Hanwha Vision

Network Multi-sensor

TNS-9040IBC
Dual Sensor BCR camera

Key Features

- Dual Global Sensor for Barcode Reading and Video Monitoring
- MONO 4K 1" + COLOR 4K 1"
- 16mm Fixed (Ultra-Wide FoV)
- AI barcode location search
- Track barcodes on high speed conveyor belt moving at 2m/s(6.5ft/s)
- 1D Code is available (Code128 / Code93/ Codabar / Interleaved 2 of 5 / UPC / EAN)
- 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℃ ~ + 55℃

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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)	16mm
Max. Aperture Ratio	Mono: F8.0 Color: F8.0
Angular Field of View	Mono: H47.5° / V26.9° / D53.2° Color: H47.5° / V26.9° / D53.2°
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
Light Type	White LED 32ea

Network

Ethernet	M12 8pin connector (10/100/1000BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Quality Level control
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)
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

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℃~+55℃(-40°F ~ +131°F) / 0~95% RH * Start up should be done at above -30℃ NEMA TS-2: 74℃ - / 0~95% RH
Storage Temperature / Humidity	-40℃ ~ +60℃(-40°F ~ +140°F) / Less than 95% RH
Certification	IP67, IP66, IK10(Exclude Window), NAME 4X
Input Voltage	24VDC
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)

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com.
Hanwha Vision is formerly known as Hanwha Techwin.

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-9040IBC

Dual Sensor BCR camera

CAD

Unit: mm [inch]

3	MODEL2	
2	TNS-9040IBC/9060IBC	'24.07.16
1	TNS-9050IBC	'23.11.16
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Vision

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