



Network

Multi-sensor

TNS-9050IBC

Dual Sensor BCR Camera



Key Features

- Dual Global Sensor for Barcode Reading and Video Monitoring
 - MONO 4K 1" + COLOR 4K 1"
- 25mm Fixed (Wide FoV)
- AI barcode location search
 - In Logistics and Warehouse, track barcodes on high speed conveyor belt moving at 2m/s(6.5ft/s)
- 1D Code is available
(Code128 / Code39 / Code93/ Codabar / Interleaved 2 of 5 / UPC / EAN)
- 2D Code is available
(QR code / DataMatrix / Maxicode / PDF417)
- Reinforced durability
 - IP66, IP67, IK10, NEMA TS-2 2.2.9, M12 8pin Ethernet connect
 - Humidity control with AIR vent, EN 60068-2-6(vibration resistance)
 - EN 60068-2-27 (shock resistance), Operating temperature -40°C ~ + 55°C

Compatible Devices



SPP-C08020E



SPP-C08050E



SPP-C08100E



SPP-C12020P



SPP-C12050P



SPP-C12100P

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Specifications

| | |
|---------------------------|--|
| Video | |
| Imaging Device | Global Shutter Mono 1" CMOS Global Shutter Color 1" CMOS |
| Resolution | Mono: Max 4096x2160 Color: Max 4096x2160 |
| Max. Framerate | Mono: Max 20fps Color: Max 20fps |
| Pixel Size | 3.45μm(H) × 3.45μm(V) |
| Lens | |
| Focal Length (Zoom Ratio) | 25mm |
| Max. Aperture Ratio | Mono: F8.0 Color: F8.0 |
| Angular Field of View | Mono: H30.4° / V16.6° / D34.2° Color: H30.4° / V16.6° / D34.2° |
| Min. Object Distance | 0.15m (0.49ft) |
| Focus Control | Manual |
| Lens Type | Manual |
| Mount Type | C Mount |
| Operational | |
| Camera Title | Displayed up to 85 characters |
| Digital Noise Reduction | SSNR V |
| Gain Control | Manual, 0~48dB |
| White Balance | AWC / Manual |
| Electronic Shutter Speed | - Manual - 1/10,000~1/30s (100us ~ 33.33ms) |
| Video Rotation | Flip, Mirror |
| Analytics | Barcode recognition - Barcode type: 1D Code, Code128 / CODE39 / CODE93 / Codabar / ITF(Interleaved 2 of 5) / UPC / EAN 2D Code, QR code / DataMatrix / Maxicode / PDF417 |
| Alarm I/O | Out 1EA |
| Light Type | White LED, M12 5pin connector |
| Network | |
| Ethernet | M12 8pin connector (10/100/1000BASE-T) |
| Video Compression | H.265/H.264: Main/High, MJPEG |
| Bitrate Control | H.264/H.265: CBR or VBR MJPEG: VBR |

Streaming

Unicast(6 users) / Multicast

Mono:
(1) 4096x2160 @ 15/18/20fps all codec
Color:
(1) 4096x2160 @ 15/18/20fps all codec
(2) 640x360 @ 15/18/20fps all codec

| | |
|-----------------------------------|---|
| Protocol | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, SRTP (TCP, UDP Unicast), MQTT |
| Security | OS / Firmware Protect: Secure boot, Verify firmware forgery, Firmware encryption User authentication: Digest Authentication, Privent brut-force attack Network authentication: 802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2) Secure Communication: HTTPS, SRTP, WSS(Websocket secure) Access Control: IP address filtering Data Protect: Authentication information encryption, ZIP compression encryption Audit: User Access/System/Event log Device ID: Device Certificate(Hanwha Techwin Root CA, pre-installed) Secure Storage: HTPM(Hanwha Trusted Platform Module) Secure by default |
| Application Programming Interface | SUNAPI(HTTP API) Wisenet Open Platform ONVIF Profile M |

Security

| | |
|------------------------|---|
| OS / Firmware Protect | Secure boot, Signed firmware, Firmware encryption |
| User authentication | Digest Authentication, Privent brute-force attack |
| Network authentication | 802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2) |
| Secure Communication | HTTPS, SRTP, WSS(Websocket secure) |
| Access Control | IP address filtering |
| Data Protect | Authentication information encryption, ZIP compression encryption |
| Audit | User Access/System/Event log |
| Device ID | Device Certificate(Hanwha Techwin Root CA, pre-installed) |
| Secure Storage | HTPM (Hanwha Trusted Platform Module) |
| Security Certificate | Secure by default |

General

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|------------------|--|
| Webpage Language | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Web Viewer | Support |
| Memory | 4GB RAM, 512MB Flash |

Environmental & Electrical

| | |
|----------------------------------|--|
| Operating Temperature / Humidity | -40°C~+55°C(-40°F ~ +131°F) / 0~95% RH * Start up should be done at above -30°C NEMA TS-2: 74°C - / 0~95% RH |
| Storage Temperature / Humidity | -40°C ~ +60°C(-40°F ~ +140°F) / Less than 95% RH |
| Certification | IP67, IP66, IK10(Exclude Window), NAME 4X |
| Input Voltage | 24VDC, M12 12pin connector |
| Power Consumption | Max 28.6W, Typical 13.7W * Max: LED On Typical: LED Off |

Mechanical

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|------------------|------------------|
| Color / Material | Black / Aluminum |
| RAL Code | RAL9005 |

| | |
|-----------------------------|---|
| Product Dimensions / Weight | Camera: 218x104.1x127.1mm, 1897g LED: 255.8x73.8x49.8mm, 996g Total: 255.8x181x127.1mm, 3438g(with install bracket) |
|-----------------------------|---|

Certifications & Standards

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|-------------|--|
| EMC | FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 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 IEC/EN 62471 |
| Environment | EN 60068-2-6 (variation resistance) EN 60068-2-27 (shock resistance) NEMA TS-2 2.2.9 (shock resistance) IEC/EN 60529 IP67, IP66 IEC/EN 62262 IK10 |

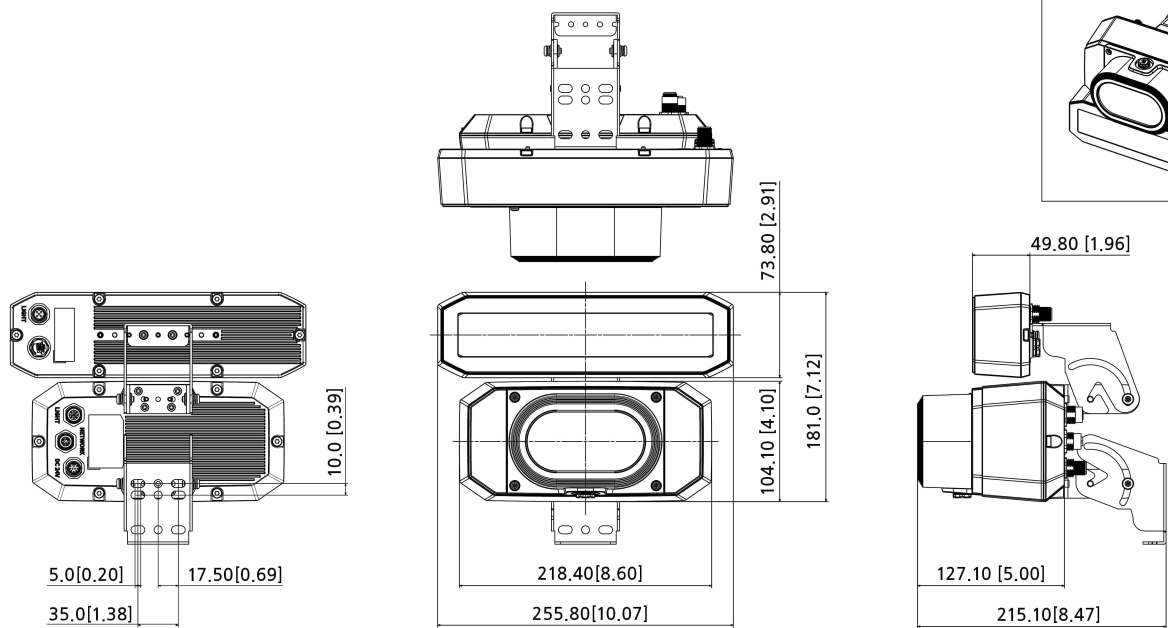
TNS-9050IBC
Dual Sensor BCR Camera



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 |