlighting suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Equipment drawing

General specifications		Operating characteristics	
Tunnel dimensions	625 mm (W) × 425 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	650 mm		
Maximum load capacity	160 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	2340 mm (L) × 1170 mm (W) × 1260 mm (H) / 750 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz + 3 Hz
		Power consumption	1.2 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
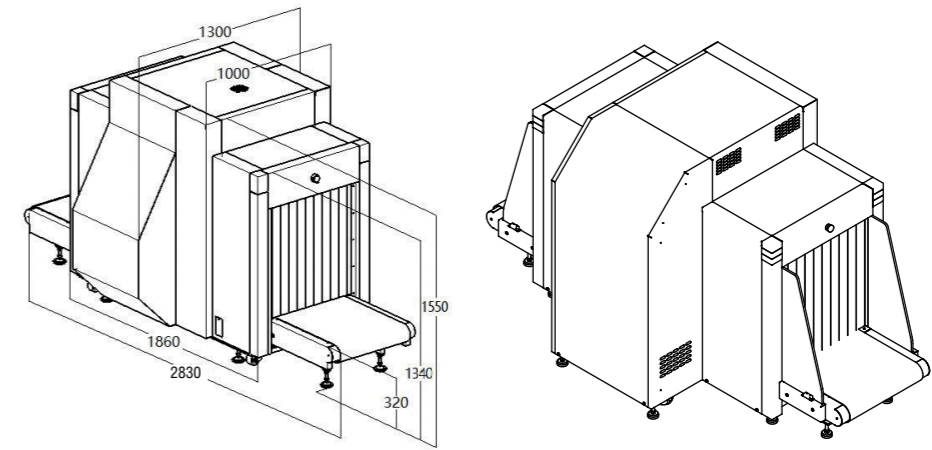
B2scan 6080D

B2scan 6080D it is an advanced dual-energy X-ray inspection system for hand luggage, baggage and cargo. Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 655 mm x 755 mm (W x H) it is ideal for screening hand luggage, baggage and cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 6080D** X-ray television systems provide excellent image quality and improved material classification.
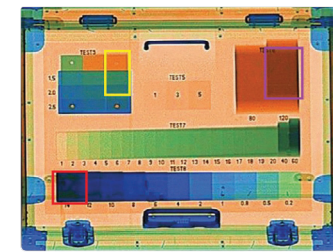
Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and contraband hidden under the overlapping zone are more likely to be detected.

The **B2scan 6080D** X-ray camera has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas of the image and alerting

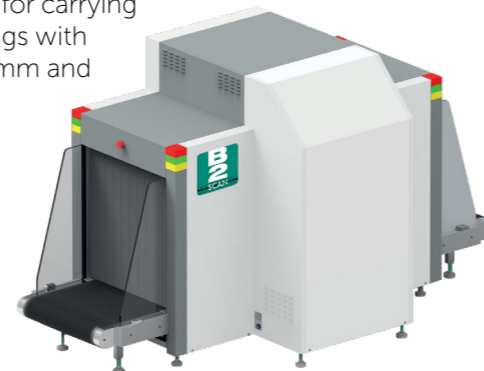Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

• High image quality with 40 AWG wire resolution and 34 mm steel penetration

• The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

• The function of automatic highlighting of suspicious areas of the image

• TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

• The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

• Data transmission over a local network using TCP / IP protocols

• Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

Additional option
• Modular design for carrying through openings with a width of 800 mm and more.

Additional options for X-ray TV systems are available (page 84)*.

Equipment drawing

| General specifications		Operating characteristics	
Tunnel dimensions	655 mm (W) x 755 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	320 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	2830 (L) × 1300 mm (W) × 1550 mm (H) / 850 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	0.9 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
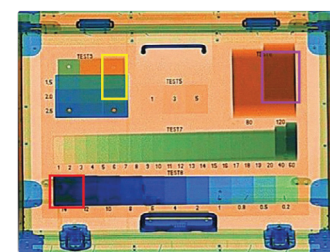
B2scan 6080S

B2scan 6080S it is an advanced dual-energy X-ray inspection system for hand luggage inspection. With tunnel dimensions of 615 mm x 815 mm (W x H) it is ideal for screening hand luggage and baggage at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 6080S** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 6080S** X-ray unit has the function of automatically highlighting suspicious areas of the image.
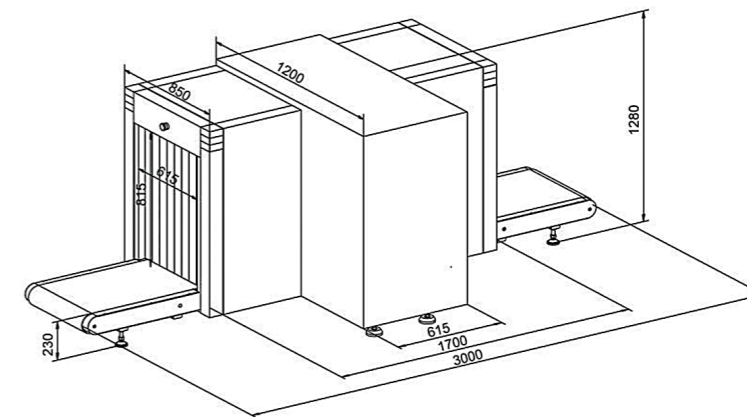
Equipment drawing

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- Function for automatic selection of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Additional options for X-ray TV systems are available (page 84)*.

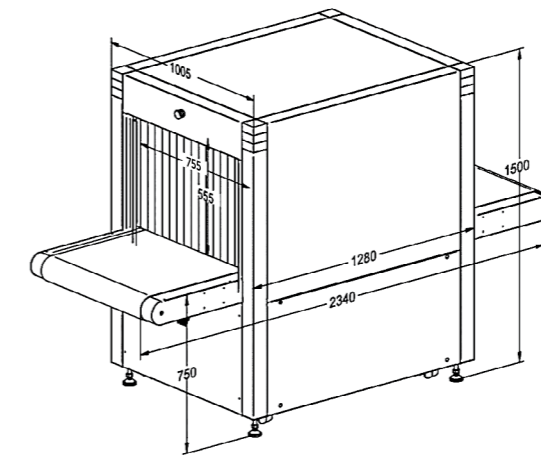| General specifications		Operating characteristics	
Tunnel dimensions	615 mm (W) x 815 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	230 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 x 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	3000 mm (L) x 1200 mm (W) x 1280 mm (H) / 750 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	0.7 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.
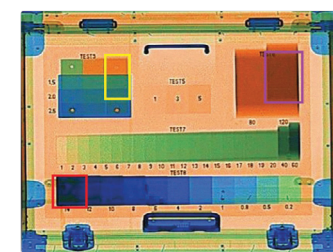
B2scan 7555B

B2scan 7555B it is an advanced dual-energy X-ray inspection system for hand luggage and baggage. With tunnel dimensions of 755 mm x 555 mm (W x H) it is ideal for screening hand luggage and baggage at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 7555B** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 7555B X**-ray unit has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas of the image and alerting

Improved classification of materials:
orange – organic, blue – metals,
green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- Function for automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Equipment
drawing

General specifications		Operating characteristics	
Tunnel dimensions	755 mm (W) x 555 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	750 mm		
Maximum load capacity	160 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 x 1080
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	2340 mm (L) x 1005 mm (W) x 1500 mm (H) / 575 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	0.8 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
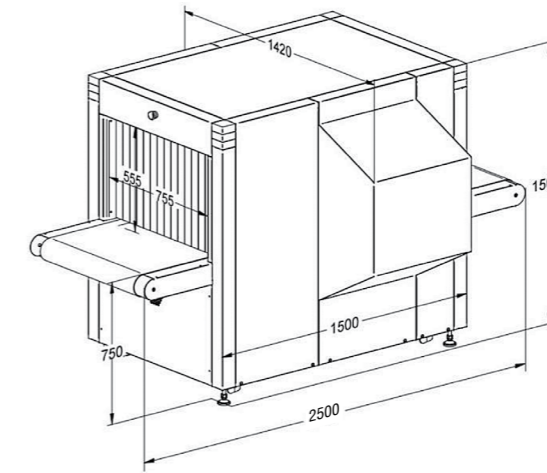
B2scan 7555D

B2scan 7555D it is an advanced dual-energy X-ray inspection system for hand luggage and baggage. Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 755 mm × 555 mm (W × H) it is ideal for screening hand luggage and baggage at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 7555D** X-ray television systems provide excellent image quality and improved material classification.
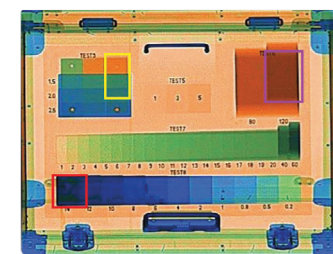
Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and contraband hidden under the overlapping zone are more likely to be detected.

The **B2scan 7555D** X-ray camera has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas
of the image and alerting

Improved classification of materials:
orange – organic, blue – metals,
green – mixed materials

Technological features

- High image quality with 40 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- Function for automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

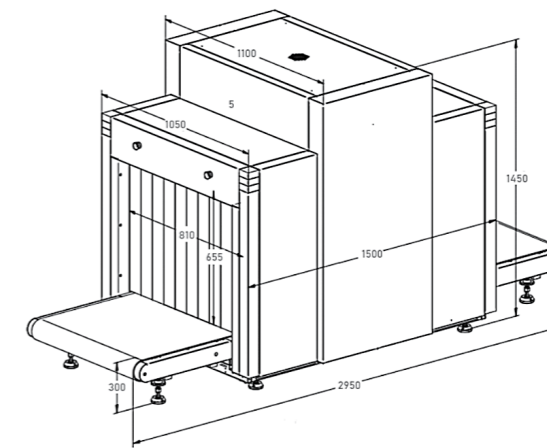| General specifications		Operating characteristics	
Tunnel dimensions	755 mm (W) x 555 mm (H)	Wire resolution	40 AWG / 0.08 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	750 mm		
Maximum load capacity	160 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 μSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	2500 mm (L) × 1420 mm (W) × 1500 mm (H) / 850 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.2 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
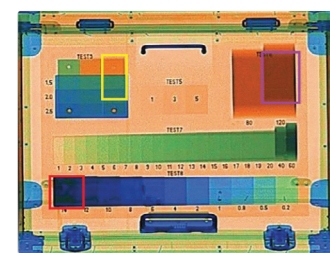
B2scan 8065T

B2scan 8065T it is an advanced dual-energy X-ray inspection system for hand luggage. With tunnel dimensions of 810 mm × 655 mm (W × H) it is ideal for screening hand luggage in hotels, museums, offices, ships, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 8065T** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 8065T** X-Ray TV unit has the function of automatically highlighting suspicious areas of the image.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 38 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- Function for automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata format.

Equipment drawing

General specifications		Operating characteristics	
Tunnel dimensions	810 mm (W) x 655 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	300 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	2950 mm (L) x 1100 mm (W) x 1450 mm (H) / 750 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.0 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
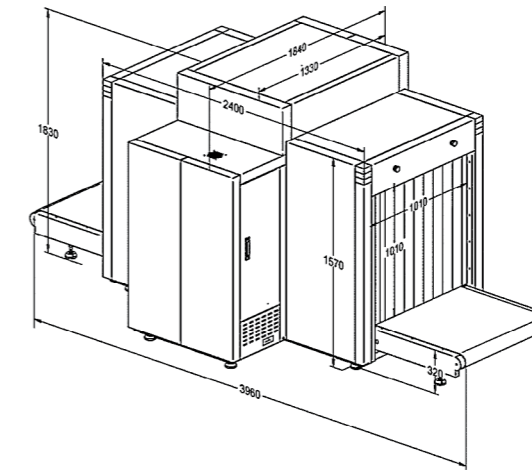
B2scan 100100D

B2scan 100100D it is an advanced dual-energy X-ray inspection system for hand luggage, baggage and cargo. Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 1010 mm × 1010 mm (W × H) it is ideal for screening hand luggage, baggage and cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 100100D** X-ray television systems provide excellent image quality and improved material classification.
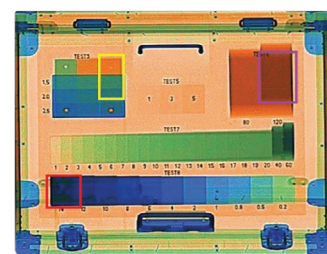
Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and contraband hidden under the overlapping zone are more likely to be detected.

The **B2scan 100100D** X-ray television unit has the function of automatic highlighting of suspicious areas of the image.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Equipment drawing

Technological features

• High image quality with 38 AWG wire resolution and 34 mm steel penetration

• The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

• The function of automatic highlighting of suspicious areas of the image

• TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

• The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

• The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

• Data transmission over a local network using TCP / IP protocols

• Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

Additional options for X-ray TV systems are available (page 84)*.

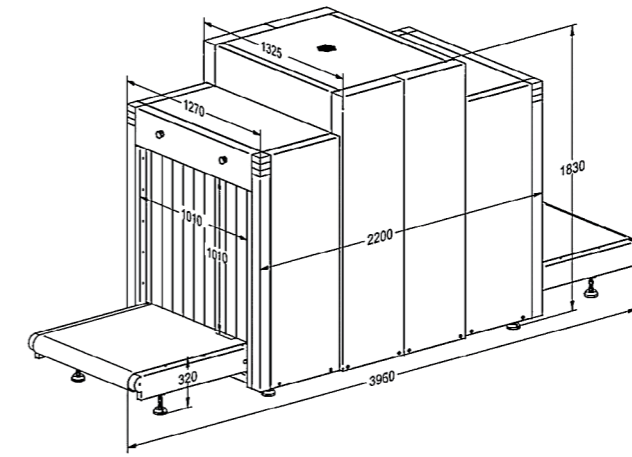| General specifications		Operating characteristics	
Tunnel dimensions	1010 mm (W) x 1010 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	320 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	3960 mm (L) x 1840 mm (W) x 1830 mm (H) / 1300 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz + 3 Hz
		Power consumption	1.5 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
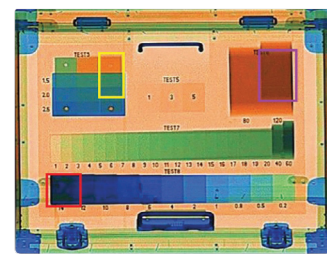
B2scan 100100T

B2scan 100100T it is an advanced dual-energy X-ray inspection system for hand luggage, baggage and cargo. With tunnel dimensions of 1010 mm × 1010 mm (W × H) it is ideal for inspection of hand luggage, baggage and cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 100100T** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 100100T** X-ray television unit has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Equipment drawing

Technological features

• High image quality with 38 AWG wire resolution and 34 mm steel penetration

• The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

• The function of automatic highlighting of suspicious areas of the image

• TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

• The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

• The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

• Data transmission over a local network using TCP / IP protocols

• Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

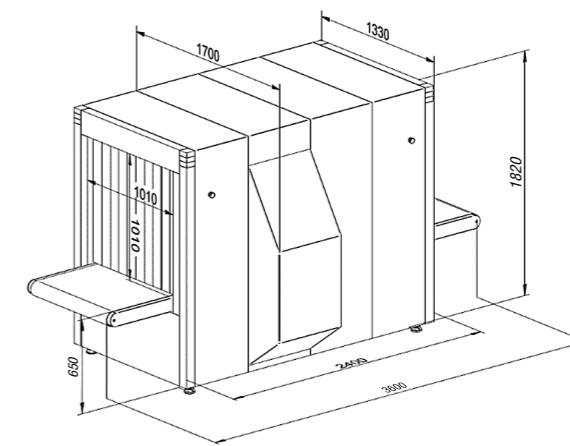Additional options for X-ray TV systems are available (page 84)*.

General specifications		Operating characteristics	
Tunnel dimensions	1010 mm (W) x 1010 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	320 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	3960 mm (L) × 1325 mm (W) × 1830 mm (H) / 1050 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.0 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
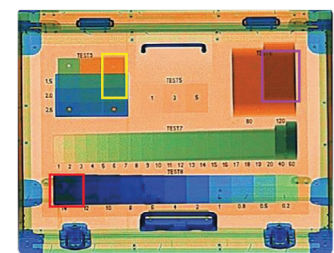
B2scan 100100DB

B2scan 100100DB it is an advanced dual-energy X-ray inspection system for hand luggage baggage and cargo. Being equipped with two X-ray generators it provides the display of the inspected object in two projections. With tunnel dimensions of 1010 mm × 1010 mm (W × H) it is ideal for screening hand luggage, baggage and cargo at airports, railway stations, customs posts, ports, etc. Conveyor top position makes it an ideal model for integration into baggage and cargo handling systems (BHS) at transport infrastructure facilities.

Along with unmatched ergonomics, reliability and safety, **B2scan 100100DB** X-ray television systems provide excellent image quality and improved material classification.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Equipment drawing

Technological features

- High image quality with 38 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata.

General specifications		Operating characteristics	
Tunnel dimensions	1010 mm (W) x 1010 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	650 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	3600 mm (L) × 1700 mm (W) × 1820 mm (H) / 1200 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.5 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.
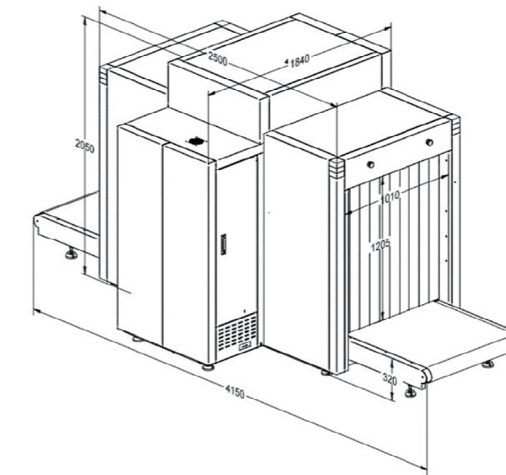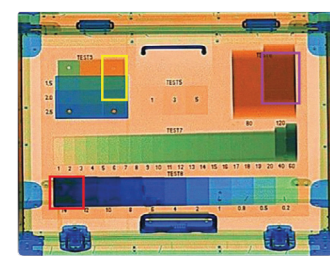
B2scan 100120D

B2scan 100120D it is an advanced dual-energy X-ray inspection system for hand luggage, baggage and cargo. Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 1010 mm × 1205 mm (W × H) it is ideal for screening hand lug-gage, baggage and cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 100120D** X-ray television systems provide excellent image quality and improved material classification.

Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and, contraband hidden under the overlapping zone are more likely to be detected.

The **B2scan 100120D** X-ray TV unit has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

• High image quality with 38 AWG wire resolution and 34 mm steel penetration

• The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

• The function of automatic highlighting of suspicious areas of the image

• TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

• The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

• The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

• Data transmission over a local network using TCP / IP protocols

• Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

Equipment drawing

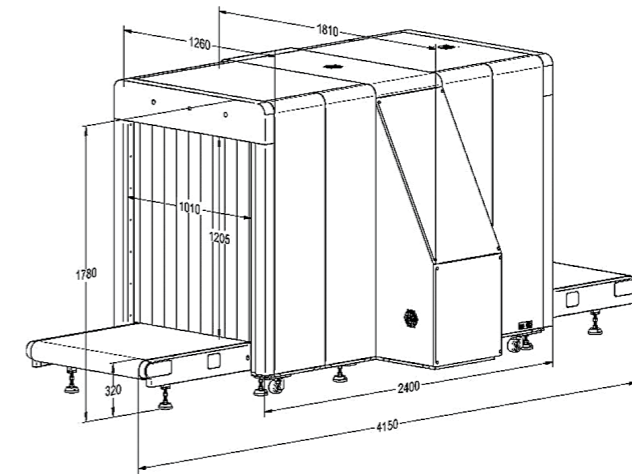| General specifications		Operating characteristics	
Tunnel dimensions	1010 mm (W) x 1205 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	320 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 μSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	4150 mm (L) × 1840 mm (W) × 2050 mm (H) / 1400 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.5 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation. Technical specifications and product configuration are subject to change by the manufacturer without notice.
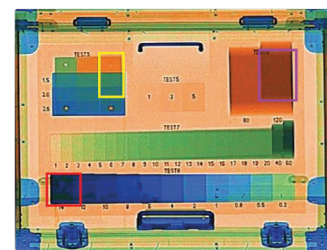
B2scan 100120S

B2scan 100120S it is an advanced dual-energy X-ray inspection system for baggage and cargo. With tunnel dimensions of 1010 mm × 1205 mm (W × H) it is ideal for screening catering trolleys, baggage and cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 100120S** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 100120S** X-ray television unit has the function of automatic highlighting of suspicious image areas.

Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Equipment drawing

Technological features

- High image quality with 38 AWG wire resolution and 34 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

General specifications		Operating characteristics	
Tunnel dimensions	1010 mm (W) x 1205 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	34 mm
Conveyor height	320 mm		
Maximum load capacity	200 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	4150 mm (L) × 1810 mm (W) × 1780 mm (H) / 1400 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	1.5 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.

Technical specifications and product configuration are subject to change by the manufacturer without notice.
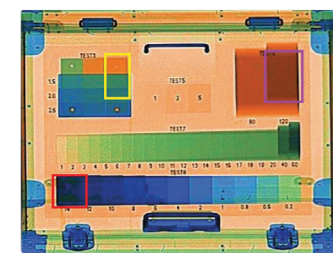
B2scan 150180D

B2scan 150180D it is an advanced dual-energy X-ray inspection system for cargo. Being equipped with two X-ray generators, it provides the display of the inspected object in two projections. With tunnel dimensions of 1540 mm x 1820 mm (W x H) it is ideal for screening cargo at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 150180D** X-ray television systems provide excellent image quality and improved material classification.

Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and contraband hidden under the overlapping zone are more likely to be detected.

B2scan 150180D X-ray TV unit has the function of automatic highlighting of suspicious areas of the image.
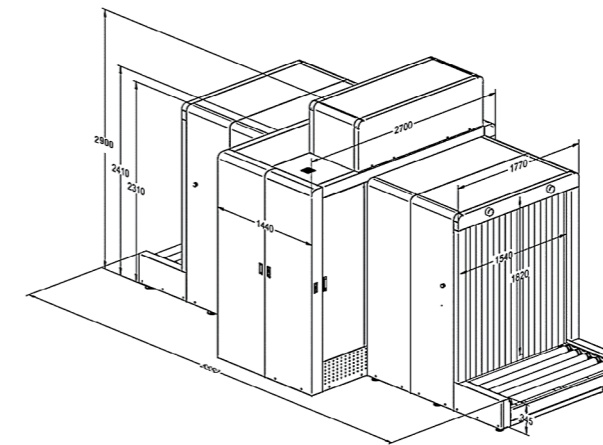
Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Equipment drawing

Technological features

- High image quality with 38 AWG wire resolution and 48 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata.

General specifications		Operating characteristics	
Tunnel dimensions	1540 mm (W) x 1820 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.2 m/s	Steel penetration	48 mm
Conveyor height	345 mm		
Maximum load capacity	2500 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 x 1080
Image processing system		**Health and safety**	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	**Installation data**	
Image return	Viewing previous images	Dimensions / weight	5550 mm (L) x 2700 mm (W) x 2900 mm (H) / 3500 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	3.5 kVA

B2scan 150180S

B2scan 150180S it is an advanced dual-energy X-ray inspection system for cargo. With tunnel dimensions of 1550 mm × 1800 mm (W × H) it is ideal for cargo inspection at airports, railway stations, customs posts, ports, etc.

Along with unmatched ergonomics, reliability and safety, **B2scan 150180S** X-ray television systems provide excellent image quality and improved material classification.

The **B2scan 150180S** X-Ray TV system has the function of automatic highlighting of suspicious image areas.
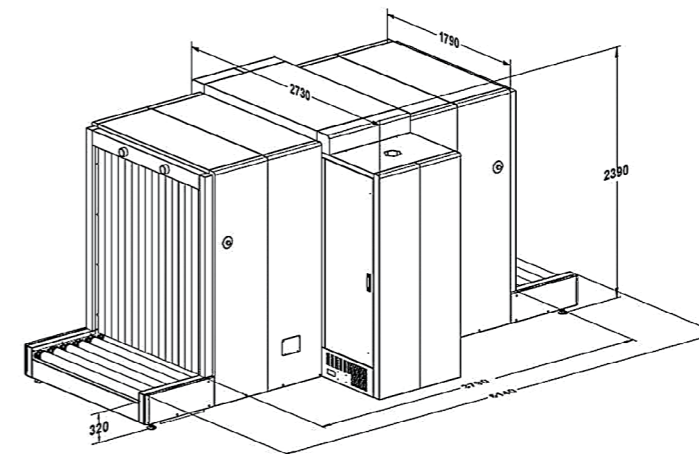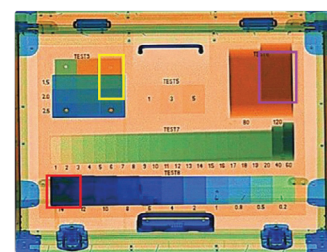
Highlighting suspicious areas of the image and alerting

Improved classification of materials: orange – organic, blue – metals, green – mixed materials

Technological features

- High image quality with 36 AWG wire resolution and 50 mm steel penetration

- The X-ray dose rate around the equipment is close to the natural background level, which corresponds to all applicable international health standards and occupational safety

- The function of automatic highlighting of suspicious areas of the image

- TIP (projection of the image of dangerous objects) is a very effective way to train operators and control their work

- The ergonomic design of the keyboard and user interface ensures effective and professional work of X-ray television system

- The modular design, combined with built-in diagnostics, ensures efficient maintenance of the equipment

- Data transmission over a local network using TCP / IP protocols

- Information exchange with the system of technical monitoring results collection and control using a unified data transfer protocol and XML-based metadata

Equipment drawing

General specifications		Operating characteristics	
Tunnel dimensions	1550 mm (W) x 1800 mm (H)	Wire resolution	36 AWG / 0.12 mm
Conveyor speed	0.2 m/s	Steel penetration	50 mm
Conveyor height	320 mm		
Maximum load capacity	3000 kg with an even distribution	Monitor	LCD, 21.5 inches, high resolution 1920 × 1080
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	5140 mm (L) x 2730 mm (W) x 2390 mm (H) / 2500 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (±15%), 50 Hz / 60 Hz ± 3 Hz
		Power consumption	2.2 kVA

The equipment has passed mandatory and voluntary certification applicable in the territory of the Russian Federation.
Technical specifications and product configuration are subject to change by the manufacturer without notice.

B2scan 180180D

The **B2scan 180180D** is an advanced dual energy cargo X-ray inspection system. Being equipped with two X-ray generators, it displays the object under inspection in two projections. With a tunnel size of 1820 mm x 1820 mm (W × H), it is ideal for inspecting aircraft containers and pallets at airports.

Along with unmatched ergonomics, reliability and safety, **B2scan 180180D** X-ray television systems provide excellent image quality and improved material classification.

Two projections of the inspected object are displayed each on a separate monitor, so dangerous items and contraband hidden under the overlapping zone are more likely to be detected.
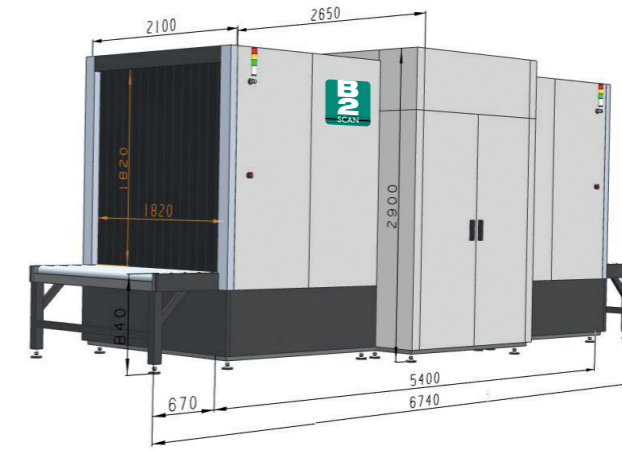
The **B2scan 180180D** X-ray television unit has the function of automatic highlighting of suspicious image areas.

Improved classification of materials:
orange – organic, blue – metals,
green – mixed materials

Technological features

• Designed for checking palletized cargoes with tunnel dimensions sufficient for inspection of LD2, LD3, LD3-45 containers.

• Two powerful X-ray generators are capable of penetrating even large and solid objects, reducing re-inspection time

• High quality image with 38 AWG wire resolution and 75 mm steel penetration

• Functionality of step-by-step, continuous and local zooming provides convenient and fast image magnification

• The obtained images can be saved in common formats (BMP, JPG, PNG) and transferred to an external USB drive

• Ergonomic design of keyboard and user interface ensures efficient and professional operation of X-ray unit

• Modular design combined with built-in diagnostics ensures efficient maintenance of equipment.

General specifications		Operating characteristics	
Tunnel dimensions	1820 mm (W) x 1820 mm (H)	Wire resolution	38 AWG / 0.10 mm
Conveyor speed	0.24 m/s	Steel penetration	75 mm
Conveyor height	840 mm		
Maximum load capacity	5000 kg with an even distribution	Monitor	Dual LCD, 21.5 inches, 1920 x 1080 high resolution
Image processing system		Health and safety	
Image processing functions	Color / BW image, organic / inorganic removal, change in absorption level, super-enhancement, negative image, high / low penetration, pseudocolor, etc	X-ray dose rate	Less than 2.5 µSv/h (10 cm from the body) meets all applicable international standards
Material classification (by color)	Organic – orange; inorganic – blue; mixtures and light metals – green	Safety for photographic films	Guaranteed for highly sensitive film up to ASA / ISO 1600 (33 DIN)
Scaling	Selectable image scaling areas, magnification 1 ~ 64 times	Installation data	
Image return	Viewing previous images	Dimensions / weight	6740 mm (L) x 2650 mm (W) x 2900 mm (H) / 9000 kg
Memory capacity	Up to 100 000 images	Storage temperature	-40°C ~ +60°C
Additional functions	Date / time display, baggage counter, transaction log, user management, X-ray television system / X-ray generator operating time counters, power-on self-test, built-in diagnostics tools, bi-directional scanning, image recognition training	Operating temperature	0°C ~ +55°C
		Humidity	0% ~ 95% non condensing
		Power supplies	AC power 220 V (+15%), 50 Hz / 60 Hz + 3 Hz
		Power consumption	5 kVA

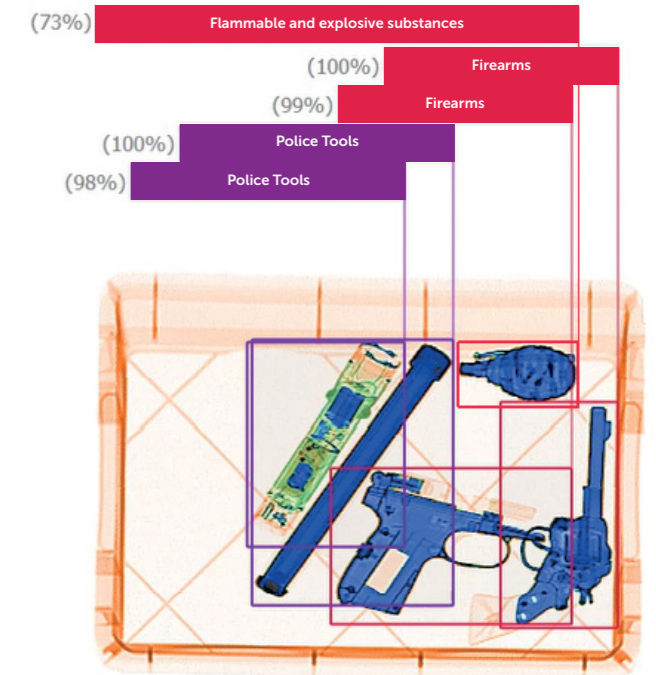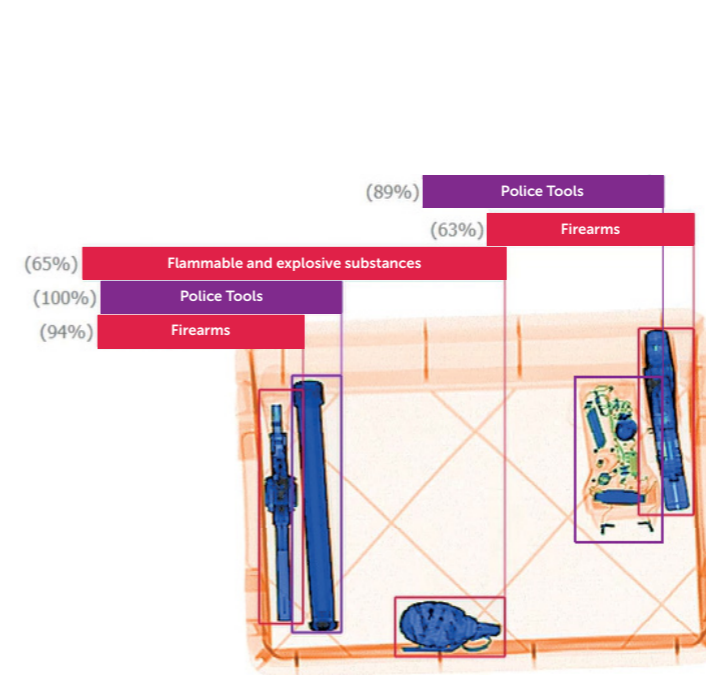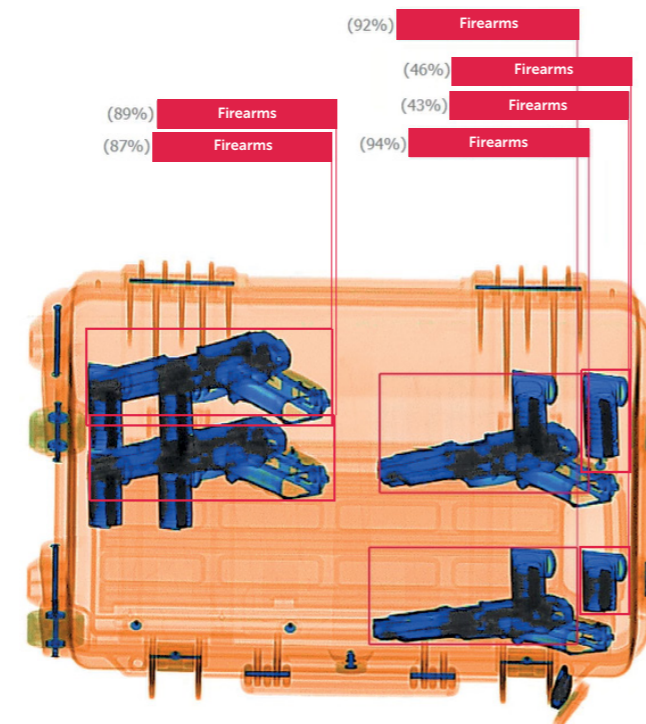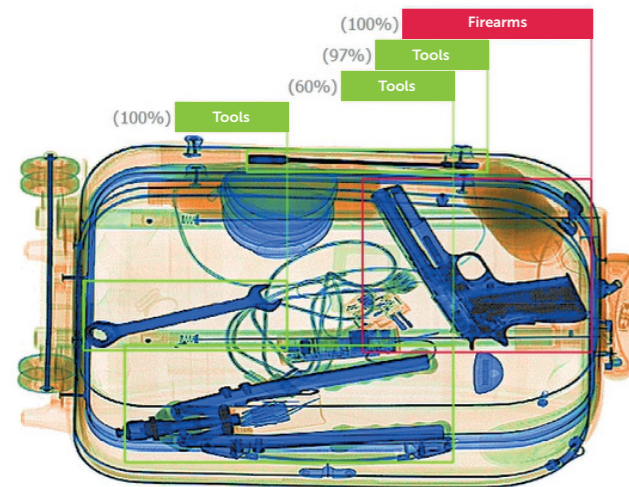**B2 SCAN**

USING ARTIFICIAL INTELLIGENCE

B2secure AI neural network can be
installed both on new X-ray TV systems
and on the models of B2scan product
line that are already in operation.

B2secure AI
neural network

The **B2secure AI Neural Network** is a function that
automatically detects dangerous and prohibited ob-
jects using artificial intelligence. This function anal-
yses, the atomic effective number of the substance
(Zeff), the optical density factor of the substance
(Gray) and the shape of objects in the image, which
makes it possible to detect effectively in automatic
mode dangerous and prohibited objects such as:
firearms and their parts (breech blocks, barrels, maga-
zines), flammable and explosive substances (explosive
devices, grenades, checkers), ammunition (cartridges,
bullets), blades (knives, bayonets, scissors), police
equipment (handcuffs, batons, stun guns, electric
shockers, blunt weapons (brass knuckles, hammers),
pressurised cylinders, electronics, acids, lighters, glass
containers, tools, pyrotechnics (fireworks, firecrack-
ers, clappers), batteries and much more.

When detected, the dangerous object is automatically
highlighted in a colored box, with a comment and
a percentage probability of matching the reference
objects.

There is also the possibility to individually enable/
disable automatic detection of specific categories
of dangerous objects, and a wide range of individual
marking settings in terms of color, thickness, frame
and text, clarifying comments, automatic belt stop
and/or light and sound alarms.

Additional options for X-ray television systems	
	Additional options for X-ray television systems
1	Roller tables of any length (inlet / outlet / with stops / slopes).
2	Tray return system (gravitational / automated).
3	Uninterruptible power supply for autonomous operation (external / built-in).
4	Operator's workstation (vandal-proof workstation, lockable / specialized operator's desk / rack for vertical placement of monitors and operator's control panel / flap for organizing a workplace on the roof of RTU).
5	Limiters at tunnel entrance / exit (material: plexiglass / metal).
6	Possibility to paint RTU in colors at the customer's request / apply the customer's logos.
7	Multi-touch displays allow to control RTU without a specialized control panel.
8	Integration into the Baggage Handling System Inline (simple: parallel dry contacts (synchronous operation of RTU and BHS conveyors) / professional: interaction via Ethernet standard, increased throughput, use of BAGID and transfer of operator's decisions on approval / rejection of each piece of baggage to the BHS).
9	Additional hand search operator's station Recheck, which duplicates images of suspicious baggage with comments of the main RTU operator to the automated workstation of the manual inspection operator.
10	Additional station for the Customs operator, which duplicates all images from the main Aviation Security station to the Customs station with the possibility of independent image processing, scaling and transmission of decisions on approval / rejection of each baggage item separately from Aviation Security.
11	The Integrated video surveillance function allows to display in the main interface of the introscope real-time video at the entrance and exit of baggage from the RTU tunnel, and also forms automatic links to the images of shadow X-ray projections of video fragments for 15 seconds (adjustable time) before scanning and 15 seconds after scanning, allowing in case of emergency situations or forgotten baggage to determine who exactly, when and which bag put on the belt, as well as who picked it up at the exit.
12	The function Remote control allows to control RTU via LAN or Internet.
13	Image archiving server of arbitrary configuration.
14	The function FTP-client is used to copy the archive of scanned images to the network storage.
15	The function Speed adjustment is used to change the speed of RTU conveyor from 0.1 m/s to 0.38 m/s.
16	The function Energy mode adjustment is used for inspection of baggage and goods in standard mode with anode generator voltage of 140 kV and current strength of 0.7 mA and inspection in high penetration mode with voltage of 160 kV and current strength of 1.0 mA.
17	The function Power Saving Mode is used to turn off the conveyor automatically after a preset time.
18	The function Auto Start is used for automatic start of the conveyor upon the appearance of baggage at the entrance part of the conveyor.
19	B2secure AI neural network is a function of automatic detection of dangerous objects using artificial intelligence.
20	Possibility of extended warranty (10% of RTU cost for each year over the factory warranty).
21	Possibility to conclude short-term and long-term service contracts / training of Customer's technicians under the program Maintenance, Diagnostics and Repair.
22	High-speed detection system. Provides effective baggage inspection without loss of image quality with RTU conveyor speed of 0.5 m/s.

www.b2scan.ru