

PDE4E1W2-I/A/F/AI

4MP AI IP Turret Dome Camera



System Overview

This is a 4MP IP Dome camera that not only has some impressive AI features, like facial capture and people counting, but it is a full color Starlight camera. With two warm supplemental LED lights, the camera is able to produce a colorful image in little to no lighting to full darkness. This camera's IR distance is approximately 66 feet and with added image balancing features like WDR and HLC, you won't have to worry about one part of your image being too bright than the rest. It can be a standalone camera with an SD card built right in with a capacity up to 256GB. With its IP67 ingress protection rating, you can use this camera indoors or out without issue as long as your connections are well protected from the elements.

Features

Face Capture

Face capture is a software application that automatically captures faces from within a digital image or a video frame from a video source. This camera uses advanced deep learning algorithms and is trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

Perimeter Protection

The Perimeter Protection function significantly improves accuracy by reducing false alarms and decreases pixel count requirements for object detection. Features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

People Counting

This feature counts the number of people that go in a specified region and the number of people that come out. This is perfect for businesses, banks and anybody who wants to monitor the amount of people coming and going.

- 1/1.8" 4MP progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- 2.8 mm fixed lens
- WDR, Day/Night, 3D DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS (DSS/PSS) & DMSS
- Built-in MIC
- Micro SD memory, IP67



Full-color Starlight

This camera adopts an F1.6 large aperture lens and an 1/1.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive lowlight performance with an exceptional balance between noise reduction and the blur of moving object.

Warm Supplemental lights

With two warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposing of the objects in the image center. Also, the sensitivity and intensity of the LED lights can be remotely controlled by the OSD menu.

Protection (IP67, wide voltage)

The camera allows for $\pm 30\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67), the camera is the choice for installation in even the most unforgiving environments.

Technical Specification

Camera					
Image Sensor	1/1.8" 4Megapixel progressive scan CMOS				
Effective Pixels	2688 (H) × 1520 (V)				
RAM/ROM	512 MB/128 MB				
Scanning System	Progressive				
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s				
Minimum Illumination	0.001 Lux@F1.6				
LED Distance	Distance up to 20 m (66 ft)				
LED On/Off Control	Auto/Manual				
LEDs	2				

Lens					
Lens Type	Fixed				
Mount Type	Board-in				
Focal Length	2.8 mm				
Max. Aperture	F1.6				
Angle of View	H: 113°, V: 60°/H: 89°, V: 48°/H: 56°, V: 31°				
Optical Zoom	N/A				
Aperture Type	Fixed				
Close Focus Distance	1.3 m (4.27 ft)/1.9 m (6.23 ft)/3.8 m(12.47 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	58m(192ft)	23m(75ft)	12m(39ft)	6m(20ft)

Pan/Tilt/Rotation					
Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–78°; Rotation: 0°–360°				

Artificial Intelligence					
Face Capture	Support face image capture				
Perimeter Protection	Tripwire, Intrusion (Human & Vehicle classification)				
People Counting	Support Line crossing/Region/Queueing people counting; Support 4 accesses independent detection, 4 areas independent detection				

General Intelligence					
Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly				
General Intelligence	Object Abandoned/Missing				

Video					
Compression	H.265+, H.265, H.264+, H.264, H.264B, H.264H, MJPEG(sub stream)				
Streaming Capability	3 Streams				
Resolution	2688 × 1520/2560 × 1440/2304 × 1296/1080P (1920 × 1080)/1.3M (1280 × 960)/720P (1280 × 720)/D1 (704 × 576/704 × 480)/VGA (640 × 480)/CIF (352 × 288/352 × 240)				

Frame Rate	Main Stream: 2688 × 1520 (1 fps–25/30 fps) 2560 × 1440 (1 fps–25/30 fps) 1920 × 1080 (1 fps–50/60 fps)
	Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps)
	Third Stream: 1080P (1 fps–16 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 19 Kbps–8192 Kbps
Day/Night	Day/Night: Electronic Auto/Color/B/W
BLC Mode	BLC/HLC/WDR (140 dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	Off/On (4 Zone, Rectangle)
Region of Interest	Off/On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Defog	Support
Digital Zoom	N/A
Flip	0°/90°/180°/270°
Mirror	Off/On
Privacy Masking	Off/On (4 Area, Rectangle)

Audio	
Compression	G.711a, G.711Mu, G.726, AAC, G.723

Network	
Ethernet	RJ-45 (10/100 Base-T)
Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, QoS, UPnP, NTP, ICMP, HTTPS, IGMP, 802.1x
Interoperability	ONVIF (Profile S/Profile G), CGI, Milestone, Genetec, P2P
Streaming Method	Unicast/Multicast
Max. User Access	20 Users
Edge Storage	NAS FTP Micro SD card 256 GB
Web Viewer	IE (versions newer than IE8), Chrome, Firefox, Safari (versions newer than Safari 12)
Management Software	Smart PSS, DSS, P2P
Smart Phone	iOS, Android

Certifications	
Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Interface

Video Interface	N/A
Audio Interface	Built-in MIC
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC 12V (±30%), PoE (802.3af) (Class 0)
Power Consumption	<7.2W

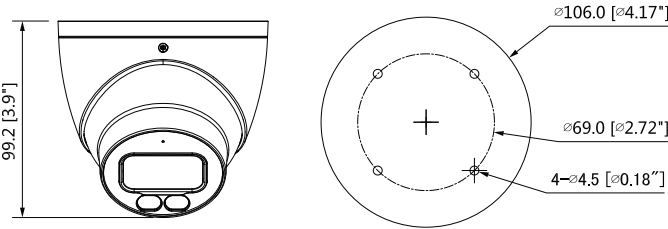
Environmental

Operating Conditions	-30° C to +60° C (-22° F to +140° F)/10%RH–95%RH
Storage Conditions	-30° C to +60° C (-22° F to +140° F)
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	Φ106 mm × 99.2 mm (4.17" × 3.91")
Net Weight	0.55 kg (1.21 lb)
Gross Weight	0.71 kg (1.57 lb)

Dimensions (mm/inch)



Accessories

Optional:



Junction Box	Corner Mount
JBEW-130	CEW-151 + WEW-204W
Wall Mount	Pole Mount
WEW-204W	WEW-204W + LEW-152E