

DH-IPC-HD4140X-3D

1.3MP Dual-Lens People Counting AI Network Camera



Dahua AI series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua AI series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc. The complete lineup of Dahua AI includes network (PTZ) cameras, network video recorders, servers, and platform management products. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

- Two 1/3" 1.3Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 25/30fps@1.3MP(1280×960)
- DWDR, Day/Night(Electronic), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.1mm fixed lens (2.8mm optional)
- Micro SD memory, IP54, PoE
- People Counting: Support line crossing people counting, region people counting



System Overview

The Dahua Stereo Vision People Counting camera uses dual-lens imaging technology to capture 3D depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

Technical Specification					
Camera					
Image Sensor		Two 1/3” 1.3Megapixel progressive scan CMOS			
Effective Pixels		1028(H)x960(V)			
RAM/ROM		512MB/128MB			
Scanning System		Progressive			
Minimum Illumination		0.003Lux/F2.2 (Color,1/3s,30IRE) 0.02Lux/F2.2 (Color,1/30s,30IRE) 0.005Lux/F2.2 (B/W,1/3s,30IRE) 0.02Lux/F2.2 (B/W,1/30s,30IRE)			
S/N Ratio		More than 50dB			
IR Distance		N/A			
IR On/Off Control		N/A			
IR LEDs		N/A			
Lens					
Lens Type		Fixed			
Mount Type		Board-in			
Focal Length		2.1mm (2.8mm)			
Max. Aperture		F2.2			
Angle of View		H: 109.5° (89°), V: 84.3° (64°)			
Optical Zoom		N/A			
Focus Control		Fixed			
Close Focus Distance		0.3m (0.98ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.1 mm	24m(79ft)	10m(33ft)	4.8m(15.7ft)	2.4m(7.9ft)
	2.8 mm	35m(115ft)	14m(46ft)	7m(23ft)	3.5m(11.5ft)
Pan/Tilt/Rotation					
Pan/Tilt/Rotation Range		N/A			
Artificial Intelligence					
People Counting		Line crossing people counting, Region people counting, Height filter, Loitering filter			
General Intelligence					
Event Trigger		Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly			
General Intelligence		N/A			
Video					
Compression		H.265/H.264/H.264H/H.264B/MJPEG(Sub Stream)			
Smart Codec		Support H.265+/H.264+			
Streaming Capability		3 Streams			
Resolution		1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480)/ VGA(640x480)			
Frame Rate		Main Stream: 1.3MP (1~25/30fps)			
		Sub Stream 1: D1 (1 ~ 25/30fps)			
		Sub Stream 2: 720P (1~25/30fps)			

Bit Rate Control		CBR/VBR	
Bit Rate		H.264: 1280~ 6144Kbps H.265: 512~ 3072Kbps	
Day/Night		Electronic	
BLC Mode		BLC / HLC /DWDR	
White Balance		Auto/Manual	
Gain Control		Auto/Manual	
Noise Reduction		3D DNR	
Motion Detection		Off / On (4 Zone, Rectangle)	
Region of Interest		Off / On (4 Zone)	
Electronic Image Stabilization (EIS)		N/A	
Smart IR		N/A	
Defog		N/A	
Digital Zoom		16x	
Flip		N/A	
Mirror		N/A	
Privacy Masking		Off / On (4 Area, Rectangle)	
Audio			
Compression		G.711a/ G.711Mu/ AAC/ G.726	
Network			
Ethernet		RJ-45 (10/100Base-T)	
Protocol		HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;S NMP;TLS	
Interoperability		ONVIF Profile S&G, API	
Streaming Method		Unicast / Multicast	
Max. User Access		10 Users/20 Users	
Edge Storage		NAS Local PC for instant recording Mirco SD card 128GB	
Web Viewer		IE, Chrome, Firefox, Safari	
Management Software		Smart PSS, DSS, DMSS	
Smart Phone		IOS, Android	
Certifications			
Certifications		CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B	
Interface			
Video Interface		N/A	
Audio Interface		Built-in Mic	
RS485		1 port	
Alarm		1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC	

Electrical

Power Supply	DC12V, PoE (IEEE 802.3af)(Class 0)
Power Consumption	DC12V: 3.6W 4.6W(People Counting on) PoE: 4.2W 5.3W((People Counting on))

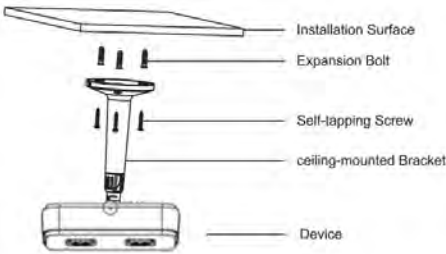
Environmental

Operating Conditions	-10° C ~ +45° C (14° F ~ +113° F) / Less than 95% RH
Storage Conditions	-10° C ~ +45° C (14° F ~ +113° F) / Less than 95% RH
Ingress Protection	IP54
Vandal Resistance	N/A

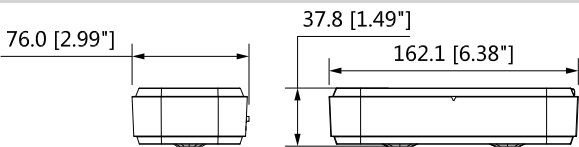
Construction

Casing	Metal
Dimensions	162.1mmx76mmx37.8mm (6.38"x2.99"x1.49")
Net Weight	0.3kg (0.66lb)
Gross Weight	0.46kg (1.01lb)

Installation



Dimensions (mm/inch)



Ordering Information

Type	Part Number	Description
1.3MP Camera	DH-IPC-HD4140XP-3D-0210B	1.3MP Dual-Lens People Counting AI Network Camera, PAL
	DH-IPC-HD4140XN-3D-0210B	1.3MP Dual-Lens People Counting AI Network Camera, NTSC
	DH-IPC-HD4140XP-3D-0280B	1.3MP Dual-Lens People Counting AI Network Camera, PAL
	DH-IPC-HD4140XN-3D-0280B	1.3MP Dual-Lens People Counting AI Network Camera, NTSC
	IPC-HD4140XP-3D-0210B	1.3MP Dual-Lens People Counting AI Network Camera, PAL
	IPC-HD4140XN-3D-0210B	1.3MP Dual-Lens People Counting AI Network Camera, NTSC
	IPC-HD4140XP-3D-0280B	1.3MP Dual-Lens People Counting AI Network Camera, PAL
	IPC-HD4140XN-3D-0280B	1.3MP Dual-Lens People Counting AI Network Camera, NTSC
Accessories (included)	Quick mounting board	Quick mounting board