



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

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Fixed (Narrow FoV)



## Specifications

| Video            |             | MONO                        | COLOR                       |
|------------------|-------------|-----------------------------|-----------------------------|
| Bildgebungsgerät | Größe       | 1"                          | 1"                          |
|                  | Typ         | CMOS                        | CMOS                        |
| Auflösung        |             | 4096x2160                   | 4096x2160, 640x360          |
| Max. Framerate   | H.265/H.264 | 20 fps/20 fps (60 Hz/50 Hz) | 20 fps/20 fps (60 Hz/50 Hz) |
| Pixelgröße       |             | 3.45µm                      |                             |

## Linse

|                                  |            |               |       |
|----------------------------------|------------|---------------|-------|
| Brennweite (mm)                  |            | 35mm          |       |
| Max. Öffnungsverhältnis (F-Zahl) | Weit       | F8.0          | F8.0  |
| Winkel-Sichtfeld                 | Horizontal | 21.5°         | 21.5° |
|                                  | Vertikal   | 11.5°         | 11.5° |
|                                  | Diagonal   | 24.2°         | 24.2° |
| Min. Objektstand                 |            | 0.2m (0.66ft) |       |
| Fokussteuerung                   |            | Manuell       |       |
| Linsentyp                        |            | Manuell       |       |
| Halierungstyp                    |            | C-Montage     |       |

## Operativ

|                              |                         |                               |
|------------------------------|-------------------------|-------------------------------|
| Digitale Rauschunterdrückung |                         | SSNR                          |
| Verstärkung                  |                         | Manuell                       |
| Weißabgleich                 |                         | AWC, Manuell                  |
| Elektronischer Verschluss    | Modus                   | Globaler Verschlussmodus      |
|                              | Geschwindigkeitsbereich | 1/30~1/10,000s (33.3ms~100µs) |
| Videodrehung                 |                         | Umdrehen, Spiegeln            |
| Alarmschnittstelle           | Eingang/Ausgang         | Output 1ea                    |
| LED                          | Color                   | White(M12 5pin connector)     |
|                              | Color Temperature       | 5700K                         |
|                              | Quantity                | 48EA                          |

## Analysen

|            |         |                                                                         |
|------------|---------|-------------------------------------------------------------------------|
| Barcodetyp | 1D-Code | Code128, CODE39, CODE93, Codabar, ITF (verschachtelt 2 von 5), UPC, EAN |
|            | 2D-Code | QR-Code, DataMatrix, Maxicode, PDF417                                   |

## Netzwerk

|                                    |           |                                                                                                                                                                                                                 |
|------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                           |           | M12 8pin connector(10/100/1000BASE-T)                                                                                                                                                                           |
| Videokomprimierung                 |           | H.265/H.264: Main/High, MJPEG                                                                                                                                                                                   |
| Streaming                          | Unicast   | Bis zu 6 Benutzer                                                                                                                                                                                               |
|                                    | Multicast | Unterstützung                                                                                                                                                                                                   |
| Protokoll                          |           | IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMP v1/v2c/v3 (MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, SRTP (TCP, UDP Unicast), MQTT |
| Anwendungsprogrammierschnittstelle | ONVIS     | M                                                                                                                                                                                                               |
|                                    | Andere    | SUNAPI (HTTP API), Hanwha Vision Offene Plattform                                                                                                                                                               |

## Sicherheit

|                                   |  |                                                                                                            |
|-----------------------------------|--|------------------------------------------------------------------------------------------------------------|
| Betriebssystem- / Firmware-Schutz |  | Verschlüsselte Firmware, Sicherer Start, Signierte Firmware                                                |
| Benutzerauthentifizierung         |  | Digest-Authentifizierung, Brute-Force-Angriffe verhindern                                                  |
| Netzwerkauthentifizierung         |  | IEEE 802.1X (EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)                                                        |
| Sichere Kommunikation             |  | HTTPS, WSS (WebSocket Secure), SRTP                                                                        |
| Zugangskontrolle                  |  | IP-basierte Zugangskontrolle                                                                               |
| Datenschutz                       |  | Verschlüsselungsanmeldeinformationen, Verschlüsselte Komprimierung für den Export von Live-Aufnahmedateien |
| Audit                             |  | Zugangs- / System- /Ereignisprotokollverwaltung                                                            |
| Geräte-ID                         |  | Gerätezertifikat (Hanwha Vision Root CA)                                                                   |
| Sichere Speicherung               |  | HTPM (Hanwha Trusted Platform Module)                                                                      |

## Allgemein

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

## Umwelt & Elektrik

|                   |                  |                                                                                                           |
|-------------------|------------------|-----------------------------------------------------------------------------------------------------------|
| Betriebsbedingung | Temperatur       | -40 °C~+55 °C(-40 °F~+131 °F)                                                                             |
|                   | Luftfeuchtigkeit | 0-95 % relative Feuchte (nicht kondensierend)                                                             |
|                   | Andere           | +74 °C(+165 °F) (Max.) basierend auf NEMA-TS 2(2.2.7), Die Inbetriebnahme sollte bei über -30 °C erfolgen |
| Lagerbedingung    | Temperatur       | -40 °C~+60 °C(-40 °F~+140 °F)                                                                             |
|                   | Luftfeuchtigkeit | 0-95 % relative Feuchte (nicht kondensierend)                                                             |
| Eingangsspannung  |                  | 24VDC, M12 12pin connector                                                                                |
| Stromverbrauch    | 24VDC            | Max 35.4W,<br>Typical 13.7W * Max: LED On Typical: LED Off                                                |

## Mechanisch

|                    |                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------|
| Farbe              | Schwarz                                                                                         |
| Material           | Aluminium                                                                                       |
| RAL-Code           | RAL9005                                                                                         |
| Produktabmessungen | Camera: 218x104.1x127.1mm LED: 255.8x73.8x49.8mm Total: 255.8x181x127.1mm(with install bracket) |
| Produktgewicht     | Camera: 1897g LED: 996g Total: 3438g(with install bracket)                                      |

## Zertifizierungen & Standards

|            |                                                                                                                                                                |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMV        | FCC 47 CFR 15 Unterabschnitt B Klasse A, ICES-3(A)/NMB-3(A), CE/UKCA – EN55032 Klasse A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, KS C 9832 Klasse A, KS C 9835 |
| Sicherheit | UL 62368-1, CAN/CSA C22.2 NR. 62368-1                                                                                                                          |
| Umwelt     | 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

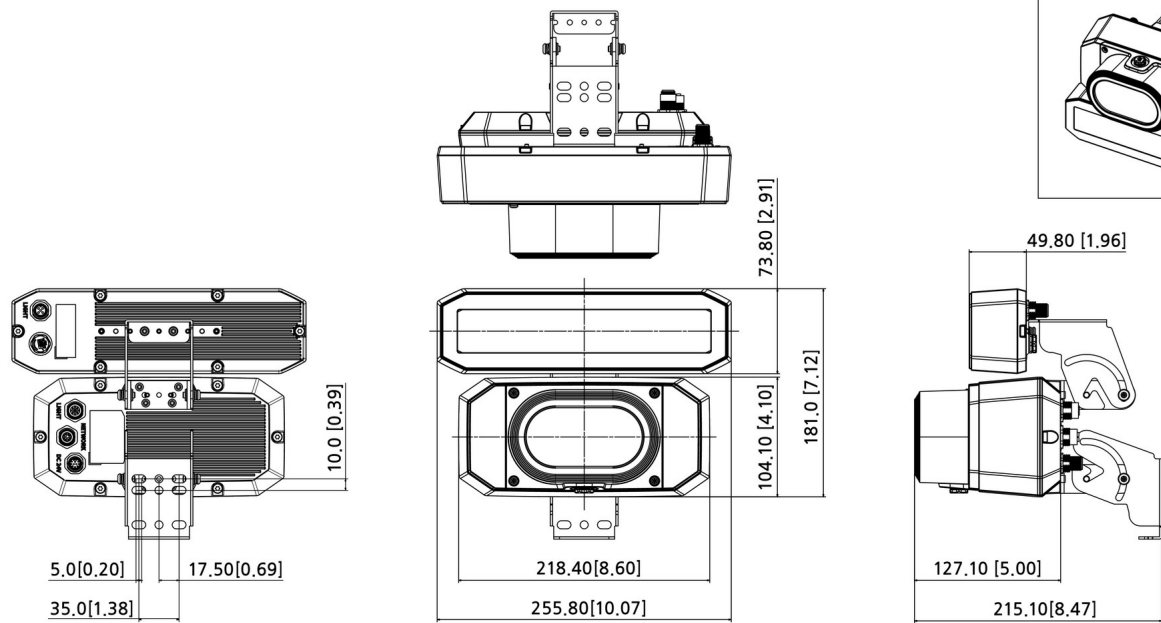
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## CAD

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       |