VKD MH9981PAI
12 MP HD AI Fisheye Network Camera

· 12MP, 1/1.7"CMOS image sensor

· Max output 12MP (4000×3000)@30fps

· 3D DNR,AWB,HLC, BLC,ROI, SVC, SMART H.264/H.265

· People counting in multiple areas, queuing management in multiple areas, heat map (number of peole /time), and track map

· 2/2 Alarm in/out, 1/1 audio in/out

· 12V DC/POE power support

· IP67, IK10 protection

System Overview

With advanced chip and deep learning algorithm, AI Fisheye network camera supports many intelligent functions, including people counting in multiple areas, multiple queues management , heat map of mumber of people and average strand time.

Functions

People Counting

The camera detects and tracks target by using advanced image processing technology and deep learning algorithm. You can draw 4 ploygon areas, and count people in each area; When the number of the people in the area is greater than or equal to/lower than or equal to the defined threshold, the alarm will be triggered.

Queue Management

The camera detects and tracks target by using advanced image processing technology and deep learning algorithm. You can draw 4 ploygon areas, and count people in each area; When the number of the people in the area or the strand time is greater than or equal to/lower than or equal to the defined threshold, the alarm will be triggered.

Heat Map

It supports heat map of mumber of people and average strand time. You can observe customer's regions of interest from two aspects: mumber of people and time.

Technical Specification

Camera

Image Sensor	1/1.7" CMOS
Effective Pixels	4000 (H) × 3000 (V)
ROM	4 GB
RAM	4 GB
IR LEDs	3 (IR LEDs)
Electronic Shutter Speed	1/3 s-1/100000 s (Auto/Manual)
Min. Illumination	0.001 Lux/F2.0 (Clolor, 1/3 s, 30 IRE) 0.01 Lux/F2.0 (Clolor, 1/30 s, 30 IRE) 0.01 Lux/F2.0 (IR on)
IR Distance	10 m (32.8 ft)
Scan	Progressive
Noise Reduction	3D DNR
WDR	DWDR
S/N Ratio	49.7dB
Gain control	Manual
White Balance	Auto/Natural/street lamp/outdoor/manual/regional Custom

Lens

Focal Length	1.85 mm			
Mount Type	M12			
Max. Aperture	F2.0			
Aperture Type	Fixed aperture			
Lens Type	Fixed focal			
Field of View	Horizontal: 185°; Vertical: 180°			
DORI Distance	Detect	Observe	Recognize	Identify
	40.0 m (131.3 ft)	16.0 m (52.6 ft)	8.0 m (26.3 ft)	4.0 m (13.1 ft)

Audio

Audio Input	1 channel (RCA port),1 build in MIC
Audio Output	1 channel (RCA port)
Audio Encoding	G.711A, G.711Mu, G726, AAC

Video

Video Encoding	H.265, H.264, H.264H, H.264B, MJPEG
Video Bit Rate	H264: 88Kbps-16384Kbps ;H264: 52Kbps-16384Kbps
Video Frame Rate	50Hz Main Stream (4000 × 3000@25fps), sub Stream (704 × 576@25fps), third Stream (704 × 576@25fps) 60Hz Stream (4000 × 3000@30fps), sub Stream (704 × 480@30fps), third Stream (704 × 480@30fps) Fisheye: 1O (4000 x 3000) 1P (4096 x 1024) 2P (2432 x 2432) 1R (1216 x 1216) 2R (2432 x2432) 4R (2432 x 2432) 1O + 3R (2432 x 2432)

Resolution	4000 × 3000, 2880 × 2880, 2880 × 2160, 2048 × 1536 (3M), 1280 × 960 (1.3M), (704 × 576/704 × 480) D1, (352 × 288/352 × 240) CIF
Bit Rate Control	CBR/VBR
Region of Interest	Yes (4 areas)
Smart IR	Yes (Adjust by user)
Language	English, Italian, Spanish, Russian, French, German, Portuguese, Polish, Korean, Persian, Czech, Dutch, Arabic, European Spanish

Alarm

Alarm Input	2 channels (Wet contact, and it supports max potential 3V-5V)
Alarm Output	2 channels (Dry contact, and it supports max potential 30V)

Function

SD Card	Yes
Storage	FTP, Micro SD card (256 G)
Max User	20 (Total bandwidth: 240 M)
Browser	IE: IE11, IE10, IE9 Google of high version: 48.0.2564.116 Firefox of high version: 48.0.2 Non-plug edge: 42.17134.1.0
Privacy Masking	4 areas

Smart event

IVS Analyze	Intrusion, tripwire
Heat Map	Yes

Professional, intelligent

People Counting	People counting in 4 areas, number of people threshold alarm, 4 queue management, stranding alarm, number of people alarm, number of people heat map, average stranding heat map, track map and export (Report max range is 1 week.)

Network and port

Network Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, QoS, UPnP, NTP
Interoperability	ONVIF (Profile S/Profile G), GB/T28181, CGI

General

Power Supply	12V DC /POE
Power Consumption	Basic power consumption: 6.2W (12V DC), 9.2W (POE) Max power consumption: (ICR switch, and IR full intensity): 9.2W (12V DC), 12.9W (POE)
Operating Temperature	-30°C to +45°C (-22°F to +113°F)
Operating Humidity	≤95%
StrorageTemperature	-30°C to +70°C (-22°F to +158°F)
Strorage Humidity	≤95%
Protection Grade	IP67, IK10
Enclosure	Metal + Plastic

Dimensions	59.8 mm × Φ149.8 mm (2.35'' × Φ5.9'')
Net Weight	0.77 kg(1.70 lb)
Gross Weight	1.16 kg(2.56 lb)
Certification	CE-LVD:EN60950-1 EN 55032: 2015, Class B EN 61000-3-2: 2014 EN 61000-3-3: 2013 EN 55024: 2010+A1: 2015 EN 55035: 2017 EN 50130-4: 2011+A1: 2014 CE-EMC:Electromagnetic Compatibility Directive 2014/30/EU FCC:47 CFR FCC Part15, Subpart B, Class B UL/CUL:UL60950-1 CAN/CSA C22.2 No.60950-1-07

Accessories

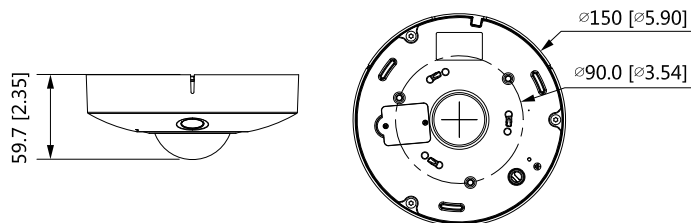**Optional:**

DH-PFA100
Adapting plate

DH-PFB300C
Wall-mount bracket

DH-PFB300S
Wall-mount bracket

DH-PFB302S
Hang-mount bracket

Ceiling Mount	Hang Mount	Wall Mount
	PFB300C+PFA100	PFB300S+PFA100

Dimensions (mm/inch)

59.7 [2.35]

⌀150 [⌀5.90]

⌀90.0 [⌀3.54]