



IWH-81PI-UHTA

8 MP Smart Hybrid Light Fixed Bullet Network Camera, 2.8 mm lens, 40 m IR range, PoE, IP67.

High quality imaging with 8 MP resolution

Clear imaging against strong backlight due to 120 dB true WDR technology

Efficient H.265+ compression technology

Focus on human and vehicle classification based on deep learning

Smart Hybrid Light: Integrates IR and White lights, 4 supplemental lighting modes

Built-in dual-microphone for real-time high quality audio security

Water and dust resistant (IP67) and vandal-resistant (IK10)

Camera

Image Sensor	1/2.8" Progressive Scan CMOS
Max. Resolution	3840 x 2160
Min. Illumination	Colour: 0.005 Lux @(F1.6, AGC ON), B/W0 Lux with light
Shutter Time	1/3 ÷ 1/100,000 s
Day & Night	IR cut filter
Angle Adjustment	<i>Pan:</i> 0° ÷ 360°; <i>Tilt:</i> 0° ÷ 90°; <i>Rotate:</i> 0° ÷ 360°

Lens

Lens Type	Fixed focal length, 2.8 mm
Aperture	F1.6
FOV (Field of View)	<i>Horizontal:</i> 108°; <i>Vertical:</i> 59°; <i>Diagonal:</i> 127°
Lens Mount	M12
Iris Type	Fixed
Depth of Field	1.7 m to ∞

DORI

DORI	D: 84 m, O: 33 m, R: 16 m, I: 8 m
------	-----------------------------------

Illuminator

Supplement Light Type	IR, White Light
Smart Supplement Light	Yes
Supplement Light Range	Up to 40 m
IR Wavelength	850 nm

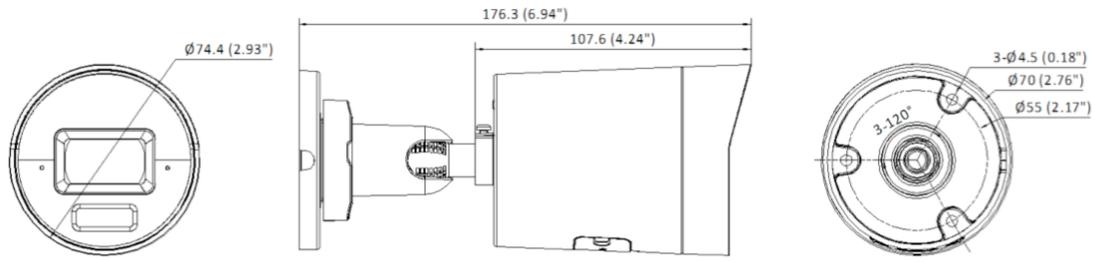
Video

Main Stream	50 Hz: 20 fps (3840 × 2160), 25 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 20 fps (3840 × 2160), 30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
Sub Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)
Video Compression	<i>*Third stream is supported under certain settings</i> <i>Main stream:</i> H.265/H.264/H.264+/H.265+ <i>Sub-stream:</i> H.265/H.264/MJPEG <i>Third stream:</i> H.265/H.264 <i>*Third stream is supported under certain settings</i>
Video Bit Rate	32 kbps to 16 Mbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Bit Rate Control	CBR/VBR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
ROI (Region of Interest)	1 fixed region for main stream and sub-stream
Target cropping	Yes

Audio

Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Audio Bit Rate	64 kbps (G.711ulaw/G.711alaw)/16 kbps (G.722.1)/16 kbps (G.726)/32-160 kbps (MP2L2)/8-320 kbps (MP3)/16-64 kbps (AAC-LC)
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/48 kHz

Network	
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (Profile S, Profile G), ISAPI, SDK, ISUP
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets
User/Host	Up to 32 users. 3 levels: administrator, operator and user
Security	Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2/1.3, WSSE and digest authentication for Open Network Video Interface
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
Client	CMS-MAZi, CTR-MAZi
Web Browser	Plug-in required live view: IE 11 Plug-in free live view: Chrome 80+, Firefox 80+, Edge 89+, Safari 13+ Local service: Chrome 80+, Firefox 80+, Edge 89+, Safari 13+
Image	
Image Parameters Switch	Yes
Image Settings	Rotate mode
Day/Night Switch	Day, Night, Auto, Schedule
Wide Dynamic Range (WDR)	120 dB
Image Enhancement	BLC, HLC, 3D-DNR
SNR	≥ 52 dB
PrivacyMask	8 programmable polygon privacy masks
Interface	
Audio	Built-in microphone; Dual array microphone
On-board Storage	Built-in memory card slot, support microSD/SDHC/SDXC card, up to 512 GB
Reset Key	Yes
Ethernet Interface	1 RJ45 10/100 Mbps self-adaptive Ethernet port
Event	
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception
Smart Event	Unattended baggage detection, object removal detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture, trigger alarm output
Deep Learning Function	
Perimeter Protection	Line crossing detection, intrusion, region entrance, region exiting; Support alarm triggering by specified target types (human and vehicle)
General	
Web Client Language	33 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
Operating and Storage Conditions	-30 °C ÷ +60 °C (-22 °F ÷ +140 °F), humidity 95% or less (non-condensing)
General Function	Heartbeat, mirror, flash log, password reset via email, pixel counter, anti-banding
Power	12 Vdc ± 25%, 0.5 A, max. 6 W, Ø 5.5 mm coaxial power plug, reverse polarity protection, PoE IEEE 802.3af, Class 3, max. 7.5 W
Material	Metal
Dimension	Camera Ø 74.4 × 176.3 mm (Ø 2.93" × 6.94") Package: 234 × 120 × 117 mm (9.21" × 4.72" × 4.61")
Weight	<i>Without package</i> : ~515 g (1.1 lb.); <i>With package</i> : ~760 g (1.7 lb.)
Approval	
EMC	CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue7, KC: KN32: 2015, KN35: 2015
Safety	CB: IEC 62368-1: 2014+A11, CE-LVD: EN 62368-1: 2014/A11: 2017, BIS:IS13252(Part1): 2010/IEC60950-1:2005, LOA: IEC/EN 60950-1
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	IP67 (IEC 60529-2013)



Unit: mm (inch)