



Network

Multi-sensor

# TNS-9060IBC

Dual Sensor BCR Camera



## Key Features

- Dual Global Sensor for Barcode Reading and Video Monitoring
- MONO 4K 1” + COLOR 4K 1”
- 35mm 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)	35mm
Max. Aperture Ratio	Mono: F8.0 Color: F8.0
Angular Field of View	Mono: H21.5° / V11.5° / D24.2° Color: H21.5° / V11.5° / D24.2°
Min. Object Distance	0.2m (0.66ft)
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	
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 35.4W, Typical 13.7W * Max: LED On Typical: LED Off

Mechanical	
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)
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## Certifications & Standards

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-9060IBC

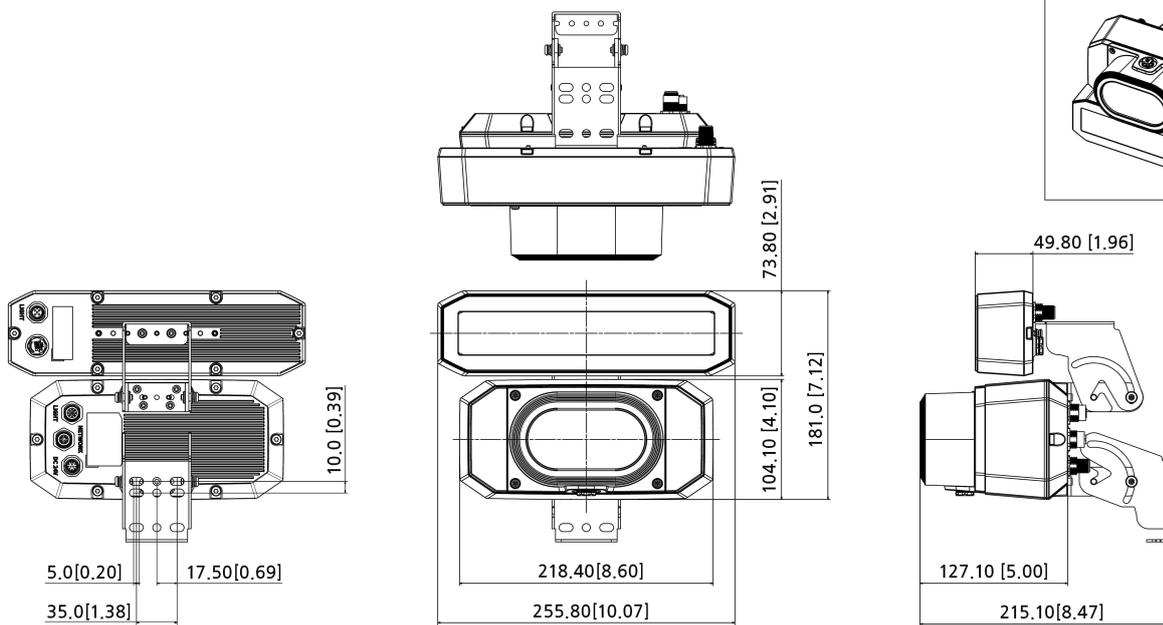
Dual Sensor BCR Camera



CAD

Unit:mm [inch]

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



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

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