





# **TNS-9060IBC**

Dual lens BCR camera





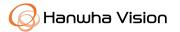






#### **Key Features**

- Dual Global Sensor for Barcode Reading and Video Monitoring
- MONO 4K 1" + COLOR 4K 1"
- 35mm Fixed (Wide FoV)
- AI barcode location search
- 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)
- 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  $\sim$  + 55°C



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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
0	
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 48ea
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

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.

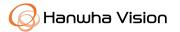


Unicast(6 users) / Multicast
Mono:
(1) 4096x2160 @ 15/18/20fps all codec Color:
(1) 4096x2160 @ 15/18/20fps all codec (2) 640x360 @ 15/18/20fps all codec
IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, SRTP (TCP, UDP Unicast)
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
SUNAPI(HTTP API) Wisenet Open Platform
Secure boot, Signed firmware, Firmware encryption
Digest Authentication, Privent brute-force attack
802.1X Authentication, FTVent Brace Torce detack  802.1X Authentication (EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
HTTPS, SRTP, WSS(Websocket secure)
IP address filtering
Authentication information encryption, ZIP compression encryption
User Access/System/Event log
Device Certificate(Hanwha Techwin Root CA, pre-installed)
HTPM (Hanwha Trusted Platform Module)
Secure by default
Secure by defidure
English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Support
4GB RAM, 512MB Flash
-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
-40°C ~ +60°C(-40°F ~ +140°F) / Less than 95% RH
IP67, IP66, IK10(Exclude Window), NAME 4X
24VDC
Max 35.4W, Typical 13.7W  * Max: LED On  Typical: LED Off
Black / Aluminum
Black / Aluminum RAL9005

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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



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CAD Unit:mm [inch]

