



# HW-IPC-E5419C-IL-ZAS

# 4MP Advanced Dual Light Active Deterrence NightColor IntelliCore Network Camera





IntelliCore, by Hector Weyl, is an advanced AI surveillance series. It features Object Detection, Intrusion/Tripwire alerts, Face Detection, People Counting, and Heat Mapping. Its AMD 4.0 uses deep learning to filter out animals, minimizing false alarms. It also captures color details for post-event searches. With Active Deterrence and NightColor technologies, IntelliCore provides smart, user-friendly AI solutions for diverse monitoring needs.

#### **Series Overview**

Powered by advanced deep learning algorithms, IntelliCore excels in a multitude of Al-driven functions, including Object Detection, Intrusion and Tripwire alerts, Face Detection, People Counting, and Heat Mapping. Its AMD (Active Motion Detection) 4.0 leverages these algorithms to filter out irrelevant objects with remarkable accuracy, reducing false alarms and providing valuable data for post-event analysis.

#### **Functions**

### Smart H.265& Smart H.264

Leveraging an advanced scene-adaptive rate control algorithm, Hector Weyl's smart encoding technology achieves greater encoding efficiency compared to H.265 and H.264, delivering high-quality video while reducing storage and transmission costs.

#### **Active Motion Detection**

With enhanced AI capabilities, AMD (Active Motion Detection) 4.0 intelligently filters out irrelevant objects in a scene. Utilizing an advanced deep learning algorithm, it can accurately differentiate and exclude both small and large animals, minimizing false alarms. Furthermore, AMD 4.0 detects color details in clothing and vehicles, offering valuable data for quick post-event searches.

- 4-MP 1/1.8" CMOS image sensor, low luminance, and high definition image.;
- Outputs max. 4 MP (2688  $\times$  1520) @ (1~25/30fps);
- H.265 codec, high compression rate, ultra-low bit rate.
- the max. illumination distance is 50 m.
- H.264+ /H.265+, flexible coding, applicable to various bandwidth and storage environments;
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes;
- 2.8-12mm Motorized vari-focal Lens;
- intrusion, Tripwire(Support the Classification of Vehicle, Human and Non-Motor );
- Supports max. 256 G Micro SD card;
- built in Mic, Built-in Speaker, Two-way talk;
- Support White Light Alarm, Sound Alarm, Arm and Disarm;
- With deep learning algorithm, it supports: Perimeter Protection, Face Detection, Smart Object Detection, People Counting, Parking Space Detection, etc.;
- AMD, Video Metadata;
- 12 VDC/PoE power supply;
- IP67 protection.













#### Advanced Dual Light technology

Hector Weyl Smart Dual Light technology uses an intelligent algorithm to detect targets. At night, the IR illuminator is typically active; however, when a target enters the monitoring area, the white light activates, allowing the camera to capture full-color video and detailed snapshots of key events. This means snapshots and videos are linked with full-color imagery. Once the target leaves the area, the white light turns off, and the IR illuminator resumes, effectively minimizing light pollution.

Equipped with sophisticated Wide Dynamic Range (WDR) technology, Hector Weyl's network cameras deliver crisp details in settings characterized by stark brightness contrasts. This ensures that both the brightly lit and shadowed areas are captured with clarity, even under conditions of intense illumination or when subjects are backlit.

#### **Perimeter Protection**

With deep learning algorithm, Hector Weyl Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, Object Detection, People Counting, Heat Map) are largely reduced

#### Protection (IP67, Wide Voltage)

IP67: The camera undergoes rigorous dust and waterimmersion testing. It is dust-proof and can operate normally after being submerged in 1 meter of water for 30 minutes.

Wide Voltage: The camera supports an input voltage toleranceof ±30% (for certain power supplies), making it highly suitablefor outdoor environments with unstable voltage conditions.







Camera		
Image Sensor	1/1.8" CMOS	
Max. Resolution	4MP, 2880 (H) $ imes$ 1620 (V)	
Scanning System	Progressive	
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s	
Min. Illumination	0.0006 lux@F1.6(Color, 30 IRE),0.0004 lux@F1.6 (B/W, 30 IRE),0 lux (Illuminator on)	
S/N Ratio	> 56 dB	
Illumination Distance	IR distance 50m, Warm light distance 50m	
Illuminator Control	Auto; Manual	
Lens		
Lens Type	Motorized Vari-Focal	
Focal Length	2.8 mm-12mm	
Max. Aperture	F1.6	
Iris Type	Auto	
Intelligence		
Smart Motion Detection	Yes	
Perimeter Protection	Intrusion, Tripwire; Loitering Detection; People Gathering; Parking Detection	
Face Detection	Face detection; Track; Snapshot; Snapshot Optimization;	
Object Detection	Abandoned object; Missing object	
Parking Space Detection	Yes  Reanle Counting in area, synarting report (day/week/menth)	
People Counting	People Counting in area, exporting report (day/week/month)	
Heat Map	Support  Natura Vahiala Nan matarusahiala Fasa Human Badu Datastian Jufa Callastina	
	Motor Vehicle, Non-motor vehicle, Face, Human Body Detection; Info Collecting Motor Vehicle Attributes; Non-motor Vehicle Attributes; Human Body Attributes; Face Attributes;	
Al Search	Work together with NVR	
Video		
Compression	H.264H; H.264M; H.264B; H.265;MJPEG (Customization)	
Smart Compression	H.264H+; H.264M+; H.264B+; H.265+	



Video Frame Rate         Sub Stream: 4MP 2880 (H) × 1620 (V) (1 fps-25/30 fps)           Stream Capability         3 Streams           Bit Rate Control         CBR/VBR           Video Bit Rate         H.264: up to 16384 kbps           H.265: up to 16384 kbps         H.265: up to 16384 kbps           Day/Night         Color/B/W           BLC         Yes           HLC         Yes           WDR         140 dB           White Balance         Yes           Gain Control         Auto/Manual           Noise Reduction         3D NR           Motion Detection         OFF/ON (4 Areas, rectangular)           Image Rotation         180°           Mirror         Yes           Privacy Masking         4 Areas           Audio         Yes           Built-in Mic         Yes           Built-in Speaker         Yes           Two-way talk         Yes           Audio Compression         A.711a; G.711Mu; G.726; G.726ASF           Auding/Disarming         Yes           Sound Alarm         Yes
Third Stream: 1080P (1 fps-25/30 fps)  Stream Capability 3 Streams  Bit Rate Control CBR/VBR  Video Bit Rate H.264: up to 16384 kbps  H.265: up to 16384 kbps  Day/Night Color/B/W  BLC Yes  HLC Yes  WDR 140 dB  White Balance Yes  Gain Control Auto/Manual  Noise Reduction 3D NR  Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Yes Audio Compression Alarm  Arming/Disarming Yes
Stream Capability3 StreamsBit Rate ControlCBR/VBRVideo Bit RateH.264: up to 16384 kbpsDay/NightColor/B/WBLCYesHLCYesWDR140 dBWhite BalanceYesGain ControlAuto/ManualNoise Reduction3D NRMotion DetectionOFF/ON (4 Areas, rectangular)Image Rotation180°MirrorYesPrivacy Masking4 AreasAudioYesBuilt-in MicYesIwo-way talk Audio CompressionYesAlarmArming/DisarmingYes
Bit Rate Control Video Bit Rate Video Bit Rate H.265: up to 16384 kbps H.265: up to 16384 kbps  Day/Night Color/B/W BLC Yes HLC Yes WDR 140 dB White Balance Yes Gain Control Auto/Manual Noise Reduction 3D NR Motion Detection OFF/ON (4 Areas, rectangular) Image Rotation 180° Mirror Yes Privacy Masking 4 Areas  Audio Built-in Mic Yes Built-in Speaker Two-way talk Audio Compression Alarm Arming/Disarming Yes
Video Bit Rate  H.264: up to 16384 kbps  H.265: up to 16384 kbps  Day/Night  Color/B/W  BLC  Yes  HLC  Yes  WDR  140 dB  White Balance  Yes  Gain Control  Auto/Manual  Noise Reduction  3D NR  Motion Detection  OFF/ON (4 Areas, rectangular)  Image Rotation  180°  Mirror  Yes  Privacy Masking  4 Areas  Audio  Built-in Mic  Suilt-in Speaker  Two-way talk  Audio Compression  Alarm  Arming/Disarming  Yes
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HLC Yes  WDR 140 dB  White Balance Yes  Gain Control Auto/Manual  Noise Reduction 3D NR  Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Audio Compression  Alarm  Arming/Disarming Yes
WDR 140 dB  White Balance Yes  Gain Control Auto/Manual  Noise Reduction 3D NR  Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Yes G.711a; G.711Mu; G.726; G.726ASF  Alarm  Arming/Disarming Yes
White Balance  Gain Control  Auto/Manual  Noise Reduction  3D NR  Motion Detection  OFF/ON (4 Areas, rectangular)  Image Rotation  180°  Mirror  Yes  Privacy Masking  4 Areas  Audio  Built-in Mic  Yes  Built-in Speaker  Two-way talk  Audio Compression  Alarm  Arming/Disarming  Yes
Gain Control Auto/Manual  Noise Reduction 3D NR  Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Noise Reduction 3D NR  Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Motion Detection OFF/ON (4 Areas, rectangular)  Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes  Two-way talk Yes G.711a; G.711Mu; G.726; G.726ASF  Alarm  Arming/Disarming Yes
Image Rotation 180°  Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Mirror Yes  Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes  Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Privacy Masking 4 Areas  Audio  Built-in Mic Yes  Built-in Speaker Yes  Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Audio  Built-in Mic Yes  Built-in Speaker Yes  Two-way talk Yes Audio Compression  Alarm  Arming/Disarming Yes
Built-in Mic Yes  Built-in Speaker Yes  Two-way talk Yes G.711a; G.711Mu; G.726; G.726ASF  Alarm  Arming/Disarming Yes
Built-in Speaker Two-way talk Audio Compression  Alarm  Arming/Disarming  Yes  Yes G.711a; G.711Mu; G.726; G.726ASF  Yes
Two-way talk Audio Compression  Alarm  Arming/Disarming  Yes  Yes  G.711a; G.711Mu; G.726; G.726ASF
Audio Compression  Alarm  Arming/Disarming  Yes
Alarm Arming/Disarming Yes
Arming/Disarming Yes
Sound Alarm Yes
1. Lead
Light Alarm Yes
Alarm Event Disconnection; IP Conflict; No SD Card; Capacity Warning; SD Card Error
Network
Network RJ-45 (10/100 Base-T)
SDK and API Yes
SDK and API Yes
Network Protocol  TCP/IP;UDP;HTTP;IGMP;ICMP;DHCP;RTP/RTSP;DNS;DDNS;FTP;NTP;PPPOE;UPNP;SMTP
Network Protocol TCP/IP;UDP;HTTP;IGMP;ICMP;DHCP;RTP/RTSP;DNS;DDNS;FTP;NTP;PPPOE;UPNP;SMTP
Network Protocol TCP/IP;UDP;HTTP;IGMP;ICMP;DHCP;RTP/RTSP;DNS;DDNS;FTP;NTP;PPPOE;UPNP;SMTP Interoperability ONVIF; CGI; P2P



Management Software	PC Software(SVMS) APP	
Mobile Client	IOS; Android	
Port		
Audio Input	1 channel ( RCA port)	
Audio Output	1 channel ( RCA port)	
Alarm Input	1 channel	
Alarm Output	1 channel	
Power		
Power Supply	12V DC (±30%)/PoE (802.3af)	
Power Consumption	Basic: 2.8 W; Max. 6.5W	
Environment		
Operating Conditions	-30°C to +60°C (-22°F to +140°F)/Less than 95% RH	
Storage Conditions	-40°C to +60°C (-40°F to +140°F)	
Protection Grade	IP67	
Structure		
Casing	Metal	
Dimensions	102 mm × Φ122 mm	
Net Weight	520g	

## Dimensions (mm[inch])







