Dahua TECHNOLOGY

IR Megapixel Vari-focal Eyeball

3MP Eyeball Network Camera

· Max 20fps@3MP (2048×1536) & 30fps@1080p (1920×1080)
· DWDR
· True Day/Night
· Motorized Lens 2.7mm-12mm
· Smart IR 60m (195ft)
· Outdoor Rated IP67
· Onboard Storage

60m IR   IP67

System Overview

The IR Megapixel Vari-focal Eyeball camera delivers 3MP resolution with a motorized 2.7mm – 12mm varifocal 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 at an affordable price.

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

With IR illumination, the camera has the ability to capture detailed images in low light or total darkness. 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 technology 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 60m (195ft).

Motorized Lens

With a motorized lens, focusing the camera is quick and convenient for both the initial installation and future adjustments. Simply install the camera, dial in the lens, and then make adjustments from the convenience of your computer. For sites that require lens adjustments, remote focus eliminates the hassle of driving to the site deploying a ladder, or spending time away from the office.

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.

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. Dual streaming enables bandwidth-efficient viewing and recording. Depending on the resolution and frame rate selected on the first stream, the second stream provides a copy at a lower resolution.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF PSIA

Technical Specification

Camera

Image Sensor	1/3" CMOS
Effective Pixels	2048(H) x 1536(V)
Scanning System	Progressive
ROM / RAM	16MB / 256MB
Electronic Shutter Speed	1/3(4) ~ 1/100,000s
Minimum Illumination	Color: 0.1Lux@F1.4; B/W: 0.01Lux@F1.4; 0 Lux (IR on)
S/N Ratio	More than 50db
IR Distance	Distance Up to 60m (195ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Lens

Lens Type	Motorized lens
Mount Type	Board-in
Focal Length	2.7mm-12mm
Max Aperture	F1.4
Angle of View	H: 92°~28° V:48°~18°
Focus Control	Motorized
Close Focus Distance	1300mm～23000mm (4.27 ft - 75.46 ft)

Pan/Tilt/Rotation

Pan/Tilt Range	Pan: 0° ~ 360°; Tilt: 0° ~ 80°, Rotation：0° ~ 360°

Video

Compression	H.264 / MJPEG
Streaming Capability	2 Streams
Resolution	3MP (2048×1536) (2304×1296) / 1080p (1920×1080) / 720p (1280×720) / D1 (704×576/704×480) / CIF (352×288/352×240)
Frame Rate	Main Stream 3MP (1~20fps), 1080P (1 ~ 30fps)
	Sub Stream 1 D1/CIF (1 ~ 30fps)
Bit Rate Control	CBR / VBR
Bit Rate	H.264: 4K ~ 8192Kbps
Day/Night	Auto (ICR) / Color / B/W
BLC Mode	BLC / HLC / DWDR
White Balance	Auto/Sunny/Night/Outdoor/Customized
Gain Control	Auto / Manual
Noise Reduction	3D DNR
Motion Detetion	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
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, 128GB
Web Viewer	IE10….
Management Software	Smart PSS, DSS
Smart Phone	Android, Ios

Certifications

Certifications	FCC (SEFD1507206-B) UL (E234884-A65-UL)

Electrical

Power Supply	12V DC ±25%, PoE (af Class 0)
Power Consumption	Max 5.3W (12V DC, 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
Dimensions	Φ122mm x 102mm (4.8" x 4.0")
Net Weight	0.5Kg (1.10lb)
Gross Weight	0.7Kg (1.54lb)

Ordering Information

Type	Part Number	Description
3MP Camera	DH-IPC-HDBW23A0RN-ZS	3MP, 2.7mm-12mm, True D/N, DWDR, 20fps@3MP, 30fps@1080p, IP67, IR: up to 60m (195ft), DC12V, PoE
Accessories	PFA137	Junction Box
	PFB203W	Wall Mount Bracket
	PFA152	Pole Mount Bracket
	PFA151	Corner Mount Bracket

Accessories

Optional:

PFA137 Junction box	PFB203W Wall mount	PFB203W Wall mount	+	PFA152 Pole mount

Junction Mount	Pole Mount
PFA137	**PFB203W+PFA152**

Wall Mount
PFB203W

Dimensions (mm/inch)

ø4.5
ø84
ø122
102