



Network

TNO-C8083E

5MP Compact Explosion-proof AI Camera

EAC



CE

FC

Key Features

- Compact and Light-weight (4.77Kg) 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

TNO-C8083E

5MP Compact Explosion-proof AI Camera



Specifications

Video		
Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@5MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.07
	BW(1/30sec, 30IRE)	0.007
Lens		
Focal Length (mm)		3.2~10.2
Zoom Ratio	Optical	3.2x
Max Aperture Ratio (F number)	Wide	1.6
	Tele	3.1
Angular Field of View	Horizontal	95°~29°
	Vertical	69°~21°
	Diagonal	126°~36°
Min. Object Distance		1.2m(3.93ft)
Focus Control		Simple focus
Lens Type		DC auto iris(IR corrected)
Operational		
Day & Night		Auto(ICR)
Backlight Compensation		BLC, WDR, SSSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones

Operational

Privacy Masking	Quantity	32ea
	Shape	4point Quadrangle zones
	Color / Option	Gray, Green, Red, Blue, Black, White
Gain Control		Low, Middle, High
White Balance		ATW, AWC, Manual, Indoor, Outdoor
LDC		Support
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker
	Speed Range	1/5~1/25,000sec
Digital PTZ		Support
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Triggers		Analytics, Network disconnect, MQTT subscription
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Handover: PTZ preset,send message by HTTP/HTTPS/TCP.Audio clip playback, MQTT: publication

Analytics

Classified Object Type		Person, Vehicle
Attributes	Vehicle	Type(car, bus, truck, motorcycle, bicycle)
Thumbnail		BestShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection
	Normal	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting

Network

Ethernet		RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec		Manual, WiseStreamIII
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 users
	Multicast	Support
	Multiple Streaming	Up to 5 profiles
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), MQTT
Application Programming Interface	ONVIF	S, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)

General

Memory	RAM	2GB
	Flash	1GB

Environmental & Electrical

Operating Condition	Temperature	-30°C~+55°C(-22°F~+131°F)
	Humidity	0~95% RH(non-condensing)
	Others	Start up should be done at above -30°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~95% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3)
Power Consumption	PoE	Max. 9.5W, typical 5.30W

Mechanical

Color	Silver
Material	Stainless(STS316L)
Product Dimensions	ø110.5 x 215mm(ø4.35x8.46")
Product Weight	4770g(10.51lb)

Certifications & Standards

EMC	CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, KS C 9832 Class A, KS C 9835
Environment	IEC 60529 IP66, IEC 62262 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, JPEX, KCs, CCC

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)

DORI (EN62676-4 standard)

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)

TNO-C8083E

5MP Compact Explosion-proof AI Camera

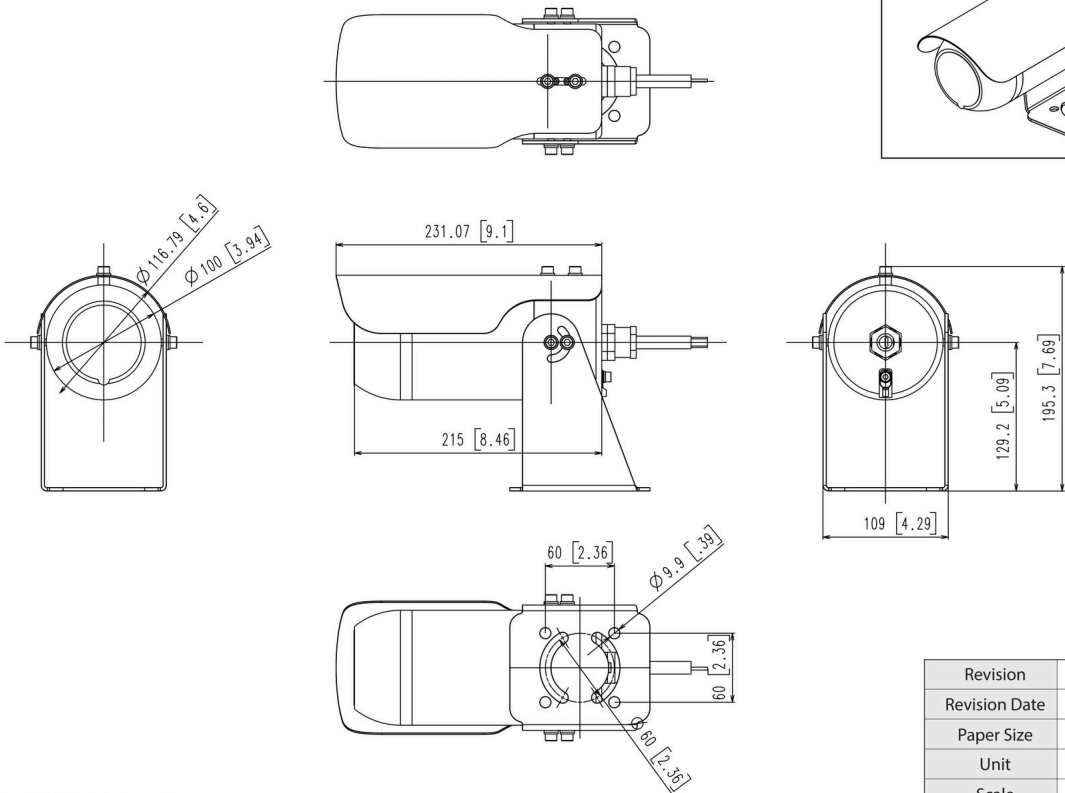
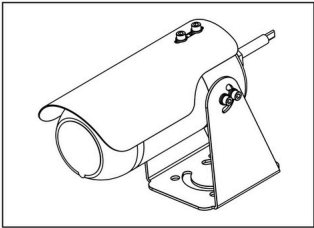


CAD

Unit: mm [inch]

TNO-C8083E 5MP Compact Explosion-proof AI Camera

Reference image



© Hanwha Vision Co., Ltd. All right reserved.

Revision	V1.0
Revision Date	24/07/31
Paper Size	A0
Unit	mm [inch]
Scale	1 : 1