IR Megapixel Fixed Eyeball

4MP Eyeball Network Camera

- Max 20 fps at 4 MP (2688×1520) and 30 fps at 3 MP (2304×1296)
- True WDR (120dB)
- True Day/Night
- Fixed Lens Options: 2.8 mm, 3.6 mm, 6 mm
- Smart IR 50 m (165 ft)
- Outdoor Rated IP67
- Intelligent Video System (IVS)
- Five-year Warranty

System Overview

The IR Megapixel Fixed Eyeball camera delivers 4MP resolution with a choice of 2.8mm, 3.6mm, or 6mm fixed lens. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications.

Functions

True Day/Night
A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

Regions of Interest
Regions of Interest (ROI) is a user defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas.

Smart IR
The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR prevents IR LEDS from whiting out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 50m (165ft).

Image Flip
Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Wide Dynamic Range
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Intelligent Video System (IVS)
With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, and Facial Detection, for searching or identification of individuals.

Protection
The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust to IP67 standards, making it suitable for indoor or outdoor environments.

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Streaming
With a choice of unicast or multicast streaming, bandwidth-efficient viewing, recording and third-party video management can easily be achieved. Multiple streaming enables bandwidth-efficient viewing and recording. Depending on the resolution and frame rate selected on the first stream, the second and third stream provides a copy at a lower resolution.

Smart H.264+
Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

Technical Specification

Camera

Image Sensor	1/3" CMOS
Effective Pixels	2688(H) x 1520(V)
ROM / RAM	16MB / 256MB
Scanning System	Progressive
Electronic Shutter Speed	1/3(4) ~ 1/100,000s
Minimum Illumination	Color: 0.01 Lux@F2.0; B/W: 0.001 Lux@F2.0; 0 Lux (IR On)
S/N Ratio	More than 50dB
IR Distance	Distance Up to 50m (165ft)
IR On/Off Control	Auto/ Manual
IR LEDs	1

Lens

Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8mm/3.6mm/6mm
Max Aperture	F2.0/F2.0/F2.0
Angle of View	H: 110°/81°/55°
Focus Control	Fixed

Pan/Tilt Range

Pan/Tilt Range	Pan: 0° ~ 360°; Tilt: 0° ~ 78°, Rotation：0° ~ 360°

Video

Compression	Smart H.264+ / MJPEG
Streaming Capability	3 Streams
Resolution	4MP (2688×1520) / 3MP (2304×1296) / 1080p (1920×1080) / 720p (1280×720) /D1 (704×576 / 704×480) / CIF (352×288/352×240)
	Main Stream 4MP (1~20fps), 3MP (1 ~ 30fps)
	Sub Stream 1 D1 / CIF (1 ~ 30fps)
	Sub Stream 2 720p (1 ~ 20fps)
Bit Rate Control	CBR / VBR
Bit Rate	H.264: 4K ~ 10Mbps
Day/Night	Auto (ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR (120dB)
White Balance	Auto / Sunny / Night / Outdoor / Customized
Gain Control	Auto / Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Smart IR	Support
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4/ IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20
Web Viewer	IE 10, Firefox, Safari
Management Software	Smart PSS, DSS
Smart Phone	Android, Ios

Certifications

Certifications	FCC (SEFD1509190-A) UL (E234884-A72-UL)

Electrical

Power Supply	12V DC ±25%, PoE (af Class 0)
Power Consumption	Max. 4.0W (12V DC, IR On), Max. 4.0W (PoE, IR On)

Environmental

Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP67

Construction

Casing	Metal + Plastic
Dimensions	Φ110mm×95.5mm (4.33" x 3.76")
Net Weight	0.40Kg (0.88lb)
Gross Weight	0.47Kg (1.04lb)

Intelligence

IVS triggers an alarm and takes a defined action for the following events:

Standard Features	Tampering with the camera. Camera loses or changes focus drastically. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera.
Premium Features	
Motion	An object moves through any part of the scene.
Tripwire	A target crosses a user-defined line.
Intrusion	A target enters or exits a defined perimeter.
Scene Change	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
Abandoned/Missing Object	A target leaves an object in designated area, or a target removes an object from the same designated area.
Advanced Features	
Facial Detection	Detects and captures a snapshot of a human face in a defined area within a scene.

Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HDW44A1EN 2.8mm	4MP, 2.8mm, True D/N, True WDR, IP67, IR: up to 50m (165ft), PoE, Smart H.264+, IVS
	DH-IPC-HDW44A1EN 3.6mm	4MP, 3.6mm, True D/N, True WDR, IP67, IR: up to 50m (165ft), PoE, Smart H.264+, IVS
	DH-IPC-HDW44A1EN 6mm	4MP, 6mm, True D/N, True WDR, IP67, IR: up to 50m (165ft), PoE, Smart H.264+, IVS
Accessories	PFA136	Junction Box
	PFB203W	Wall Mount Bracket
	PFA152	Pole Mount Bracket
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket

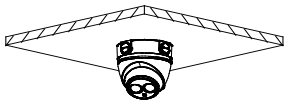
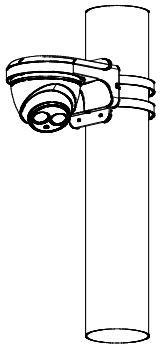
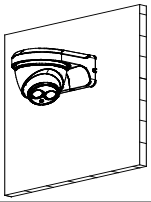
Accessories

Optional:

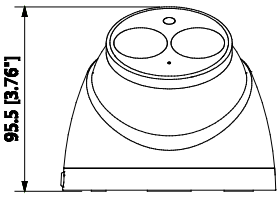
PFA136
Juntion Box

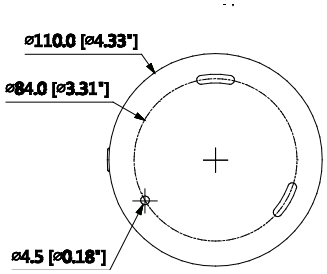
PFB203W
Wall Mount

PFA152
Pole Mount

Junction Mount	Pole Mount
PFA136	PFB203W + PFA152
	
Wall Mount	
PFB203W	
	

Dimensions (mm/inch)





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