

DHI-ISC-D733-TS2

Walk-through Metal Detector



With its modular design and strong anti-interference capabilities, the Walk-through Metal Detector provides optimal performance. It has a user-friendly interface, and is easy to transport and install. Designed with a 7-inch touch screen, it offers remote control and touch screen control, and is also built of specialized, strong materials that make it suitable for use both indoors and outdoors.

System Overview

The Walk-through Metal Detector detects metal objects using electromagnetic fields, and triggers sound and light alarms when a person is detected to be carrying a metal object. It can cover 18 detection zones, adapts easily to a wide variety of environments, and is built with high-frequency signal generators, a host box, signal receivers, and IR sensors.

Functions

Walk-through Metal Detector:

Multi Applications

Supports 90 applications, and it associates various detection features, supports independent detection of magnetic metals, non-magnetic metals and innocuous metal object filtering.

Various Alarms

Supports visible and audible alarm, giving people the most sensitive prompts, and the alarm tone, volume, and duration can be adjusted as needed.

Pass Statistics Search

Searches Pass statistics by hour/day.

Networking

Supports the parameter configuration of the device via network, and supports platform management.

Walk-through Metal Detector

- 33 detection zones with corresponding indicators
- Built-in traffic lights
- 7-inch full color touch screen LCD display
- Easy-to-install modular design
- Monitor and display the real-time signal strength of environmental interference
- Counting passing number, pass/return numbers, and alarm number
- Pass/Return statistics, alarm statistics, and searching by hour/day
- Display the alarm position via human shape display
- Ultra-high sensitivity, Minimum detect target: *CNY ten-cent coin
- Independent detection of ferromagnetic and non-ferromagnetic metals
- Innocuous metal object filtering
- 90 applications selectable
- Automatically searches operating frequency (100 levels available)
- Random alarm
- 2-level user management of operators and administrators
- Support multi-language, real-time switching
- 2-channel alarm output
- Monitoring and configuration through the network, and managed by platform
- IR remote controller
- Supports SLA back-up battery
- 2-channel alarm output
- Temperature monitoring display, support visible and audible alarm for abnormal temperature

Camera

- Uncooled VOx thermal sensor technology
- Athermalized lens (thermal camera), focus-free
- 4-MP 1/2.7" progressive scan CMOS
- ROI, motion detection, color palettes
- Smoking and call behaviour detection
- Fire detection & alarm
- Built-in 1/1 alarm in/out
- Micro SD memory, IP67, PoE
- Smart linkage with strobe light & audio
- Dual image fusion (visible and thermal images)

* Nickel bonded Steel, round, diameter 19 mm, thickness 1.67 mm, weight 3.20 g

Cyber Security

Supports 2-level user. The operator and the administrator has different permission. Strong password verification to ensure cyber security.

Self Diagnosis

Automatic diagnosis plus manual/automatic self test.

Detection Capacity

60-100 person/min.

Quick Installation and Configuration

Supports automatic sensitivity setting, automatic frequency search, convenient application selection, which promotes easier configuration.

Temperature Monitoring

Supports real-time body temperature monitoring, visible and audible alarm and real-time recording of abnormal body temperature.

Uninterruptible Power Supply

Supports lead-acid batteries (optional), and automatically detects the battery status for cyclic charging. The charging will stop automatically when the battery is fully charged.

Traffic Lights

Supports traffic lights that remind pedestrians whether the pass is allowed or prohibited.

Multi-language

Built-in multiple languages for real-time switching to meet the market demand of various countries.

Two Control Methods

Adopts a 7-inch touch screen, which supports two control methods of touch screen and remote control.

Safety

Complies with the EMC Electromagnetic Radiation Standards by using very low frequency electromagnetic fields. No harm caused to pacemakers, pregnant women and magnetic storage devices.

Camera:

Uncooled VOx Technology

Dahua thermal cameras use uncooled VOx sensor technology. Because of small size and better performance, it is cost-effective solution for thermal security.

High Sensitivity

High thermal sensitivity (< 50 mK) makes cameras capture more image details and temperature difference information.

Fire Detection & Alarm

With built-in fire detect function, the camera has the ability to detect fire in a long distance. Thermal camera is sensitive to temperature, so the accuracy of fire detection will be higher than visible camera.

Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as motion detection. IVS also supports tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed.

Smoking Detection

Dahua thermal camera can provide a real-time monitoring, in the use of AI technology, to automatically detect people's smoking behavior and provide intelligent voice and light warning (loudspeaker and white light, etc.) in an effort to dissuade smoker, and avoid potential risk and loss.

Environmental

With a temperature range of -30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

Scene

The walk-through metal detector is suitable for use in the following scenarios: Security screening of prohibited metal items in railway stations, bus stations, metro rail transit, government buildings, exhibition centers, sports meetings, schools.

Walk-through Metal Detector Technical Specification

Device

Precise Positioning	33 overlapping detection zones, bilateral transmission and receipt of detection signals; 2-panel indicator lights
Zone Indication	33 independent zones selectable, and multiple metal items can be located simultaneously
IR Sensor	Supports the switching of multiple start-stop modes for two-pair of IR sensor. Infrared sensor can reduce false alarms; automatic alarm statistics and pass/return statistics
Adjustable Sensitivity	255 adjustable sensitivity levels in each detection zone (sensitivity increases by levels)
Security level	Supports 1-100 selectable security level.
POST (Power On Self Test)	Power on self test.
Operating Frequency	Supports 1-100 selectable operating frequency ranges, and supports automatic frequency search.
Alarm Volume	Support 0-10 adjustable alarm volume, mute mode can be set.
Alarm Tone	Supports 9 kinds of selectable alarm tones, and independent tone for temperature alarm.
Remote Control	An IR remote controller with maximum remote control range of 2 m (6.56 ft)
Leakage Current	<0.5 mA, complying with safety requirements for electronic devices

Certifications

Certifications	GB 15210-2018 IEC 60068-2-1 IEC 60068-2-2 CE-LVD: Low Voltage Directive 2014/35/EU CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU CE-RED: Radio Equipment Directive 2014/53/EU FCC: 47 CFR FCC Part 18, Subpart B
Safety	ICNIRP 2010 Guidelines ICNIRP 1998 Guidelines EC directive 2013/35/EU EC recommendation 1999/519/EC IEEE C95.1:2005

Ports

Power Button	Power switch on both door panels, and metal detection power switch on the front panel
Indicator	One green indicator
Environmental Noise	Monitors and displays real-time signal strength of environmental interferences
RS-485	1
Alarm In/Out	2-channel input, and 2-channel output
Power Output	12 VDC
Detector Underside Power Port	Aviation power port, 1 for each side.
Detector Underside Network Port	Waterproof RJ45 port, 1 for each side.

Regular Parameters

Tunnel Dimensions	2060 mm × 760 mm × 500 mm
Product Dimensions	2221 mm × 916 mm × 537 mm
Packaging Dimensions	2275 mm × 775 mm × 235 mm
Net Weight	42 kg (92.59 lb)
Gross Weight	52 kg (114.64 lb)
Operating Voltage	12 VDC, power adapter (included): 100 V–240 VAC, 50/60 Hz
Max. Power Consumption	26 W
Standby Power	15.5 W
Operating Temperature	–20 °C to +60 °C (–4 °F to +140 °F)
Operating Humidity	0%–95% RH
Storage Temperature	–20 °C to +65 °C (–4 °F to +149 °F)
Storage Humidity	0–95% RH
Installation	Floor mounted

Camera Technical Specification

Thermal

Detector Type	Vanadium Oxide Uncooled FPA
Max. Resolution	256 × 192

Pixel Pitch	12 μm
Spectral Range	8 μm–14 μm
Thermal Sensitivity (NETD)	<50 mK (@f/1.0, 25Hz, 300K)
Focal Length	3.5 mm
Field of View	H: 50.6°, V: 37.8°
Close Focus Distance	0.5 m (1.64 ft)
Effective Distance Human (1.8 m × 0.5 m)	D: 146 m (479 ft) R: 38 m (125 ft) I: 19 m (622 ft)
Effective Distance Vehicle (4.0 m × 1.4 m)	D: 389 m (1276 ft) R: 97 m (318 ft) I: 49 m (161 ft)
Aperture	F1.0
Digital Detail Enhancement (DDE)	Yes
Digital Zoom	16 ×
AGC	Auto; manual
Noise Reduction	2D NR; 3D NR
Image Flip	90°; 180°; 270°
Color Palettes	18 (Whitehot/Blackhot/Ironrow/Icefire/Fusion/Rainbow/Globow/Icnbow1/Icnbow2, etc.)

Visible

Image Sensor	1/2.7" CMOS
Max. Resolution	2336 × 1752
Pixel	4 MP
Electronic Shutter Speed	1/30,000 s–1 s
Min. Illumination	Color: 0.05 lux Black & white: 0.005 lux 0 lux (IR on)
IR Illumination Distance	≥30 m (98.43 ft)
IR Illuminator On/Off Control	Auto; manual
Focal Length	4 mm
Aperture	F1.6
Field of View	H: 71.2° V: 52° D: 92.6°
Focus Control	Fixed
Close Focus Distance	1.0 m (3.28 ft)
Day/Night	Auto (ICR); Color and B/W
BLC	Yes
WDR	DWDR
HLC	Yes

White Balance	Auto/Manual/Indoor/Outdoor/Tracking/Street lamp/Natural
AGC	Auto; manual
Noise Reduction	2D NR; 3D NR
S/N Ratio	≥55 dB
Region of Interest (RoI)	Yes
Image Flip	90°; 180°; 270°
Exposure Compensation	Yes

Intelligence

General Intelligence	Tripwire; intrusion
Advanced Intelligence	Fire detection & alarm Cold & hot spot trace Human & vehicle classification Smoking detection Call detection

Video and Audio

Video Compression	H.265/H.264M/H.264H/H.264B/MJPEG
Resolution	Thermal: Main Stream: 1280 × 960 (1.3M)/XVGA (1024 × 768)/VGA (640 × 480)/256 × 192, 1280 × 960 by default Sub Stream: VGA (640 × 480)/256 × 192, 256 × 192 by default Visual: Main Stream: 2336 × 1752/1080p (1920 × 1080)/720p (1280 × 720)/D1 (704 × 576), 2336 × 1752 by default Sub Stream: 720p (1280 × 720)/D1 (704 × 576)/CIF (352 × 288), 352 × 288 by default
Frame Rate	Thermal 50Hz: (main stream) 1 fps–25 fps adjustable, 25 fps by default; (sub stream) 1 fps–25 fps adjustable, 15 fps by default 60Hz: (main stream) 1 fps–30 fps adjustable, 30 fps by default; (sub stream) 1fps–30 fps adjustable, 15 fps by default Visual 50Hz: (main stream) 1 fps–25 fps adjustable, 25 fps by default; (sub stream) 1 fps–25 fps adjustable, 15 fps by default 60Hz: (main stream) 1 fps–30 fps adjustable, 30 fps by default; (sub stream) 1 fps–30 fps adjustable, 15 fps by default
Audio Compression	G.711a; G.711mu; PCM

Network

Protocol	HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP
Edge Storage	Micro SD card (256 G)
Interoperability	ONVIF; CGI
Browser	IE: IE 8 and the later, and explorer with IE core Google: 42 and the earlier Firefox: 42 and the earlier
User/Host	10
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access

Certification

Certifications	CE: EN55032:2015; EN61000-3-2:2014 FCC:CFR 47 FCC Part15 subpart B; ANSI C63.4-2014
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Port

Network	1 10M/100M Ethernet port (RJ-45)
RS-485	1 pair

Power

Power Supply	12 VDC±20%/PoE
Power Consumption	Basic: <6.5 W (LED off) Max: <13 W (LED on, heater on)

Environment

Operating Temperature	−30 °C to +60 °C (−22 °F to +140 °F)
Storage Temperature	−30 °C to +70 °C (−22 °F to +158 °F)
Operating Humidity	≤95%
Protection	IP67, anti-surge 6kV, anti-elctrostatic 6kV (touched by objects), anti-elctrostatic 8kV (air)

Structure

Product Dimensions	122 mm × 122 mm × 112 mm (4.8" × 4.8" × 4.41")
Packaging Dimensions	155 mm × 155 mm × 135 mm (6.10" × 6.10" × 5.31")
Net Weight	≤0.85 kg (1.87 lb)
Gross Weight	≤1 kg (2.20 lb)

Ordering Information

Type	Model	Description
Walk-through Metal Detector	DHI-ISC-D733-TS2	Temperature Monitoring Walk-through Metal Detector DHI-ISC-D733-TS2
Walk-through Metal Detector	DHI-ISC-D733-TNS2	Temperature Monitoring Walk-through Metal Detector DHI-ISC-D733-TNS2

Dimensions (mm [inch])

