

12 MP Network Fisheye Camera

180° Panoramic IR Fisheye Camera



- 1/1.7-in. 12 MP Progressive-scan CMOS Sensor
- 12 MP (4000 x 3000) at 25 fps Maximum Resolution
- Triple-stream Encoding
- H.265 and H.264 Dual Codecs
- Multiple Dewarp Modes
- Day/Night (ICR), 3DNR, AWB, AGC, BLC
- Maximum IR Distance 10 m (33 ft)
- IP67 Ingress Protection, IK10 Vandal Resistance
- Five-year Warranty*



System Overview

Dahua Fisheye Cameras provide detailed panoramic views in a compact, low-profile design. The progressive-scan sensor combined with a fisheye lens provide a high-quality 180° panoramic view without blind spots, making the camera the ideal solution for wide and open areas, such as airports, shopping malls and banks. The camera offers multiple dewarp modes for different installations and configurations that enhance the video for a specific scene. The IP67 environmental protection rating and the IK10 vandal resistance ensure the camera operates in the harshest environments.

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.

Dewarping Mode

Fisheye dewarping solves the problem of distortion in the circular panoramic view. The camera offers multiple dewarping modes for different installations and configurations, either with a Dahua XVR, NVR, via the Web interface. Each dewarping mode offers options to adjust each scene.

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening 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 10 m (33 ft).

High Efficiency Video Coding (H.265)

The H.265 (ITU-T VCEG) video compression standard offers double the data compression ratio at the same level of video quality, or substantially improved video quality at the same bit rate, as compared to older video compression technologies. H.265 offers such impressive compression by expanding the pattern comparison and difference-coding, improving motion vector prediction and motion region merging, and incorporating an additional filtering step called sample-adaptive offset filtering.

Protection

The camera allows for $\pm 25\%$ 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) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

Technical Specification			
Camera			
Image Sensor	1/1.7-in. 6 MP CMOS		
Total Sensor Pixels	4000(H) x 3000(V)		
RAM/ROM	1024 MB / 128 MB		
Scanning System	Progressive		
Electronic Shutter Speed	Auto, Manual, 1/3 s to 1/100,000 s		
Minimum Illumination	Color: 0.001 lux at F2.8 (1/3 s, 30 IRE) Color: 0.01 lux at F2.8 (1/30 s, 30 IRE) 0 lux at F2.8 with IR on		
S/N Ratio	More than 50 dB		
IR Distance	Up to 10 m (32.81 ft)		
IR On/Off Control	Auto, Manual		
IR LEDs	Three (3)		
Lens			
Lens Type	Fixed		
Mount Type	Board-in		
Focal Length	1.98 mm		
Maximum Aperture	F2.8		
Angle of View	Horizontal: 180° Vertical: 180°		
Focus Control	Fixed		
DORI Distance ¹			
Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
42 m (138 ft)	17 m (56 ft)	8 m (27 ft)	4 m (14 ft)
Video			
Compression	H.265, H.264		
Streaming Capability	Three (3) Streams		
Resolution	12 MP (4000 x 3000), 8 MP (2880 x 2880), 6 MP (3072 x 2048), 3 MP (2048 x 1536), 1.3 MP (1280 x 960), D1 (704 x 576), CIF (352x288)		
Effective Maximum Resolution, based on Dewarping Mode			
Dewarping Method	Mount Location	Resolution (H x V)	
1 Panoramic	Ceiling/Ground	4096 x 1024	
	Wall	2048 x 1024	
2 Panoramic	Ceiling/Ground	2048 x 2048	
1 Original + 3 Regions	All Locations	2048 x 2048	
4 Regions	All Locations	2048 x 2048	
1 Region	All Locations	1280 x 1024	
Main Stream			
12 MP at 25 fps or 8 MP at 30 fps			
Sub Stream 1			
D1 at 30 fps			
Sub Stream 2			
1.3 MP at 30 fps			
Bit Rate Control			
CBR, VBR			
Bit Rate			
H.265: 3 Kbps to 9984 Kbps H.264: 8 Kbps to 16384 Kbps			
Day/Night			
Auto (ICR), Color, B/W			
BLC Mode			
BLC, HLC, DWDR			
White Balance			
Auto, Natural, Street Lamp, Outdoor, Manual			
Gain Control			
Auto, Manual			
Noise Reduction			
3D DNR			
Motion Detection			
Off, On (4 Zone, Rectangle)			
Region of Interest			
Off, On (4 Zone)			
Advanced Features			
Smart IR, Defog			
Digital Zoom			
16x			
Privacy Masking			
Off, On (4 Area, Rectangle)			
Audio			
Compression			
G.711a, G.711Mu, AAC, G.726			
Network			
Ethernet			
M12 D-coded Connector (100/1000 Base-T)			
Protocol			
HTTP, HTTPS, TCP, ARP, RTSP, RTP, UDP, SMTP, FTP, DHCP, DNS, DDNS, PPPOE, IPv4/v6, QoS, UPnP, NTP, Bonjour, 802.1x, Multicast, ICMP, IGMP, SNMP			
Interoperability			
ONVIF, PSIA, CGI			
Streaming Method			
Unicast, Multicast			
Maximum User Access			
10 Users, 20 Users			
Edge Storage			
Network Attached Storage (NAS) Local PC for instant recording Micro SD Card Slot, maximum 128 GB			
Web Viewer			
IE, Firefox, Safari			
Management Software			
Smart PSS, DSS			
Mobile Operating System			
IOS, Android			
Certifications			
Safety			
UL60950-1 EN 60950:2000			
Electromagnetic Compatibility (EMC)			
FCC Part 15 Subpart B			
Interface			
Audio Interface			
Input: One (1) Channel, Built-in Microphone Output: One (1) Channel			
Alarm			
Input: Two (2) Channels (5 VDC, 5 mA) Output: Two (2) Channels (30 VDC, 1 A; 50 VAC, 0.5 A)			
Electrical			
Power Supply			
12 VDC ±25% or PoE (802.3af, Class 0)			
Power Consumption			
< 12 W			

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

Environmental

Operating Conditions	-30 °C to +60 °C (-22 °F to +140 °F), Less than 95% RH
Storage Conditions	-30 °C to +60 °C (-22 °F to +140 °F), Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

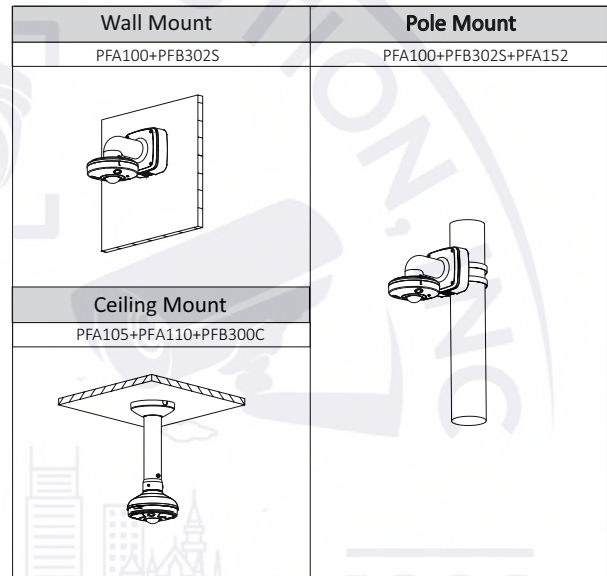
Casing	Metal
Dimensions	ø149.80 mm x 50.70 mm (ø5.90 in. x 2.0 in.)
Net Weight	0.58 kg (1.28 lb)
Gross Weight	1.0 k g (2.20 lb)

Ordering Information

Type	Part Number	Description
6 MP Fisheye	DH-IPC-EBW81230 M12	12 MP Panoramic Network IR Fisheye Camera,
Accessories, optional	PFA100	Mount Adapter (Required for PFB302S Wall Mount)
	PFA105	Mount Adapter (Required for PFB300C Ceiling Mount)
	PFA110	Mount Adapter (Required for PFB300C Ceiling Mount)
	PFA152	Pole Mount (For use with PFB302S Wall Mount)
	PFB300C	Ceiling Mount (Requires PFA105 and PFA110 Mount Adapters)
	PFB302S	Wall Mount (Requires PFA100 Mount Adapter)

Accessories

Optional:



Dimensions (mm/inch)

