DS-2TX3742-25A/P
Thermal Smart Linkage Tracking System

Hikvision DS-2TX3742-25A/P Thermal Smart Linkage Tracking System formed by one bi-spectrum bullet camera offering panorama and one optical PTZ camera smartly tracking moving targets. Thermal smart linkage tracking system is popularly applied in infrastructure such as airports, prisons, railway, city streets, and campus, in which smart tracking and perimeter protection are needed.

- **Key Feature**
- 384 × 288 resolution thermal image, high sensitivity sensor, adjustable contrast
- Thermal image processing: Adaptive AGC, DDE, 3D DNR, NETD ≤ 35 mK (@ 25°C, F# = 1.0)
- PTZ camera with 4MP image, 42 × optical zoom and 500 m IR supplement
- Intelligent and persistent analytics working within the linkage system
- One-touch connection and automatic alignment between the images of bi-spectrum bullet camera and optical PTZ camera

▪ Specification

System Function	
Click Linkage	One-Touch connection between bi-spectrum bullet camera and PTZ camera beforehand via VMS client
Tracking Mode	Manual/Auto
Manual Tracking	Drawing an area in VMS client within the field of the bullet camera, leading the PTZ camera zooming in
Multi-targets Tracking	Up to 30 targets simultaneously
Event Tracking	Intrusion Detection, Line Crossing Detection
Tracking Duration	Configurable in VMS client for PTZ tracking
Temperature Measurement	3 temperature measurement rule types; 21 rules in total (10 points, 10 areas, and 1 line)
Temperature Range	-20°C to 150°C (-4°F to 302°F)
Temperature Accuracy	± 8°C (± 14.4°F)
Fire Detection	Dynamic fire detection, up to 10 fire points detectable.
Bullet Camera- Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	384 × 288
Pixel Pitch	17 μm
Spectral Range	8 μm to 14 μm
NETD (Noise Equivalent Temperature Difference)	≤ 35 mk (@ 25°C, F# = 1.0)
Focal Length	25 mm
IFOV	0.68 mrad
Field of View	14.9° × 11.2° (H × V)
Min. Focusing Distance	13 m
Aperture	F1.0
Digital Zoom	× 2, × 4, × 8
Bullet Camera- Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520, 4 MP
Shutter Speed	1 s to 1/100,000 s
Min. Illumination	Color: 0.0089 Lux @(F1.6, AGC ON), B/W: 0.0018 Lux @(F1.6, AGC ON)
Focal Length	12 mm
Field of View	25.25° × 14.44° (H × V)
Aperture	F1.6
WDR	120 dB
Bullet Camera- General	
Main Stream	Optical channel 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Thermal channel 25 fps (1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240)

Sub-stream	Optical channel
	50 Hz: 25 fps (704 × 576, 352 × 288, 176 × 144)
	60 Hz: 30 fps (704 × 480, 352 × 240, 176 × 120)
	Thermal channel
	25 fps (704 × 576, 352 × 288, 320 × 240)
Video Compression	Main Stream: H.265/H.264
	Sub-Stream: H.265/H.264/MJPEG
Audio Compression	G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/OPUS/PCM
Alarm Input	2, alarm input (0 to 5 VDC)
	2, alarm output
Alarm Output	2-ch relay outputs, alarm response actions configurable
Audio Input	1, 3.5 mm Mic in/Line in interface.
	Line input: 2 to 2.4 V [p-p], output impedance: 1 KΩ ± 10%
Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface.
	1, RS-485 interface
Optical Speed Dome	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @ (F1.5, AGC ON), B/W: 0.0002 Lux @ (F1.5, AGC ON), 0 Lux with IR
Resolution	2688 × 1520
Focal Length	6.0 to 252 mm, 42 × optical zoom
Zoom Speed	Approx. 4.8 s (Optical, Wide-Tele)
Digital Zoom	16 x
Field of View	58.7° to 2.0° (Wide-Tele)
Working Distance	100 mm to 1500 mm (Wide-Tele)
Aperture Range	F1.2 to F4.6
Shutter Speed	1 s to 30,000 s
WDR	140 dB
Image Enhancement	3D DNR, EIS, HLC/BLC, SVC
AGC	Auto/Manual
White Balance	Auto/Manual/ATW (Auto-tracking White Balance)/Indoor/Outdoor/Daylight Lamp/Sodium Lamp
Day & Night	IR cut filter
IR Supplement	Up to 500 m
Privacy Mask	24 programmable privacy masks
Optical Defog	Yes
Pan Speed	configurable from 0.1° to 210°/s; preset speed: 280°/s
Tilt Speed	configurable from 0.1° to 150°/s, preset speed 250°/s
Main Stream	60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
	50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
Sub-Stream	60 Hz: 30 fps (704 × 480, 352 × 240, 176 × 120)
	50 Hz: 25 fps (704 × 576, 352 × 288, 176 × 144)
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 352 × 288, 176 × 144)
	60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 352 × 240, 176 × 120)

| Video Compression	Main Stream: H.265+/H.265/H.264+/H.264
	Sub-Stream: H.265/H.264/MJPEG
	Third Stream: H.265/H.264/MJPEG
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/PCM
Alarm Action	Preset, Patrol Scan, Pattern Scan, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Send Email
Alarm Input	7, alarm input (0 to 5 VDC)
Alarm Output	2, alarm output
Audio Input	1, 3.5 mm Mic in/Line in interface. Line input: 2 to 2.4 V [p-p], output impedance: 1 KΩ ± 10%
Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface
Network	
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Network Storage	MicroSD/SDHC/SDXC card (up to 256 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
API	ISAPI, HIKVISION SDK, open network video interface
Simultaneous Live View	Up to 20 channels
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	iVMS-4200, Hik-Connect
Web Browser	Live view (plug-in allowed) : Internet Explorer 11 Live view (plug-in free) : Chrome 57.0+, Firefox 52.0+ Local service : Chrome 57.0+, Firefox 52.0+
General	
Adjustment Range	Network Camera (Universal Joint Module): Pan: 90°, Tilt: - 45° to 45° Speed Dome: Pan: 360°, Tilt: - 20° to 90°, Auto Flip
Mount	Wall Mount
Menu Language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
Power Supply	24 VAC ± 25%, one power supply for whole system
Power Consumption	Max. 70 W Speed Dome Consumption: Max.60W (If powered separately)
Working Temperature/Humidity	-40°C to 65°C (-40°F to 149°F); Humidity: 90% or less
Protection Level	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Dimensions	Φ266.6 mm × 573.5 mm × 699.8 mm (Φ10.5" × 22.6" × 27.5")
Weight	10.89 kg (Approx. 24.0 lb)

▪ **DRI Range Table**

* *The table is only for reference and the performance may vary according to different environment.*

* *The optimal human detection, recognition, and identification distances are calculated according to Johnson's Criteria.*

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.
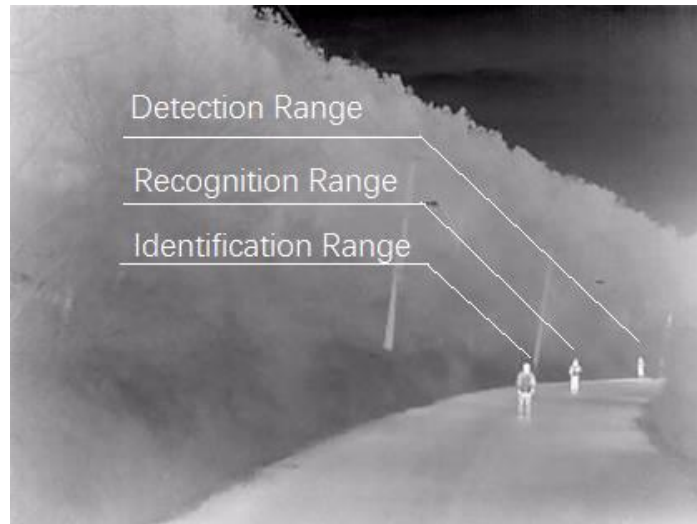
VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object:2 × 2 m)	Temperature measurement (Object:1 × 1 m)	Temperature measurement (Object:1 × 1 m)	Fire Detection (Object:1 × 1 m)
515 m	184 m	585 m	295 m	1470 m	735 m

▪ **Smart Function Table**

* *The table is only for reference and the performance may vary according to different environment.*

Detection Range (Vehicles: 1.4 × 4.0 m)	Detection Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)
2255 m	735 m	564 m	184 m	282 m	92 m

▪ **Available Model**

DS-2TX3742-25A/P

▪ **Dimension**
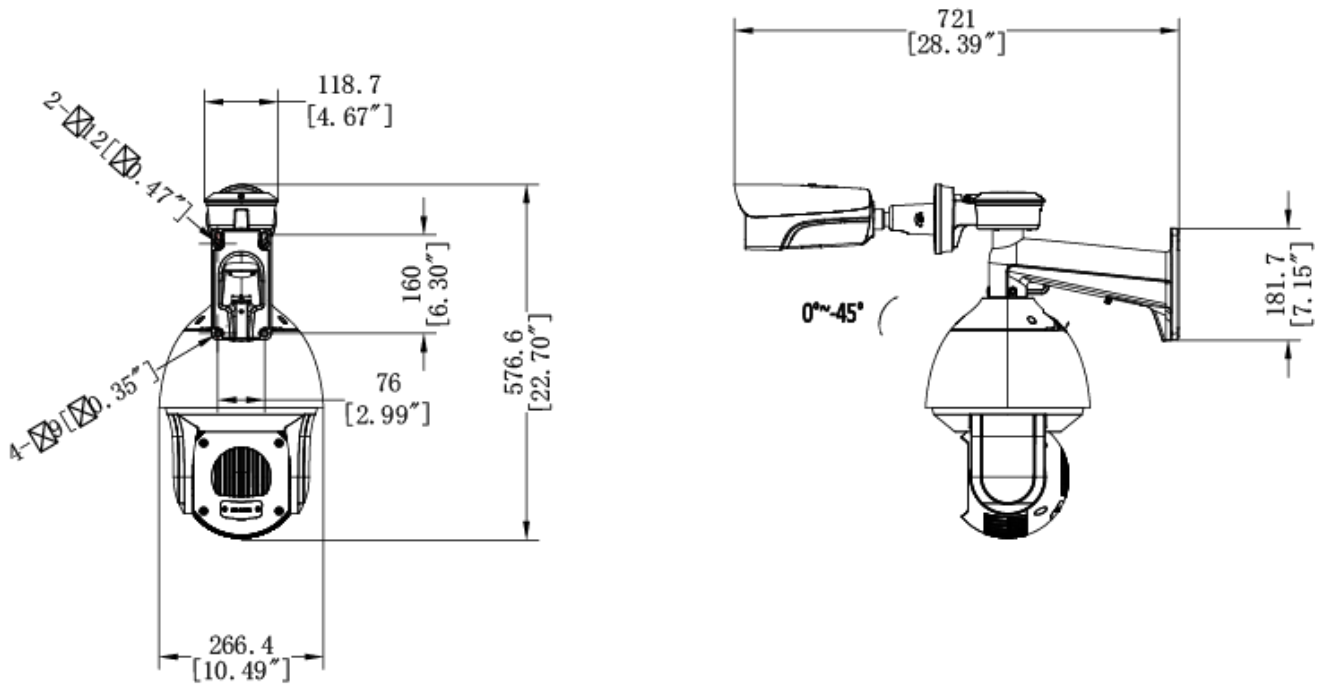
Unit:mm[Inch]

▪ **Accessory**

▪ **Optional**

DS-2902ZJ

COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.

Distributed by