

X-RAY BAGGAGE SCANNER

**HANDY 53B**

Single Generator and Single View

The MAGTECH® AI X-Ray Baggage Scanner is an advanced security inspection system designed to scan baggage without the need to open packages. The system features a next-generation X-ray imaging system equipped with semiconductor detectors, digital image processing technology, and computer image display technology, providing users with an efficient, dependable, and high-quality image processing system with enhanced service functions. The device boasts a large HDD capacity capable of storing a substantial amount of high-definition images. It can identify prohibited objects, sound alarms when forbidden items are detected, and offers person-package linkage, image enhancement, network expansion, automatic detection, maintenance, and more. The operation of this baggage scanner is simple and user-friendly.

The scanner's algorithm analyzes X-ray images of packages and identifies dangerous items such as knives, bottled liquids, pressure tanks, guns, lighters, etc. It also tracks these dangerous items using an AI overlay, marking them in different colors to indicate danger levels. The alarm system includes a voice prompt, sound and light alarms, and automatically halts the conveyor belt. The scanner is equipped with both entrance and exit cameras. It supports real-time recording and offers person-package linkage storage and search functionality.

Application



Residential & Commercial



Industries



Theme Park



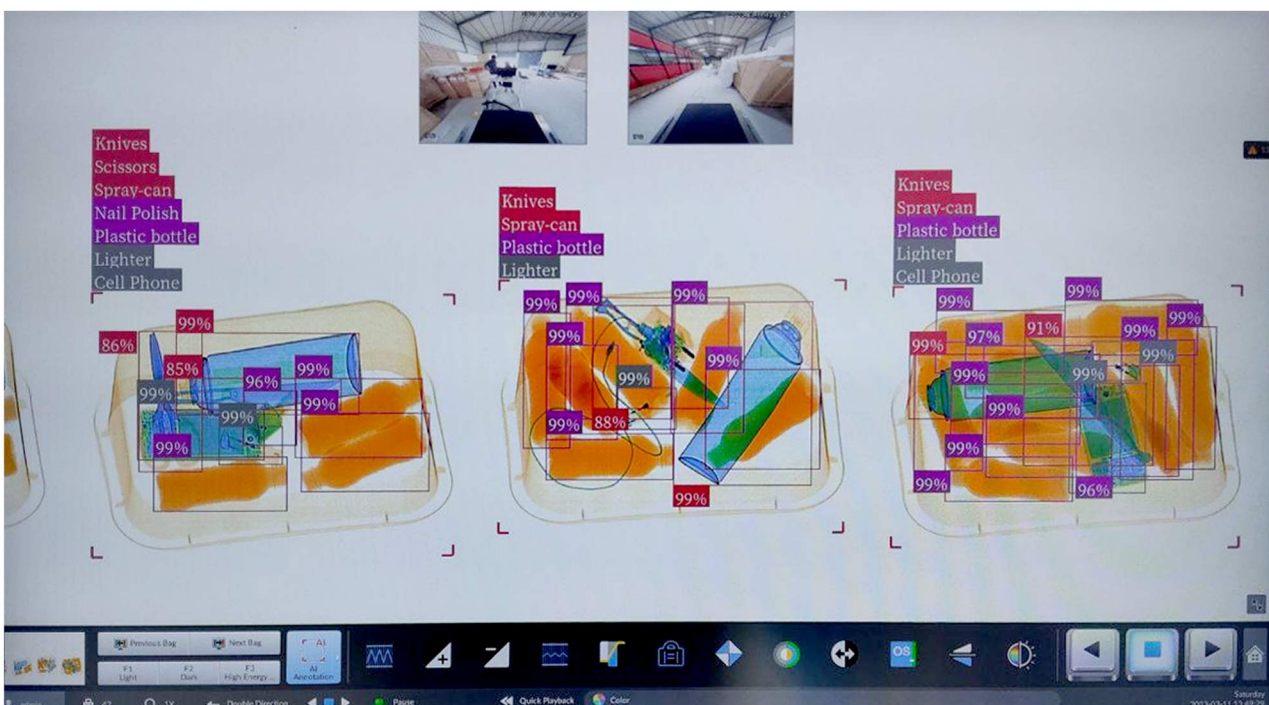
Educational Institutions



FEATURES:

- ◆ Uses X-ray to generate images of packaged items passing on the conveyor belt, and checks the shape and size of scanned baggage.
- ◆ Supports security screening mode and video surveillance mode and recognizes 24 types of objects: Guns, fireworks, spray, cans, knives, axes, scissors, lighter fluid, nail polish, bottled liquids, glass bottles, thermos bottles, plastic bottles, handcuffs, nightsticks, brass knuckles, lighters, tools, electronic products, mobile phones, power banks, laptops and umbrellas.
- ◆ Set danger levels for suspect items and link alarms such as voice prompt, sound and light alarm and conveyor belt stopping
- ◆ Inbuilt Artificial Intelligence tool to display the Scanned images with AI overlay on suspected objects and the AI Overlay Box moves throughout the screen along with the package.
- ◆ All detection results can be stored and generated as reports, which can be searched and exported according to danger level and time.
- ◆ 2 built-in Fisheye cameras that respectively monitor the entry and exit of baggage and the package inspection process.
- ◆ Add IP camera and PoE camera for live video, storage and playback. The cameras monitor the entire security inspection.
- ◆ Supports large HDD storage space management and ensures data security.
- ◆ Customized Keyboard to provide all the functions such as Forward, Backward, High penetration, Low penetration, Grey scan, etc.,

SCANNED IMAGES WITH ARTIFICIAL INTELLIGENCE



SPECIFICATION

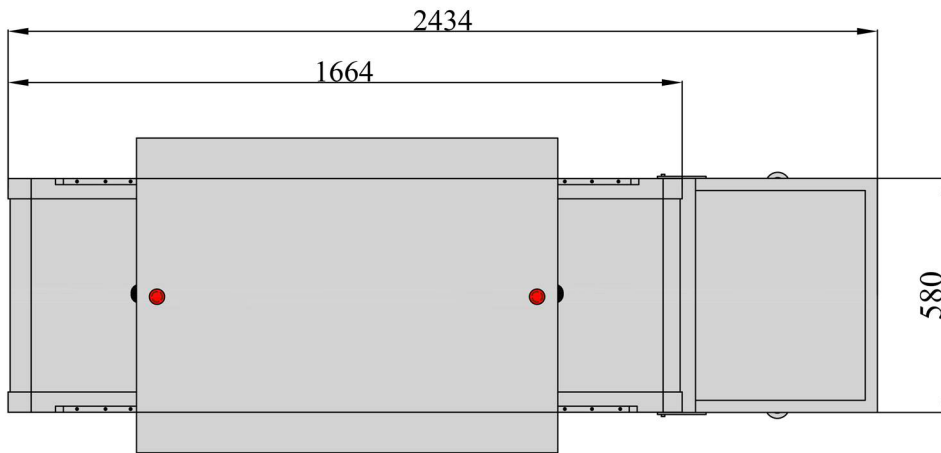
Series	Handy 53B
Physical Specifications	
Dimensions (in mm)	1664 L × 766 W × 1207 H
Console table size	700 L X 500 W X 750 H
Gross Weight	430 Kgs
X-Ray Generator & Performance	
Tunnel Size (in mm)	515(W) x 312(H)
Anode Voltage	160 KV
Tube Current	1.2 mA
Steel Penetration	35 mm
Wire Resolution	38 AWG
Film Safety	ASA/ISO 1600
X-Ray Divergence Angle	80°
Detector	L-shaped multi-energy High-sensitive detector line
Cooling / Duty Cycle	Sealed oil Bath with Forced Air / 100%
Leakage Radiation	1.0 μ Sv/h
Conveyor	
Speed	0.2 meter per second
Load	165 kgs
Height from ground	675 mm
General Specifications	
Power Requirement	220(\pm 10%), 50 \pm 3Hz
Power Consumption	0.5 KW
Operating Temperature	-25°C to 65°C
Storage Temperature	-25°C to 65°C
Relative Humidity	Up to 95% Non-Condensing
Features	
Item Recognition	Recognizes items and displays AI overlay; the AI overlay box moves with packages
Recognition Types	Recognizes 24 types of objects: guns, fireworks, spray cans, knives, axes, scissors, lighter fluid, nail polish, bottled liquids, glass bottles, thermos bottles, plastic bottles, handcuffs, nightsticks, brass knuckles, lighters, tools, electronic products, mobile phones, power banks, laptops, and umbrellas.
Image Processing	Enhancement functions include color/black and white, local enhancement, super enhancement, edge enhancement, image scanning, organic stripping, metal stripping, mixture stripping, inverse, high-energy enhancement, low-energy enhancement, light, dark, density threat alert Z7/Z8/Z9, high-density alert, AI overlay, vertical flip, pseudo color, and more.
Danger Level	High Risk, Warning, and Safe (Supports Custom Configuration According to Types of Objects)

Detection Configuration

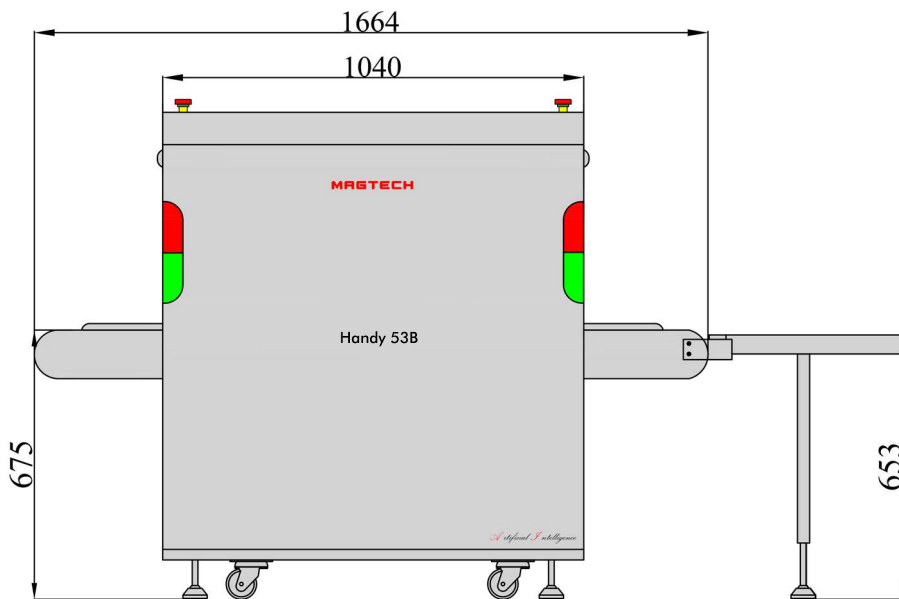
The key function configuration includes various settings such as image display configuration, which allows for vertical flipping and adjusting the maximum zoom level. Additionally, the scan mode configuration supports multiple options including double direction, forward scan, reverse scan, and compulsory scan. Furthermore, the baggage counter configuration includes settings for managing the person-package counter.

Device Diagnosis	Supports diagnosis of key components such as the detector, motor, IR sensor, and special keyboard.
Image Recall	30 preceding images recallable
Image Zooming	Zoom in on X-ray images up to 64x. Drag the focus position using a mouse or direction keys.
Real-time Curve	The real-time curve is used to detect whether the acquisition system and components work normally.
TIP facility	Image library with 100 explosive, 100 Knives and 100 firearms in various sizes, shapes locations and orientations
Through Put	800 Bags/Hour
Others	Fault diagnosis, system time setting, detection blind dots deletion, X-ray source setting (analog or digital), alarm setting, image settings, software registration, user management, TIP report, data settings (machine working time, X-ray source working time, baggage counter, etc.)
Industrial PC	
Operating System	Embedded linux
RAM & Storage	8 GB RAM, 4TB HDD (1 Million images), 60 days backup for CCTV.
Monitor	High Resolution Colour, 21 inch LCD Monitor (1920x1080 pixels)
Console table (Add-on)	Single Screen Console
Certifications Compliance	CE, FDA, FCC, ROHS, BRIT, NABL, AERB, QCI, NSIC.

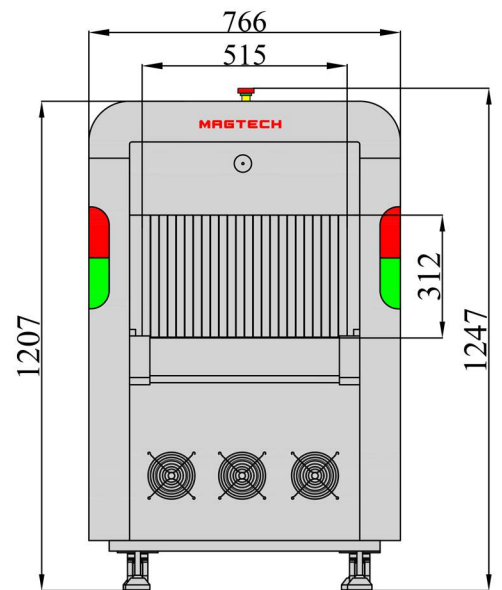
DIMENSIONS



Top View



Side View



Front View

(All Dimensions are in mm)