



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

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

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## 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 28.6W, 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-9050IBC

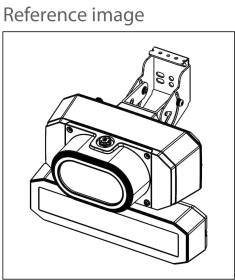
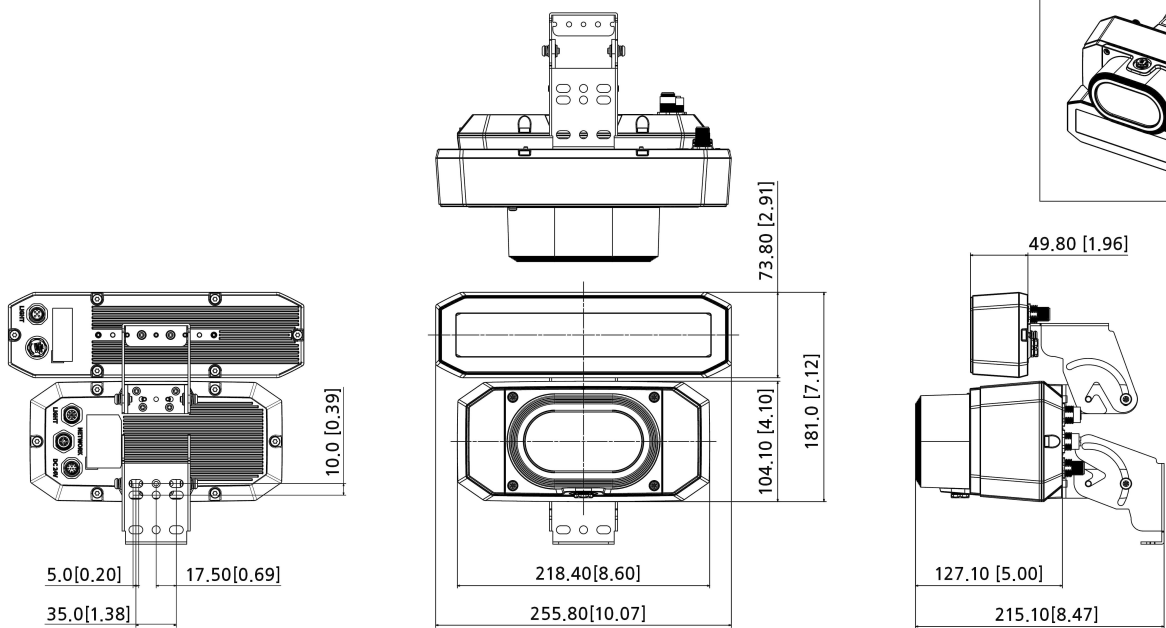
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CAD

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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