

# NUCTECH<sup>™</sup> MV100100

# X-ray Inspection System



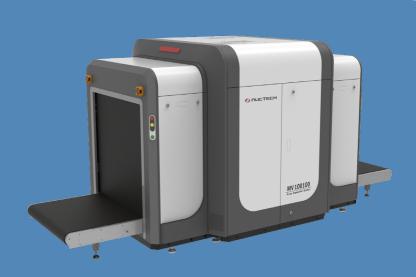
The NUCTECH™ MV100100 is a new generation inspection system developed by NUCTECH COMPANY LIMITED. The system innovatively combines dual-energy material discrimination technology with 3D Perspective technology, working with NUCTECH WEKNOW AI inspection system, it realizes automated explosives / liquid dangerous goods / aerosol spray bottles / controlled knives / guns detection and alarms with a higher probability of detection and a lower false alarm rate.

With multiple view high-definition 2D scanning images bonding with appearance images, a larger tunnel size and a higher throughput, the MV100100 is an ideal security solution for courthouses, correctional facilities, schools, stations, government builds, event venues, stadiums, etc.









# **Technical Features**

# 3D Perspective Technology

Adopting 3D Perspective technology to provide high-definition color 2D images in triple-view, avoiding difficulties in image analysis due to the items overlapping and occlusion.

### Auto Detection and Alarming

Working with built-in AI inspection system, MV100100 realizes automated detection of various types of contraband such as explosives, liquid dangerous goods, aerosol spray bottles, controlled knives and guns, etc. and the alarm category of contraband can be expandable.

#### Dual-energy Discrimination Technology

With the dual-energy discrimination technology, the system colorizes different materials with different colors in 2D images, which helps operators to make decisions more easily and more efficiently.

## Convenient for Maintenance

Newly designed detached cover plate make it convenient for maintenance and also easy for replacement of key components due to less maintenance space is needed.

### Bidirectional Scanning

The system can realize bidirectional scanning with the bidirectional conveyor, adapting to the different needs of different scenes.

#### Large Tunnel Size

MV100100 builds a super-large square tunnel with 1 meter wide by 1 meter high which is capable of screening both in-gauge and out-of-gauge baggage.



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# **Technical Data**

### **General Specifications**

**Tunnel Dimensions** 1006mm(W)×1010mm(H)

2000mm(L)×1000mm(W)×1000mm(H) Max. Baggage Size

Conveyor Height 300mm~330mm (adjustable) Conveyor Load 200kg (evenly distributed) Conveyor Speed 0.2m/s ~ 0.4m/s (adjustable)

Wire Resolution 36AWG Steel Penetration 26mm

Spatial Resolution 0.8mm line pair

**Display Monitor** Color monitor / High resolution of 1920×1080

# **Image Processing System**

Image Processing Color / BW, Negative, Edge enhancement, General

enhancement, Organic stripping, Inorganic stripping,

High-energy Penetration

ROI & Zoom Selectable image zoom regions, 1~64 times enlargement

**Data Storage Capacity** Over 500,000 images

# **Health and Safety**

X-ray Leakage Conform to all the radiation protection

standards recommended by IAEA,

ICRP and WHO

## **System Functions**

Date / Time display, Luggage counter, User management, System-on timers, Power-on self-test, Image storage and query, Built-in diagnosis.

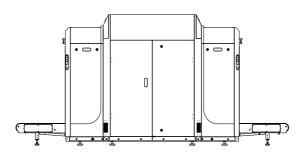
# **Installation Data**

Dimensions / Weight 2480mm(L)×1740mm(W)×1793mm(H) / 1870kg Operating Temperature / Humidity  $0^{\circ}$ C ~ +40°C / 5% ~ 95% (non-condensing) Storage Temperature / Humidity -40°C ~ +60°C / 5% ~ 95% (non-condensing)

Operating Mode Support Bidirectional Scanning, Appearance Image Bonding Power Supply Single-phase, 220VAC (-15% ~ +10%), 50Hz / 60Hz±3Hz

**Power Consumption** 1.7kVA

Note: Image performance specifications are based on test materials complying with ASTM standard.





# SIOMPSD/TP-AC772201-EN

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