



Network

Thermal

## TNO-C3062T

Cámara térmica con Teleobjetivo QVGA AI



### Key Features

- Resolución QVGA (384 x 288, 17°m)
- Opción de teleobjetivo de 35 mm
- Alta sensibilidad térmica (NETD 20 mK a 25 °C)
- Clasificación de objetos mediante Inteligencia Artificial (persona, vehículo)
- Máx. 8 ips (H.265, H.264 y MJPEG)
- IP66/67, IK10, NEMA4X, NEMA-TS2, MIL-STD-810H
- Elemento seguro con nivel 3 FIPS 140-3, CC EAL6+

## TNO-C3062T

Cámara térmica con Teleobjetivo  
QVGA AI



### Specifications

#### Vídeo

|                           |               |                                              |
|---------------------------|---------------|----------------------------------------------|
| Dispositivo de imagen     | Tipo          | Uncooled micro bolometer (384x288)           |
| Resolución                |               | 768x576, 384x288                             |
| Máx. Frecuencia de cuadro | H.265 / H.264 | 8fps                                         |
|                           | MJPEG         | 8fps                                         |
| Rango espectral           |               | 8~14 $\mu$ m                                 |
| NETD                      |               | $\leq 20\text{mK}@25^{\circ}\text{C}$ , F1.0 |
| Tamaño de píxel           |               | 17 $\mu$ m                                   |
| Salida de vídeo           |               | USB: Micro USB Type B                        |

#### Objetivo

|                                        |              |                |
|----------------------------------------|--------------|----------------|
| Longitud focal (mm)                    |              | 35             |
| Proporción de apertura máx. (número F) | Gran angular | 1.0            |
| Campo de visión angular                | Horizontal   | 10.7°          |
|                                        | Vertical     | 8.0°           |
|                                        | Diagonal     | 13.3°          |
| iFoV                                   |              | 0.486 mRad     |
| Min. Distancia al objeto               |              | 36.1m(118.4ft) |
| Control de enfoque                     |              | Fixed          |
| Tipo de lente                          |              | Athermalized   |

#### Desplazamiento / inclinación / rotación

|                                                  |                           |         |
|--------------------------------------------------|---------------------------|---------|
| Rango de desplazamiento / inclinación / rotación | Desplazamiento horizontal | 0°~350° |
|                                                  | Desplazamiento vertical   | 0°~90°  |
|                                                  | Rotación                  | 0°~350° |

#### Operativo

|                         |          |                        |
|-------------------------|----------|------------------------|
| Detección de movimiento | Cantidad | 8ea                    |
|                         | Forma    | 8point Polygonal zones |

## Operativo

|                                                               |                  |                                                                                                                                                                                                                               |
|---------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Máscara de privacidad                                         | Cantidad         | 6ea                                                                                                                                                                                                                           |
|                                                               | Forma            | Rectangular zones                                                                                                                                                                                                             |
|                                                               | Color / opción   | Gray, Black, White                                                                                                                                                                                                            |
| Rotación de vídeo                                             |                  | Flip, Mirror, Hallway view(90°/270°)                                                                                                                                                                                          |
| Interfaz serie                                                |                  | RS-485                                                                                                                                                                                                                        |
| Interfaz de alarma                                            | Entrada / Salida | 2 configurable I/O ports                                                                                                                                                                                                      |
|                                                               | Otros            | Support extra alarm I/O via optional I/O box                                                                                                                                                                                  |
| Activadores de alarma                                         |                  | Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription                                                                                                                                                  |
| Eventos de alarma cuando se ha producido activación de alarma |                  | File upload(image): e-mail/FTP/SFTP,<br>File upload(video clip): FTP/SFTP,<br>Notification: e-mail,<br>Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output,<br>Handover: PTZ preset,<br>MQTT: publication |
| Entrada de audio                                              |                  | Selectable(mic in/line in)                                                                                                                                                                                                    |
| Salida de audio                                               |                  | Line out                                                                                                                                                                                                                      |
| Paletas de color                                              |                  | Whitehot, Blackhot, Rainbow, Rainbow2, Sepia, Red, Iron, Custom                                                                                                                                                               |

## Analíticas

|                            |                                        |                                                                                                                     |
|----------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Tipo de objeto clasificado |                                        | Person, Vehicle                                                                                                     |
| Miniatura                  |                                        | BestShot                                                                                                            |
| Eventos de analíticas      | Según motor de Inteligencia Artificial | Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection  |
|                            | Normal                                 | Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear) |

## Radiometría

|                              |                          |
|------------------------------|--------------------------|
| Paletas híbridas             | Support                  |
| Supervisión de condición ROI | None, Increase, Decrease |

## Red

|                     |                  |                                                                                                                               |
|---------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Ethernet            |                  | Metal shielded RJ-45(10/100/1000BASE-T)                                                                                       |
| Compresión de vídeo |                  | H.265/H.264: Main/Baseline/High, MJPEG                                                                                        |
| Compresión de audio |                  | G.711 u-law /G.726 selectable,G.726(ADPCM) 8kHz,G.711 8kHz,<br>G.726: 16kbps,24kbps,32kbps,40kbps,<br>AAC-LC: 48kbps at 16kHz |
| Código inteligente  |                  | Manual, WiseStream II , WiseStreamIII                                                                                         |
| Control del Bitrate |                  | H.265/H.264: CBR or VBR,<br>MJPEG: VBR                                                                                        |
| Flujos              | Unicast          | Up to 20 users                                                                                                                |
|                     | Multicast        | Support                                                                                                                       |
|                     | Múltiples flujos | Up to 10 profiles                                                                                                             |

## Red

|                                           |       |                                                                                                                                                                                                                                     |
|-------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocolo                                 |       | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, Syslog |
| Interfaz de programación de la aplicación | ONVIF | S, G, T, M                                                                                                                                                                                                                          |
|                                           | Otros | SUNAPI(HTTP API), Hanwha Vision Open Platform                                                                                                                                                                                       |

## Seguridad

|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| S.O. / Protección de firmware | Encrypted firmware, Secure boot, Signed firmware                        |
| Autenticación del usuario     | Digest authentication, Prevent brute-force attack                       |
| Autenticación de red          | IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)                      |
| Comunicación segura           | HTTPS, WSS(WebSocket Secure), SRTP                                      |
| Control de acceso             | IP-based access control                                                 |
| Protección de datos           | Encryption credentials, Encrypt compress for live recording file export |
| Auditoría                     | Access / System / Event Log management                                  |
| ID del dispositivo            | Device certificate(Hanwha Vision Root CA)                               |
| Almacenamiento seguro         | SDcard partition encrypt(AES-256), Secure element                       |
| Certificado de seguridad      | Secure element(FIPS 140-3 level3, CC EAL6+)                             |

## General

|                      |                   |                  |
|----------------------|-------------------|------------------|
| Memoria              | RAM               | 2GB              |
|                      | Flash             | 512MB            |
| Almacenamiento local | MicroSD/SDHC/SDXC | Max. 1TB x 1slot |

## Medioambiental y eléctrico

|                             |              |                                 |
|-----------------------------|--------------|---------------------------------|
| Condición de funcionamiento | Temperaturas | -40°C~+60°C(-40°F~+140°F)       |
|                             | Humedad      | 0~95% RH(non-condensing)        |
| Condición de almacenamiento | Temperaturas | -50°C~+60°C(-58°F~+140°F)       |
|                             | Humedad      | 0~95% RH(non-condensing)        |
| Voltaje de entrada          |              | PoE(IEEE802.3af, Class3), 12VDC |
| Consumo de corriente        | PoE          | Max. 10.8W, typical 9W          |
|                             | 12 VCC       | Max. 9.4W, typical 7.7W         |

## Mecánico

|                             |                                                    |
|-----------------------------|----------------------------------------------------|
| Color                       | White                                              |
| Material                    | Aluminum                                           |
| Código RAL                  | RAL9003                                            |
| Dimensiones del producto    | ø107.3x275mm(ø4.22x10.83")                         |
| Peso del producto           | 2370g(5.22lb)                                      |
| Orificio de tubo compatible | Support conduit compatibility via optional adaptor |

## Mecánico

|                               |                                    |
|-------------------------------|------------------------------------|
| Caja de conexiones compatible | Single, Double, 4" Octagon, Square |
|-------------------------------|------------------------------------|

## Certificaciones y estándares

|               |                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC           | FCC 47 CFR 15 Subpart B Class A, CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835, IC Regulation ICES-003 Issue 7 Class A                                                                                                              |
| Seguridad     | UL 62368-1, CAN/CSA C22.2 NO. 62368-1                                                                                                                                                                                                                                                                                                     |
| Medioambiente | IEC/EN 63000, IEC 60529 IP66, IEC 60529 IP67, IEC 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, MIL-STD-810H 501.7, MIL-STD-810H 502.7, MIL-STD-810H 507.6, MIL-STD-810H 509.7, MIL-STD-810H 514.8, MIL-STD-810H 516.8 |

## DRI (Johnson's Criteria)

|                |                  |                  |
|----------------|------------------|------------------|
| Detection      | Person(1.67PPM)  | 1,230m(4,036ft)  |
|                | Vehicle(0.65PPM) | 3,144m(10,314ft) |
| Recognition    | Person(6.67PPM)  | 308m(1,009ft)    |
|                | Vehicle(2.61PPM) | 786m(2,578ft)    |
| Identification | Person(13.33PPM) | 154m(504ft)      |
|                | Vehicle(5.22PPM) | 393m(1,289ft)    |

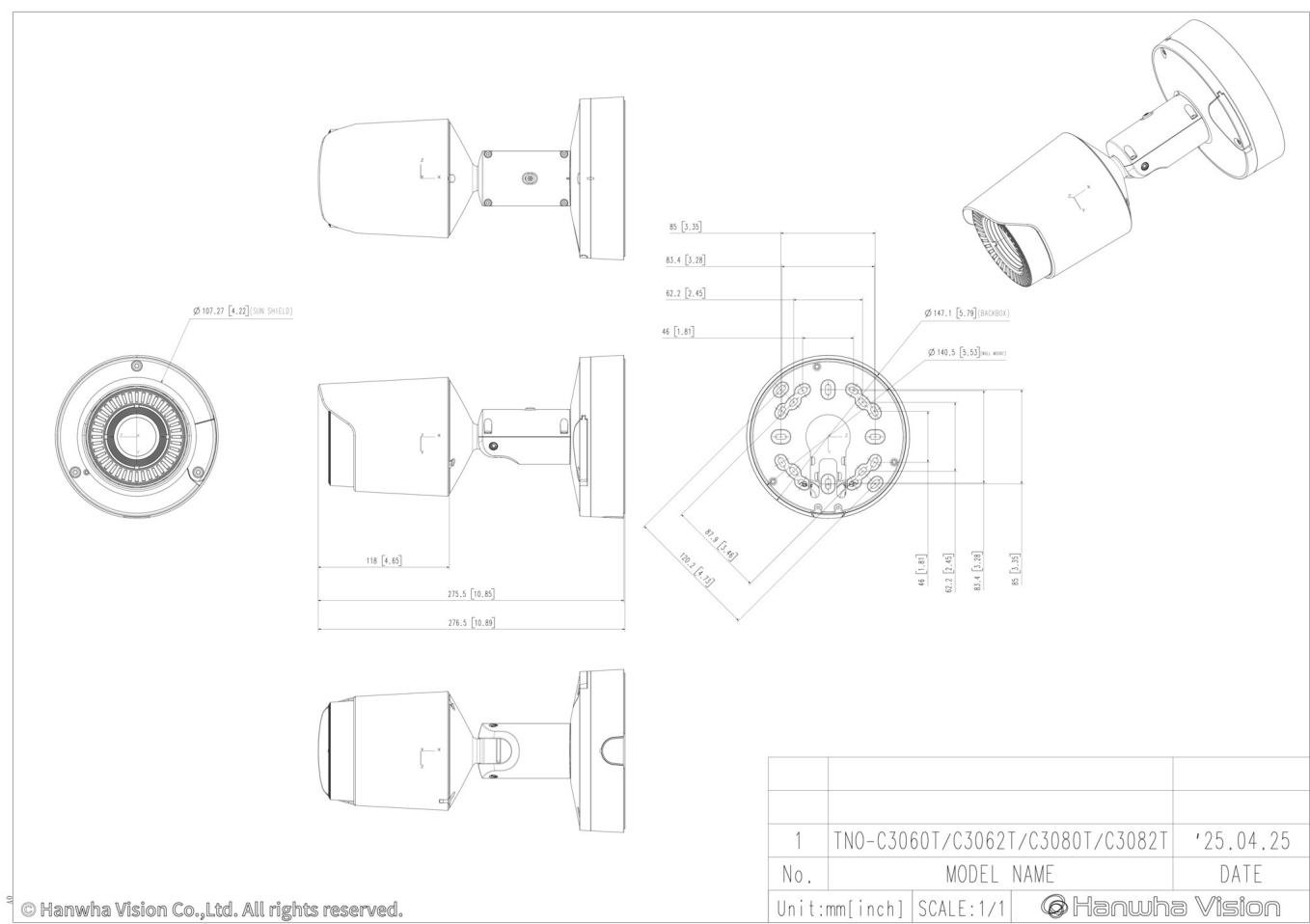
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CAD

Unit: mm [inch]



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