a**hua** TECHNOLOGY

DH-ISC-D118-T

Walk-through Metal Detector

System Overview

The Temperature Monitoring walk-through metal detector is a high-performance and high-sensitivity security gate that can detect body temperature. It is lightweight and has high metal detection sensitivity, strong anti-interference capabilities and stable performance. With high-strength special materials, it is easy to transport and install. The device is manufactured on unified assembly lines, ensuring the good stability due to its modular design. It also delivers an simplicity and user-friendly interface.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.

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: ±0.5 °C
With blackbody: ±0.3 °C
Detection distance: 0.5 m to 2 m
Target height: 1.2 m to 1.9 m

Zone Indication
6, 12, or 18 independent zones selectable, and multiple metal items can be located simultaneously.

Optimized IR Sensor
Infrared (IR) sensor with less false or missed alarms; automatic alarm statistics and passing statistics; IR detection and multiple detection modes.

Counting Mode
One-way counting; in/out counting; searching by day.

Walk-through Metal Detector
- 18 detection zones with corresponding indicator lights
- Minimum detection target: CNY ten-cent coin
- 3.5 inch LCD with an interactive, user-friendly interface
- Monitor and display the real-time signal strength of environmental interference
- Automatically searches operating frequency (20 levels available)
- Counting passing number, pass/return numbers, and alarm number
- Pass/Return statistics, alarm statistics, and searching by day
- Easy-to-install modular design
- Safe low-voltage design
- Reliable and stable aviation connector
- 9 alarm tones with 10 adjustable volume levels, mute mode and alarm duration: 0–10 s
- 255 adjustable sensitivity levels
- Separate parameter configuration for 12 supported scenarios
- IR remote controller
- Multiple IR detection modes
- Supports lead-acid batteries (optional)

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)

Digital Signal Processor Based Technology
Digital signal processing and filtering system ensure exceptional immunity to electromagnetic interference.

Adjustable Sensitivity
255 adjustable sensitivity levels in each detection zone (sensitivity increases by levels).

Password Protection
Programming access and parameter configuration protected by six-digit password.

Electromagnetic Field Emission Technology
Complies with the current international security standards by using Very Low Frequency electromagnetic fields. No harm caused to pacemakers, pregnant women and magnetic storage devices.

Adjustable Sound and Volume
9 alarm tones with 10 adjustable volume levels, mute mode and alarm.

Adjustable Frequency
Automatically searches for and applies suitable operating frequency; supports 20 adjustable levels.

Multi-scenario Mode
Supports 12 scenario modes, and automatically applies corresponding sensitivity.

Detection Accuracy
Minimum detection target: CNY ten-cents coin.

Self Diagnosis
Automatic diagnosis plus manual self test.

Time Display
Displays the current time.

Network Update
Network firmware update.

Alarm Output
Supports 1-channel relay output, which can connect to devices such as access controllers.

Time Display
Displays the current time.

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 law enforcement sites such as public security, the procuratorate, tribunal, prison, labor camp, and detention house. It is also suitable for security checks at the entrances of public spaces, including stadiums, entertainment places, airports, customs, exhibition halls and museums.

Walk-through Metal Detector Technical Specification

Technical

Precise Positioning	18 overlapping detection zones, bilateral transmission and receipt of detection signals; 2-panel indicator lights
Zone Indication	6, 12, or 18 independent zones selectable, and multiple metal items can be located simultaneously
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)
Remote Control	Comes with a infrared remote controller with the maximum remote control range of 2 m (6.56 ft)
Leakage Current	< 0.5 mA, complying with safety requirements for electronic devices

Regular

Operating Voltage	12 VDC, power adapter (included): 100 V–240 VAC, 50/60 Hz
Maximum Power Consumption	20.6 W
Typical Power Consumption	10.8 W
Gross Weight	48 kg (105.82 lb)
Net Weight	38.5 kg (84.87 lb)
Passageway Interior Size	2003 mm x 720 mm x 393 mm (78.86" × 28.35" × 15.47")
Overall Exterior Size	Bare: 2209 mm × 866 mm × 489 mm (87.0" × 34.1" × 19.3")
Packing Size	2275 mm × 700 mm × 220 mm (89.57" × 27.56" × 8.66")
Operating Temperature	−20 °C to +65 °C (−4 °F to +149 °F)
Operating Humidity	0-95% (RH), non-condensing
Storage Temperature/ Humidity	−20 °C to +65 °C (−4 °F to +149 °F)/0-95% (RH), non-condensing
Power Button	Power switch on both door panels, and metal detection power switch on the front panel
Indicator Light	One green indicator
Human Shape Display	18 detection zones
Environmental Noise	Monitors and displays real-time signal strength of environmental interferences
Installation	Vertical mounting

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

RS-485	1
Alarm In/Out	1-channel input, and 1-channel output
Network Port	1 RJ-45, 100 Mbps
Power Output	12 VDC

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

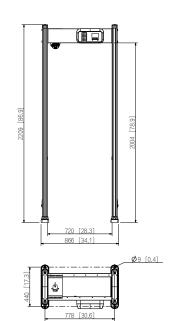| Image Sensor	1/2.7'' CMOS
Max. Resolution	2336 × 1752
Pixel	4 MP
Electronic Shutter Speed	1/30000 s–1 s
Min. Illumination	Color: 0.05 Lux Black & white: 0.005 Lux 0 Lux (IR on)
IR Illumination Distance	≥ 30 m (98.43 ft)
IR Illuminator On/Off Control	Auto; manual
Focal Length	4 mm

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

Video Compression	H.265/H.264M/H.264H/H.264B/MJEPG
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: IE8 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

Port

Network	110 M/100 M 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 (4.80" × 4.80" × 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
ISC-D118-T	DHI-ISC-D118-T	Temperature Monitoring Walk-through Metal Detector
ISC-D118-T	DHI-ISC-D118E-T	Temperature Monitoring Walk-through Metal Detector (RoHS Compliant)
Accessories	DHI-ISC-D1XX-U	UPS Module For ISC-DXX Series
Accessories	ISC-D1XX-Pallet	Use pallets when the device is moved by mechanical handling

Dimensions (mm[inch])