

6 MP Network Fisheye Camera

360° Panoramic IR Fisheye Camera



System Overview

Dahua Fisheye Cameras provide detailed panoramic views in a compact, low-profile design. The STARVIS[™] sensor combined with a fisheye lens provide a high-quality 360° 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

Panamorph Technology

The fisheye camera incorporates Panamorph Technology from ImmerVision Enables[®], an industry leader in 360° solutions and applications. Panomorph technology is comprised of patented panomorph optics and viewing functionality for optimal 360° image quality. The panomorph optic includes magnified zones of interest based on an innovative distortion control concept. The viewing functionality removes all added distortion and enables 360° immersive navigation within live or recorded 360° video. ImmerVision Enables[®] is the only universally-accepted 360° dewarping standard; all major VMS platforms and camera vendors support this technology.

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.

Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera detects and captures a snapshot of human face in a defined area within a scene, and offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

- 1/1.8-in. 6 MP Progressive-scan STARVIS[™] CMOS Sensor
- 6 MP (3072 x 2048) at 30 fps Maximum Resolution
- Panamorph Lens RPL: B4QQV
- Triple Stream Encoding
- Smart H.265+ and H.264 Dual Codecs
- Multiple Dewarp Modes
- Day/Night (ICR), 3DNR, AWB, AGC, BLC
- Intelligent Video System with Intelligent Business Analysis
- Maximum IR Distance 10 m (33 ft)
- Micro SD Memory, IP67, IK10, PoE
- Five-year Warranty*



Intelligent Business Analysis

The built-in IVS features heat map functionality, an advanced feature that adds business intelligence to your security system. Intelligent Analysis tracks and stores daily, weekly, monthly, and yearly people flow through a defined scene and produces a configurable report. The system uses this data to produce a Heat Map, a two-dimensional representation of data that provides an immediate visual summary of information. Heat Maps can identify the most active areas of a retail space providing valuable data analysis for commercial applications.

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. 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.



Fisheye Series | N68BR4V

Technical Specification Camera Image Sensor 1/1.8-in. 6 MP STARVIS™ CMOS 3072(H) x 2048(V) **Total Sensor Pixels** RAM/ROM 1024 MB / 128 MB Progressive Scanning System **Electronic Shutter Speed** Auto, Manual, 1/3 s to 1/100,000 s Color: 0.005 lux at F2.8 (1/3 s, 30 IRE) Minimum Illumination Color: 0.05 lux at F2.8 (1/30 s, 30 IRE) 0 lux at F2.8 with IR on More than 50 dB S/N Ratio Up to 10 m (32.81 ft) IR Distance IR On/Off Control Auto, Manual Three (3) IR LEDs Lens Fixed Lens Type Mount Type Board-in Focal Length 1.3 mm Maximum Aperture F2.8 Horizontal: 360° Angle of View Focus Control Fixed DORI Distance¹ Detect (8 ppf) Observe (19 ppf) Recognize (38 ppf) Identify (76 ppf) 21 m (69 ft) 8 m (26 ft) 4 m (13 ft) 2 m (7 ft) Video Compression Smart H.265+, H.265, Smart H.264+, H.264 Three (3) Streams Streaming Capability 6 MP (3072 x 2048), 4 MP (2048 x 2048), 3 MP (2048 x 1536), UXGA (1600 x 1200), Resolution 1.3 MP (1280 x 960), D1 (704 x 576), CIF (352×288) Effective Maximum Resolution, based on Dewarping Mode Dewarping Mode Mount Location Resolution (H x V) Ceiling/Ground 4096 x 1024 1 Panoramic 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

 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.

	Main Stream	6 MP at 30 fps		
Frame Rate	Stream 1	D1 at 30 fps		
	Stream 2	1.3 MP at 30 fps		
Bit Rate Contr	ol	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		RJ-45 (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		NAS Local PC for instant recording Micro SD Card, maximum 128 GB		
Web Viewer		IE, Firefox, Safari		
Management	Software	Smart PSS, DSS		
Mobile Opera	ting System	IOS, Android		
Certificatio	ins			
Safety		UL60950-1		
Electromagnetic Compatibility (EMC)		FCC Part 15 Subpart B		
Interface				
Audio		Input: One (1) Channel 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 or PoE (802.3af, Class 0)		
Power Consumption		< 12 W		
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Panoramic Series | N68BR4V

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)			
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Intelligence

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

Standard Features	 Tampering with the camera. 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				
Heat Map	Generates a visual representation of data.			

Ordering Information

Туре	Part Number	Description
6 MP Fisheye	N68BR4V	6 MP Panoramic Network IR Fisheye Camera,
	PFA100	Mount Adapter (Required for PFB302S Wall Mount)
	PFA105	Mount Adapter (Required for PFB300C Ceiling Mount)
Accessories,	PFA110	Mount Adapter (Required for PFB300C Ceiling Mount)
optional	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:







PFA100 Mount Adapter

PFB302S



Pole Mount

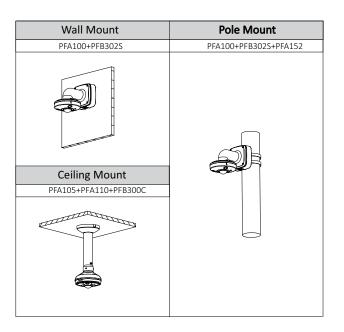
Wall Mount



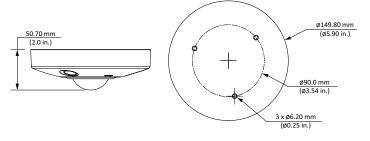
PFA105 Mount Adapter

PFA110 Mount Adapter

PFB300C Ceiling Mount



Dimensions (mm/inch)





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