

# 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))

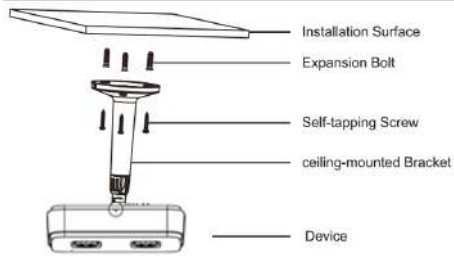
Environmental

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

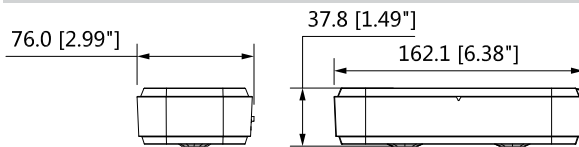
Construction

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