



Network

TNO-C8083E

5MP Compact Explosion-proof AI Camera



Key Features

- Compact and Light-weight (4.78Kg) Explosion proof bullet
- Up to 30fps@5MP resolution with 3.2x motorized vari-focal lens
- AI based Object classification and reduced false alarm
- 1/2" cable gland type for easy installation
- IECEX, ATEX, KCs, JPEX Explosion-proof certificated
- IP66/IK10 with SUS316L stainless

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Specifications

Video

Imaging Device	1/2.8" 5MP CMOS
Resolution	2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@5MP Max. 5fps)
Min. Illumination	Color: 0.07Lux (F1.6, 1/30sec) B/W: 0.007Lux (F1.6, 1/30sec, 30IRE)

Lens

Focal Length (Zoom Ratio)	3.2~10.2mm(3.2x) motorized varifocal
Max. Aperture Ratio	F1.6(Wide)~F3.1(Tele)
Angular Field of View	H: 95°(Wide)~29°(Tele) V: 69°(Wide)~21°(Tele) D: 126°(Wide)~36°(Tele)
Min. Object Distance	1.2m (3.93ft)
Focus Control	Simple focus
Lens Type	DC auto iris(IR corrected)

Operational

Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	32ea, 4point quadrangle zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90-/270-)
Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events - Motion detection, Defocus detection, Tampering, Virtual area(Appear/Disappear) * Some of the video analytics only works with people and vehicle detection
Business Intelligence	Based on AI engine: People/Vehicle counting, Queue management, Heatmap
Alarm Triggers	Analytics, Network disconnect

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.

Alarm Events	File upload via FTP and e-mail Notification via e-mail Handover(PTZ preset, Send message by HTTP/HTTPS/TCP)
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Network

Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec	Manual(5ea area), WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5profiles)
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, LLDP, CDP, SRTP (TCP, UDP Unicast)
Application Programming Interface	ONVIF Profile S/T/M SUNAPI(HTTP API)

Security

OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	Access control based on IP address
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log management
Device ID	Device Certificate(Hanwha Private Root CA)

General

Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Memory	2GB RAM, 1GB Flash

Environmental & Electrical

Operating Temperature / Humidity	-30°C~+55°C(-22°F ~ +131°F) / 0~95% RH(non-condensing) * Start up should be done at above -30°C
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~95% RH
Certification	CE, KC, IP66, IK10, ATEX, II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T80°C Db IECEX, Ex db IIC T6 Gb Ex tb IIIC T80°C Db
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 9.50W, typical 5.30W

Mechanical

Color / Material	Silver / stainless (SUS316L)
Product Dimensions / Weight	ø110.5 x 316.2mm(ø4.35x12.44"), 4770g(10.51 lb)
Hanging Mount (Dome)	SBE-100WM, SBE-100PM
Wall Mount	SBE-100WM
Pole Mount	SBE-100PM

Certifications & Standards

EMC	CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A KS C 9832:2023, KS C 9835:2019
Environment	EC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide: 42.7m(140.20ft) / Tele: 186.9m(613.28ft)
Observe (63PPM/ 19PPF)	Wide: 17.2m(56.08ft) / Tele: 75.4m(245.31ft)
Recognize (125PPM/ 38PPF)	Wide: 8.5m(28.04ft) / Tele: 37.4m(122.66ft)
Identify (250PPM/ 76PPF)	Wide: 4.3m(14.02ft) / Tele: 18.7m(61.33ft)

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Unit:mm [inch]

