

DHI-ISC-D816S

Walk-through Metal Detector for Prohibited Items Classification Detection



Series Overview

The Walk-through Metal Detector is a smart metal detector specializing in metal classification detection, featuring strong anti-interference capability, high precision, and stable performance. It offers multiple detection modes, including prohibited item mode, mobile phone mode, classification mode, and metal mode, which has proven its unmatched performance in diverse security inspection scenarios.

The user interface incorporates a 10-inch color touchscreen with intuitive function menus, while the host unit is equipped with a rear-mounted 29-inch full HD color LCD for comprehensive security screening data presentation. Additionally, the device can be optionally configured with smart camera modules and HDDs to instantly expand intelligent personnel recognition and mass storage capabilities.

The device supports network connectivity, which meets the requirements of security screening solutions.

Features

Detection Performance

Features classification detection capabilities for prohibited items such as knives and tubular objects, as well as electronic devices such as mobile phones. It ensures high detection rates for electronics (e.g., smart-phones and tablet computers) and prohibited items while effectively filtering everyday metal objects including metal buttons, keys, and metal belts.

Zone Sensitivity Adjustment

Supports 0-9,999 level sensitivity adjustment for each zone.

Screen Clear

Supports manual clear, auto-clear upon startup and scheduled clear.

Alarm Search

Supports information search such as mobile phone alarm, prohibited item alarm, metal alarm and everyday metal.

Counting Method

Supports selectable counting modes (front + rear +, front + rear- and separate counting).

Filter Umbrellas and Thermos Cups

In mobile phone detection mode, umbrellas or thermos bottles carried alone will not trigger alarms when this function is enabled.

Self Test

Supports HDD self test when powering on.

- Supports four detection modes: metal detection, mobile phone detection, prohibited item detection, and classification detection, covering multi-scenario applications.
- Utilizes advanced phase characteristic capture and algorithms combined with digital pulse counting, it can accurately identify target metal objects while efficiently filter everyday metal items.
- The host unit supports HDD connectivity (optional), enabling local storage and query of security screening data. Statistical analysis results can be exported from the host, with the device supporting store up to 10 million inspection records.
- Supports the statistical record of pass number, and the respective record of pass number and alarm times. as well as separate counting of pass and return numbers.
- Features a front-mounted 10-inch LCD touchscreen for direct menu operation via touch control, and a rear-mounted 29-inch full HD LCD display for comprehensive security screening information display. Both screens are designed with a 10° tilt angle.
- Supports optional AI smart cameras for intelligent personnel recognition and channel monitoring. It also enables integration with security screening platforms and facilitates rapid third-party platform development.
- Its sound and light alarm offers the clearest prompt, and the adjustable alarm duration meets the needs of different users.
- The device supports multi-digit password protection to create different user group permissions. The host supports pattern unlock login.
- With a standard throughput capacity of 25–30 persons per minute, it meets personnel flow requirements across various scenarios and contributes to higher security screening efficiency.
- Supports 16-zone metal detection.
- Supports standby function. When the device is not in use for a long time, the screen will turn off and enter a low-power state.
- Supports self-diagnosis upon startup to detect abnormal conditions for device components.
- Complies with the EMC electromagnetic radiation standards. Adopted low magnetic field technology makes it harmless to persons such as cardiac pacemaker wearers, and pregnant women, and at the same time, it does not affect soft disks, film rolls, video tapes and more.

Frequency Auto Setting

Supports auto setting of power-on frequency.

Standby

Supports automatic entry into standby mode if no persons pass through the detector for a configurable duration (10 minutes, 30 minutes, 60 minutes, or never) while the detector is in normal operation.

Check Snapshot

Optional vandal-proof dome network camera enables real-time monitoring of the check process and instant snapshot of passing individuals.

Authority Management

Supports password settings.

Networking

Network integration with security inspection platforms for centralized data management; support the business processing function of mobile client linkage.

Safety

Complies with the EMC electromagnetic radiation standards. Adopted low magnetic field technology makes it harmless to persons such as cardiac pacemaker wearers, and pregnant women, and at the same time, it does not affect soft disks, film rolls, video tapes and more.

Scene

Suitable for security screening in various scenarios such as stations, rail transit, key enterprises, exhibition centers, sports meets, large-scale conferences and events, campuses and more.

Technical Specification**System**

Display	*1 29-inch LCD screen and *1 10-inch touch screen
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Metal Detection

Working Mode	4 detection modes are selectable: metal detection, mobile phone detection, prohibited item detection, and classification detection.
Self Test	Power-on Self-check
Zone	16
Sensitivity	10,000 levels
Frequency	8-level frequency adjustment
Alarm Sound	99 kinds of multiple alarm tones
Alarm Volume	10-level volume adjustment
Alarm Duration	0-10 seconds
Network Upgrade	Yes
Time Display	Yes
IR Mode	Yes
Number of Scenarios	11
Environmental Interference	Real-time display of signal strength
People Counting	Supports selectable counting modes (front + rear +, front + rear - and separate counting).
Auto Search Frequency	Yes
Overall Sensitivity Settings	Yes
Filter Umbrellas and Thermos Cups	Yes

Random Alarm	Yes
Standby	Yes

Live View

People Counting Display	Displays the pass number, metal alarm number, human figure, detected object type icons and text on 29-inch LCD screen and 10-inch touch screen; if equipped with smart camera, video images, personnel detection and comparison pictures, historical data can be displayed on 29-inch large screen.
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Personnel Detection

Personnel Detection	1.12 persons/second (1,080P) for one channel, 12 persons/second (1,080P) for two channels. 2. Supports identification without mask.
Intelligent Playback (Personnel Detection)	1. Query conditions: By pass channel, time and personnel attribute. 2. Function: Supports search results associated playback of 10 seconds of video before and after the event, and search results export as excel, video and picture. 3. Historical library capacity: 10 million

Personnel Comparison

Database Management	1. Import method: import personnel images single/in batches through the browser, single card modeling speed 10 pictures/second 2. Personnel information: name, gender, birthday, province, city, ID type and ID number; custom 3. Database capacity: create up to 10 personnel databases, 300,000 pictures, total capacity 50G 4. Image requirements: jpg format, max size of a single image is 4M, pixel range 100×100–6,000×5,000.
Personnel Comparison	1. Comparison mode: rear FD+rear FR 2. AI by camera: supports 4-channel image stream 3. AI by device function configuration: normal/stranger mode; supports multiple personnel databases, support alarm prompts, linkage recording, snapshot, IPC external alarm output, voice prompts, buzzer, log records, emails performance: AI by device supports 1-channel personnel comparison (1,080p video stream)

Video and Audio

Camera Access	Max 4-channel 3,200W/2,100W/1,200W/800W/600W/500W/400W/300W/1,080P/960p/720P/D1/CIF/QCIF
Network Video Input	Supports access up to 4-channel IPCs.
Video Frame Rate	PAL: 1 frame/second to 25 frames/second
Video Bit Rate	32–6,144 kbps
Audio Sampling Rate	8KHz, 16Bit
Audio Bit Rate	64 kbps
Stream Type	Video Stream and composite stream
Video Output	3-Channel HDMI output resolution supports 1,920 × 1,080 / 1,280 × 1,024 / 1,280 × 720 / 1,024 × 768, 1,280 × 1,024 by default.
Window Split	1/4 Window
Third-party Camera Access	onvif, RTSP, Panasonic, Sony, Axis, Arecont, Pelco, Canon, Samsung and GB/T28181

Network

Protocol	IPv6; P2P; DDNS; DNS; DHCP; NTP; SMTP; UDP; RTSP; IPv4; TCP/IP; HTTPS; HTTP
Interoperability	SDK; CGI; GB/T28181; ONVIF (Profile SG)
Browser	IE11, Google (Configuration only)

Recording Management

Recording Method	Auto recording; manual recording; alarm recording; scheduled recording
Video Playback	4-channel

Backup	Browser backup
Playback Method	Instant playback; conventional playback; event playback; label playback; Intelligent playback (personnel, dynamic detection)

Alarm

Alarm Linkage	Video, snapshot, IPC external alarm output, voice prompt, buzzer, log record, preset point and mail.
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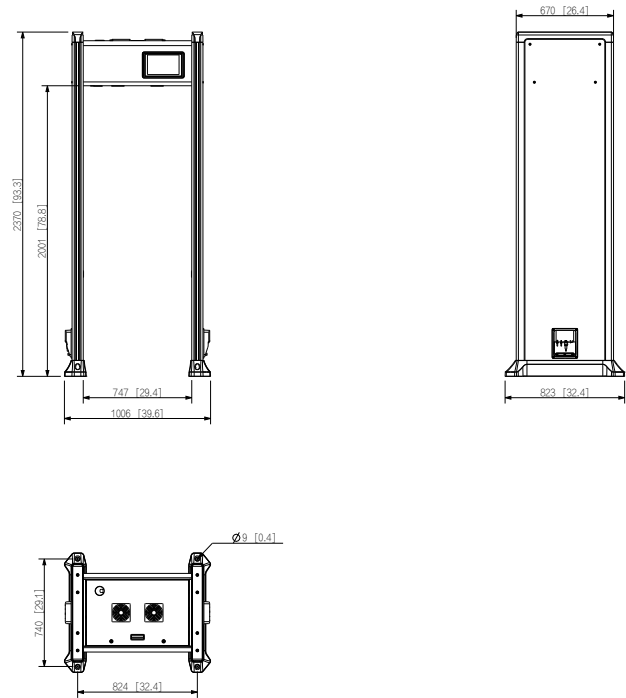
Port

Power port	*2, on the side of the detector panel.
Voice Output Port	*1
Network Port	*2 RJ-45 Network port
POE Port	*4
SATA Port	*2
USB Port	*2 USB3.0
I/O Port	2-channel alarm input and 2-channel alarm output.

Regular

Tunnel Dimensions	H × W × D: 2,001 mm × 747 mm × 823 mm (78.82" × 29.41" × 32.44")
Product Dimensions	H × W × D: 2,370 mm × 1,006 mm × 823 mm (93.31" × 39.57" × 32.44")
Packaging Dimensions	L × W × H: Detector Panel: 2,520 mm × 920 mm × 351 mm (99.21" × 36.22" × 13.82") Case: 870 mm × 693 mm × 504 mm (34.25" × 27.32" × 19.80")
Gross Weight	Detector panel: 100 kg (220.46 lb) Case: 32.6 kg (71.99 lb)
Installation	Carton
Operating Temperature	−10 °C to 35 °C (5 °F to 113 °F)
Storage Temperature	−20 °C to 65 °C (−4 °F to 149 °F)
Working Humidity	<93% (RH), non-condensing
Storage Humidity	<93% (RH), non-condensing
Power Consumption	110 W
Power Supply	100–220 VAC, 50–60 Hz

Dimensions (mm[inch])



Ordering Information

Type	Model	Description
Walk-through Metal Detector	DHI-ISC-D816S	Host box
	ISC-D816S-D	Detector panel