

# DHI-ISC-D733-T

## Temperature Monitoring Walk-through Metal Detector



The Temperature Monitoring walk-through metal detector is a high-performance and high-sensitivity security gate that can detect body temperature. The device has high metal detection sensitivity, light weight, strong anti-interference, and stable performance. It uses high-strength special materials which is light-weighted and easy to transport and install. The Device has a modular design and is manufactured on the unified assembly lines, so it can ensure the good stability. It also has delivers intuitive interface and simple use, so no operation training is required to use it. Featuring dual lens, fixed camera, this series provides an all-in-one solution for capturing video surveillance for indoor and outdoor applications. Together with Thermal and Visible Technology, the camera is the perfect solution for dark, small area monitoring applications. The series combines one thermal camera for monitoring in total darkness and one visible camera with Smart IR for confirming details.

### System Overview

The Temperature Monitoring walk-through metal detector uses IR and electromagnetic field to detect body temperature and carry-on metal articles, and gives sound and light alarm to indicate that the body temperature or carry-on metal is beyond a certain threshold. It consists of a temperature monitoring camera, host, high-frequency signal generator, signal receiver, and infrared sensor, with a beautiful appearance, strong metal detection capability, 33 detection zones, a unique Internet remote management system, and light weight. It is currently a leading metal detection door in the market.

### Walk-through Metal Detector

- Two sets of high-brightness red-green LEDs, super bright double-row area indicator lights and independent interactive 33-zone function with 22 detectors
- 7-inch full-color touch-screen LCD display
- Easy to install and use with modular design
- Safe use with low voltage design
- Stable running with anti-loose aviation power plug
- High-strength Fire retardant High-pressure Laminate(HPL) material
- Monitor and show background interference in real time
- Count the numbers of passes and alarms respectively
- Count the numbers of people with normal body temperature and abnormal body temperature alarm respectively
- Monitor and show body temperate in real time
- Trigger sound and light warning for body temperate alarm
- Ultra-high sensitivity
- 72 application scenarios and extra 16 customize scenarios
- Zone sensitivity adjustable from 0 to 255
- Security degree adjustable from 0 to 99
- 100 working frequencies selectable
- Alarm sound volume adjustable from 0 to 10; support mute mode
- 17 alarm sound types
- Multiple start-stop modes for IR
- Power-on self-test
- Remote monitoring and configuration through network

### Camera

- Uncooled VOx thermal sensor technology
- Athermalized lens (thermal camera), focus-free
- 1/2.7" 4Megapixel progressive scan CMOS
- Support ROI, motion detection, color palettes
- Smoking and call behaviour detection
- Support 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)

## Functions

### Walk-through Metal Detector:

#### Temperature Alarm

Non-contact monitoring face temperature accurately and triggers an alarm when the system detects a temperature out of defined threshold ranges.

#### Temperature Monitoring Accuracy

Without blackbody:  $\pm 0.5^{\circ}\text{C}$

With blackbody:  $\pm 0.3^{\circ}\text{C}$

Detection distance: 0.5 m to 2 m

Target height: 1.2 m to 1.9 m

#### Start-stop Technology

The IR metal detector supports manual start-stop technology for longer service life.

#### Sensitivity Adjustable

Adjusts the sensitivity for each detection zone as required.

#### Alarm

Supports sound and light alarm for timely alert. The sound duration and volume is adjustable.

#### Information Search

The system supports real-time information search.

#### Password Protection

Supports multi-digit password protection.

#### Self-test System

Supports manual and automatic self-test.

#### Network Operation

Supports parameter configuration and report exportation through the web interface.

#### Detection Capability

Detects 60 to 100 people per minute.

#### Security Protection

The device uses a weak magnetic field and complies with electromagnetic radiation standards to ensure that it is harmless to pregnant women and does not interfere with cardiac pacemakers, floppy disks, photographic film, and videotapes.

### 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 ( $< 50 \text{ mK}$ ) 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  $-30^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+140^{\circ}\text{F}$ ), 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.

#### Protection

Supporting  $\pm 20\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6kV lightning rating provides protection against the camera and its structure from the effects of lightning.

## Scene

The Temperature Monitoring walk-through metal detector can be widely used in train stations, bus stations, metros, government buildings, exhibition centers, sports meetings, conferences, schools and other occasions.

**Walk-through Metal Detector Technical Specification**

**General**

Overall Exterior Size	2210 mm × 928 mm × 572 mm (87.0" × 36.5" × 22.5")
Passageway Interior Size	1950 mm × 714 mm × 572 mm (76.8" × 28.1" × 22.5")
Packing Size	2409 mm × 868 mm × 304 mm (94.8" × 34.2" × 12.0")
Net Weight	45 kg (99.2 lb)
Gross Weight	68 kg (149.9 lb) (with camera)
Operating Voltage	12V, 100-240V AC Power adapter included in the package
Max Power Consumption	24W
Standby Power Consumption	11W
Operating Temperature	-20°C to +65°C (-4°F to +149°F)
Operating Humidity	0%–95%
Storage Temperature	-20°C to +70°C (-4°F to +158°F)
Storage Humidity	0%–95% RH
Working Frequency	1–100 frequencies

**Ports**

Bottom Panel Port	Aviation power connector, 1 on each side
Bottom Panel Network Port	RJ-45, 1 on each side

**Certification**

Certifications	GB15210-2018 IEC 60068-2-1 IEC 60068-2-2 CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
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**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/Iconbow1/Iconbow2, etc.)

**Visible**

Image Sensor	1/2.7" CMOS
Max. Resolution	2336 × 1752
Pixel	4MP
Electronic Shutter Speed	1/30000 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**

<b>Video Compression</b>	H.265/H.264M/H.264H/H.264B/MJPEG
<b>Resolution</b>	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
<b>Frame Rate</b>	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
<b>Audio Compression</b>	G.711a; G.711mu; PCM

**Network**

<b>Protocol</b>	HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
<b>Edge Storage</b>	Micro SD card (256 G)
<b>Interoperability</b>	ONVIF; CGI
<b>Browser</b>	IE: IE8 and the later, and explorer with IE core Google: 42 and the earlier Firefox: 42 and the earlier
<b>User/Host</b>	10
<b>Security</b>	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access

**Certification**

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

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

**Power**

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

**Environment**

<b>Operating Temperature</b>	−30°C to +60°C (−22°F to +140°F)
<b>Storage Temperature</b>	−30°C to +70°C (−22°F to +158°F)

<b>Operating Humidity</b>	≤ 95%
<b>Protection</b>	IP67, anti-surge 6kV, anti-elctrostatic 6kV (touched by objects), anti-elctrostatic 8KV (air)
<b>Structure</b>	
<b>Product Dimensions</b>	122 mm × 122 mm × 112 mm (4.8" × 4.8" × 4.41")
<b>Packaging Dimensions</b>	155 mm × 155 mm × 135 mm (6.10" × 6.10" × 5.31")
<b>Net Weight</b>	≤ 0.85 kg (1.87 lb)
<b>Gross Weight</b>	≤ 1 kg (2.20 lb)

**Ordering Information**

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

**Dimensions (mm [inch])**

