# DS-2TX3742-10A/P
# Thermal Smart Linkage Tracking System



Hikvision DS-2TX3742-10A/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, campus, etc., 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 | 9.7 mm |
| IFOV | 1.75 mrad |
| Field of View | 37.5° × 28.5° (H × V) |
| Min. Focusing Distance | 1 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 | 4 mm |
| Field of View | 84° × 44.8° (H × V) |
| Aperture | F1.6 |
| WDR | 120 dB |
| **Bullet Camera- General** | |
| Main Stream | Optical channel<br>50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)<br>60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)<br>Thermal channel<br>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 (0-5 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: 2-2.4 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 - 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 | 140dB |
| 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<br>Sub-Stream: H.265/H.264/MJPEG<br>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 (0-5 VDC) |
| Alarm Output | 2, alarm output |
| Audio Input | 1, 3.5 mm Mic in/Line in interface.<br>Line input: 2-2.4 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.<br>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<br>Live view (plug-in free) : Chrome 57.0 +, Firefox 52.0 +<br>Local service : Chrome 57.0 +, Firefox 52.0 + |
| **General** | |
| Adjustment Range | Network Camera (Universal Joint Module): Pan: 90°, Tilt: - 45° to 45°<br>Speed Dome: Pan: 360°, Tilt: - 20° to 90°, Auto Flip |
| Mount | wall Mount |
| Menu Language | 32 languages<br>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, two-core terminal block |
| Power Consumption | 24 VAC: 5 A, max. 80 W (with IR and heater on)<br>IR Light consumption: Max. 24 W<br>Heater consumption: Max. 15 W |
| Working Temperature/Humidity | - 40 °C to 65 °C (- 40 °F to 149 °F);<br>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.
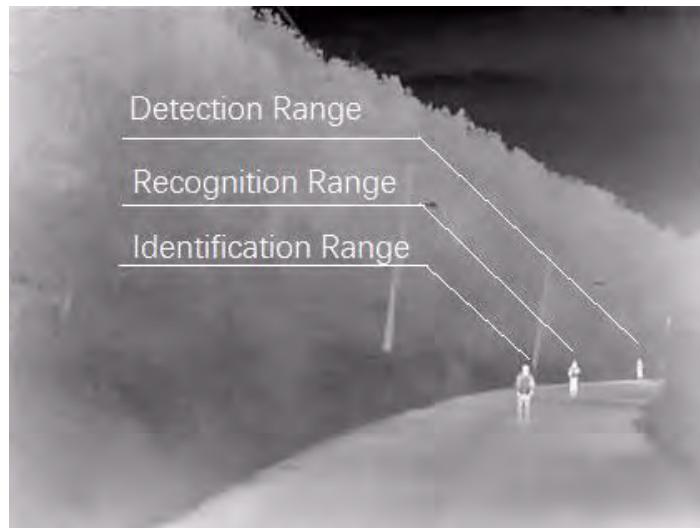


| VCA Range (Vehicles: 1.4 × 4.0 m) | VCA Range (Humans: 1.8 × 0.5 m) | Temperature Measurement (Object:2 × 2 m) | Temperature measurement (Object:1 × 1 m) | Temperature measurement (Object:1 × 1 m) | Fire Detection (Object:1 × 1 m) |
|---|---|---|---|---|---|
| 200 m | 71 m | 234 m | 118 m | 588 m | 294 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) |
|---|---|---|---|---|---|
| 902 m | 294 m | 225 m | 74 m | 113 m | 37 m |

▪ **Available Model**

DS-2TX3742-10A/P

▪**Dimension**
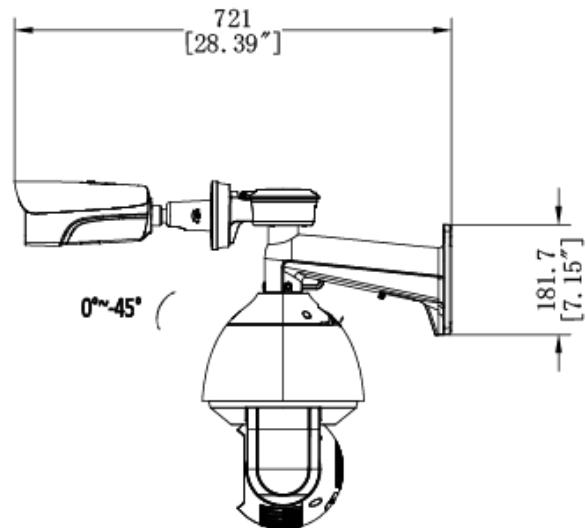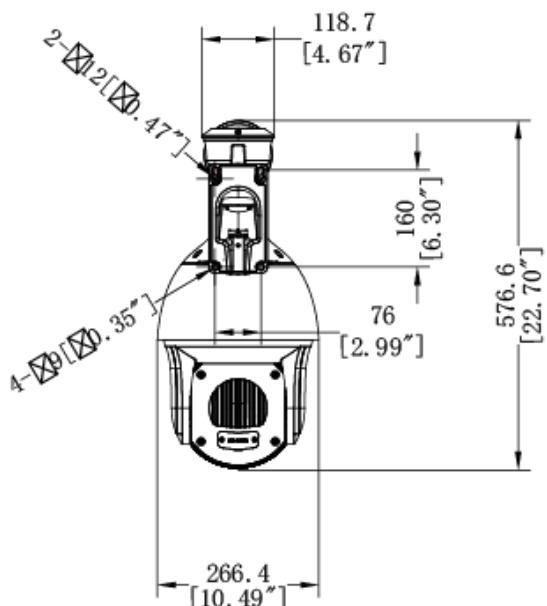


Unit:mm[Inch]

▪ **Accessory**

▪**Optional**



DS-2902ZJ

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**HIKVISION**

**Hikvision USA**
T +1-909-895-0400
sales.usa@hikvision.com

**Hikvision Europe**
T +31-23-5542770
sales.eu@hikvision.com

**Hikvision UK & Ireland**
T +01628-902140
sales.uk@hikvision.com

**Hikvision UAE**
T +971-4-4432090
salesme@hikvision.com

**Hikvision Russia**
T +7-495-669-67-99
saleru@hikvision.com

**Hikvision Australia**
T +61-2-8599-4233
salesau@hikvision.com

**Hikvision Italy**
T +39-0438-6902
info.it@hikvision.com

**Hikvision South Africa**
Tel: +27 (10) 0351172
sale.africa@hikvision.com

**Hikvision Singapore**
T +65-6684-4718
sg@hikvision.com

**Hikvision Korea**
T +82-(0)31-731-8817
sales.korea@hikvision.com

**Hikvision India**
T +91-22-28469900
sales@pramahikvision.com

**Hikvision Brazil**
T +55 11 3318-0050
Latam.support@hikvision.com

**Hikvision France**
T +33(0)1-85-330-450
info.fr@hikvision.com

**Hikvision Spain**
T +34-91-737-16-55
info.es@hikvision.com

**Hikvision Poland**
T +48-22-460-01-50
info.pl@hikvision.com

**Hikvision Canada**
T +1-866-200-6690
sales.canada@hikvision.com

**Hikvision Turkey**
T +90 (216)521 7070- 7074
sales.tr@hikvision.com

**Hikvision Kazakhstan**
T +7-727-9730667
nikia.panfilov@hikvision.ru

**Hikvision Tashkent**
T +99-87-1238-9438
uzb@hikvision.ru

**Hikvision Indonesia**
T +62-21-2933759
Sales.Indonesia@hikvision.com

**Hikvision Thailand**
T +662-275-9949
sales.thailand@hikvision.com

**Hikvision Malaysia**
T +601-7652-2413
sales.my@hikvision.com

**Hikvision Vietnam**
T +84-974270888
sales.vt@hikvision.com

**Hikvision Hong Kong**
T +852-2151-1761
info.hk@hikvision.com

**Hikvision Colombia**
sales.colombia@hikvision.com