

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						Bit Rate Control		CBR/VBR	
Camera						Bit Rate		H.264: 1280~ 6144Kbps H.265: 512~ 3072Kbps	
Image Sensor		Two 1/3” 1.3Megapixel progressive scan CMOS				Day/Night		Electronic	
Effective Pixels		1028(H)x960(V)				BLC Mode		BLC / HLC /DWDR	
RAM/ROM		512MB/128MB				White Balance		Auto/Manual	
Scanning System		Progressive				Gain Control		Auto/Manual	
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)				Noise Reduction		3D DNR	
S/N Ratio		More than 50dB				Motion Detection		Off / On (4 Zone, Rectangle)	
IR Distance		N/A				Region of Interest		Off / On (4 Zone)	
IR On/Off Control		N/A				Electronic Image Stabilization (EIS)		N/A	
IR LEDs		N/A				Smart IR		N/A	
Lens						Defog		N/A	
Lens Type		Fixed				Digital Zoom		16x	
Mount Type		Board-in				Flip		N/A	
Focal Length		2.1mm (2.8mm)				Mirror		N/A	
Max. Aperture		F2.2				Privacy Masking		Off / On (4 Area, Rectangle)	
Angle of View		H: 109.5° (89°), V: 84.3° (64°)				Audio			
Optical Zoom		N/A				Compression		G.711a/ G.711Mu/ AAC/ G.726	
Focus Control		Fixed				Network			
Close Focus Distance		0.3m (0.98ft)				Ethernet		RJ-45 (10/100Base-T)	
DORI Distance	Lens	Detect	Observe	Recognize	Identify	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	
	2.1 mm	24m(79ft)	10m(33ft)	4.8m(15.7ft)	2.4m(7.9ft)	Interoperability		ONVIF Profile S&G, API	
	2.8 mm	35m(115ft)	14m(46ft)	7m(23ft)	3.5m(11.5ft)	Streaming Method		Unicast / Multicast	
Pan/Tilt/Rotation						Max. User Access		10 Users/20 Users	
Pan/Tilt/Rotation Range		N/A				Edge Storage		NAS Local PC for instant recording Mirco SD card 128GB	
Artificial Intelligence						Web Viewer		IE, Chrome, Firefox, Safari	
People Counting		Line crossing people counting, Region people counting, Height filter, Loitering filter				Management Software		Smart PSS, DSS, DMSS	
General Intelligence						Smart Phone		IOS, Android	
Event Trigger		Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly				Certifications			
General Intelligence		N/A				Certifications		CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B	
Video						Interface			
Compression		H.265/H.264/H.264H/H.264B/MJPEG(Sub Stream)				Video Interface		N/A	
Smart Codec		Support H.265+/H.264+				Audio Interface		Built-in Mic	
Streaming Capability		3 Streams				RS485		1 port	
Resolution		1.3M(1280x960)/ 720P(1280x720)/ D1(704x576/704x480)/ VGA(640x480)				Alarm		1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC	
Frame Rate		Main Stream: 1.3MP (1~25/30fps)							
		Sub Stream 1: D1 (1 ~ 25/30fps)							
		Sub Stream 2: 720P (1~25/30fps)							

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))

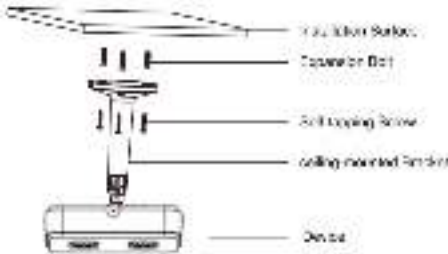
Environmental

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

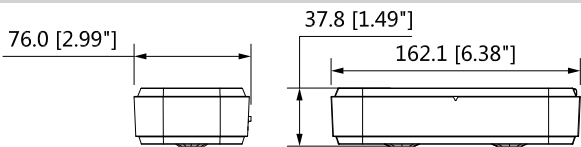
Construction

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