



Network

# TNS-9060IBC

Dual Sensor BCR camera - 35mm Fixed (Narrow FoV)



## Key Features

- All-in-one logistics solution with barcode recognition and video capture in a single device.
- Mono and colour sensors are integrated into the camera to efficiently track packages, and accurately scan & read barcodes.
- By eliminating manual scanning errors, the system increases production speed and reduces costly errors, improving overall workflow and output.
- Combining barcode reading and video surveillance provides a complete overview of conveyor activities and sites, enhancing worker safety and operational security.
- The system's ability to read barcodes from multiple orientations, coupled with large data storage capacity for thousands of alphanumeric characters, offers high flexibility and efficiency in complex workflows.
- Real-time tracking supports better inventory management, compliance, and traceability, to reduce shipping errors, returns, and ultimately boosting customer satisfaction.

## Compatible Devices



SNC-PS-60-EU   SNC-PS-60-UK

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Fixed (Narrow FoV)



## Specifications

| Video          |             | MONO                   | COLOR                  |
|----------------|-------------|------------------------|------------------------|
| Imaging Device | Size        | 1"                     | 1"                     |
|                | Type        | CMOS                   | CMOS                   |
| Resolution     |             | 4096x2160              | 4096x2160, 640x360     |
| Max. Framerate | H.265/H.264 | 20fps/20fps(60Hz/50Hz) | 20fps/20fps(60Hz/50Hz) |
| Pixel Size     |             | 3.45μm                 |                        |

## Lens

|                               |            |               |       |
|-------------------------------|------------|---------------|-------|
| Focal Length (mm)             |            | 35mm          |       |
| Max Aperture Ratio (F number) | Wide       | F8.0          | F8.0  |
| Angular Field of View         | Horizontal | 21.5°         | 21.5° |
|                               | Vertical   | 11.5°         | 11.5° |
|                               | Diagonal   | 24.2°         | 24.2° |
| Min. Object Distance          |            | 0.2m (0.66ft) |       |
| Focus Control                 |            | Manual        |       |
| Lens Type                     |            | Manual        |       |
| Mount Type                    |            | C mount       |       |

## Operational

|                         |                   |                               |
|-------------------------|-------------------|-------------------------------|
| Digital Noise Reduction |                   | SSNR                          |
| Gain Control            |                   | Manual                        |
| White Balance           |                   | AWC, Manual                   |
| Electronic Shutter      | Mode              | Global shutter mode           |
|                         | Speed Range       | 1/30~1/10,000s (33.3ms~100μs) |
| Video Rotation          |                   | Flip, Mirror                  |
| Alarm Interface         | In/Out            | Output 1ea                    |
| LED                     | Color             | White(M12 5pin connector)     |
|                         | Color Temperature | 5700K                         |
|                         | Quantity          | 48EA                          |

## Analytics

|              |         |                                                                     |
|--------------|---------|---------------------------------------------------------------------|
| Barcode Type | 1D Code | Code128, CODE39, CODE93, Codabar, ITF(Interleaved 2 of 5), UPC, EAN |
|              | 2D Code | QRcode, DataMatrix, Maxicode, PDF417                                |

## Network

|                                   |           |                                                                                                                                                                                                              |
|-----------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                          |           | M12 8pin connector(10/100/1000BASE-T)                                                                                                                                                                        |
| Video Compression                 |           | H.265/H.264: Main/High, MJPEG                                                                                                                                                                                |
| Streaming                         | Unicast   | Up to 6 users                                                                                                                                                                                                |
|                                   | Multicast | Support                                                                                                                                                                                                      |
| Protocol                          |           | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, SRTP(TCP, UDP Unicast), MQTT |
| Application Programming Interface | ONVIF     | M                                                                                                                                                                                                            |
|                                   | Others    | SUNAPI(HTTP API), Hanwha Vision Open Platform                                                                                                                                                                |

## Security

|                        |                                                                         |
|------------------------|-------------------------------------------------------------------------|
| OS / Firmware Protect  | Encrypted firmware, Secure boot, Signed firmware                        |
| User authentication    | Digest authentication, Prevent brute-force attack                       |
| Network authentication | IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)                      |
| Secure Communication   | HTTPS, WSS(WebSocket Secure), SRTP                                      |
| Access Control         | IP-based access control                                                 |
| Data Protect           | Encryption credentials, Encrypt compress for live recording file export |
| Audit                  | Access / System / Event Log management                                  |
| Device ID              | Device certificate(Hanwha Vision Root CA)                               |
| Secure Storage         | HTPM(Hanwha Trusted Platform Module)                                    |

## General

|        |       |       |
|--------|-------|-------|
| Memory | RAM   | 4GB   |
|        | Flash | 512MB |

## Environmental & Electrical

|                     |             |                                                                                      |
|---------------------|-------------|--------------------------------------------------------------------------------------|
| Operating Condition | Temperature | -40°C~+55°C(-40°F~+131°F)                                                            |
|                     | Humidity    | 0~95% RH(non-condensing)                                                             |
|                     | Others      | +74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7). Start up should be done at above -30°C |
| Storage Condition   | Temperature | -40°C~+60°C(-40°F~+140°F)                                                            |
|                     | Humidity    | 0~95% RH(non-condensing)                                                             |
| Input Voltage       |             | 24VDC, M12 12pin connector                                                           |
| Power Consumption   | 24VDC       | Max 35.4W,<br>Typical 13.7W * Max: LED On Typical: LED Off                           |

## Mechanical

|                    |                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------|
| Color              | Black                                                                                           |
| Material           | Aluminum                                                                                        |
| RAL Code           | RAL9005                                                                                         |
| Product Dimensions | Camera: 218x104.1x127.1mm LED: 255.8x73.8x49.8mm Total: 255.8x181x127.1mm(with install bracket) |
| Product Weight     | Camera: 1897g LED: 996g Total: 3438g(with install bracket)                                      |

## Certifications & Standards

|             |                                                                                                                                                      |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC         | FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, KS C 9832 Class A, KS C 9835 |
| Safety      | UL 62368-1, CAN/CSA C22.2 NO. 62368-1                                                                                                                |
| Environment | IEC 60529 IP66, IEC 60529 IP67, IEC 62262 IK10, NEMA TS-2 2.2.9 (shock resistance), IEC 60068-2-6, IEC 60068-2-27                                    |

# TNS-9060IBC

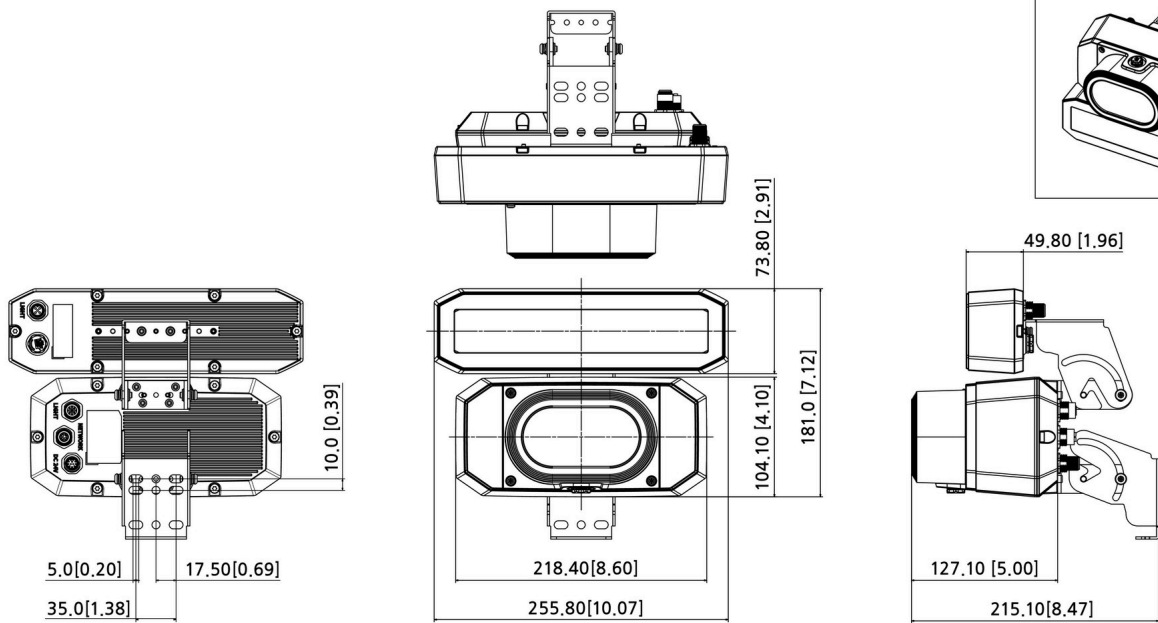
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## CAD

Unit: mm [inch]

### TNS-9040/9050/9060IBC BCR CAMERA



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|               |           |
|---------------|-----------|
| Revision      | V1.0      |
| Revision Date | 24/12/03  |
| Paper Size    | A0        |
| Unit          | mm [inch] |
| Scale         | 1:1       |