

HNC7V4120-IR

12MP Panoramic Network IR Fisheye Camera



- 1/1.7" 12Megapixel progressive scan STARVIS™ CMOS
- H.265/H.264 triple-stream encoding
- Max 25fps@12M(4000x3000)
- Multiple dewarped Mode
- Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Smart detection
- Intelligent Function
- Max. IR LEDs length 10m
- Micro SD memory, IP67, IK10, PoE



System Overview

The fisheye camera is an expert at panoramic surveillance with low-profile design. With a fisheye lens, the camera can provide a high quality 180° or 360° panoramic views without blind spots, making it ideal for wide and open areas, such as airports, shopping malls, banks, hotels, stores, offices and more. The camera can offer different views including 360° overview and dewarped views such as panorama view, double views and quad views.

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.

Panoramic

Panoramic cameras provide 180°, 360° full range of video scene, bringing people a new sense of real live and interactive experience. Dahua provides two kinds of panoramic camera, single lens fisheye camera and multi-lens camera, both of them can offer 180-degree & 360-degree panoramic image. Through working together with PTZ camera which offer whole scene and region details at same time. It provided new surveillance experience to end user and improved the surveillance quality.

Business intelligent analysis (Heatmap)

The fisheye camera also supports advanced intelligent feature like heat map besides basic IVS functions. The heatmap function can be applied to business intelligence and bring extra values to customers. The heat map function based on a moving object in time of space movement for analysis, find the most active area and output the report, which is to provide valuable data support for commercial applications.

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 10m (33ft).

HEVC(H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 Following standard developed around the existing video coding standard H.264, some retain the original technology, while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream, encoding quality, and the delay between algorithm complexity, optimize settings specific contents include: Improve compression efficiency, improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay, reduce complexity, etc

Protection (IP67, IK10, wide voltage)

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. IP67 is supported by the camera, which makes it suitable for both indoor and outdoor environments. IK10 compliance enables the camera to sustain the equivalent of 55 kg (120lbs) force.

Technical Specification

Camera

Image Sensor	1/1.7" 12Megapixel progressive scan CMOS
Effective Pixels	4000(H)x3000(V)
RAM/ROM	1024MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.001Lux/F2.8(Color,1/3s,30IRE) 0.01Lux/F2.8(Color,1/30s,30IRE) 0Lux/F2.8(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 10m(33ft)
IR On/Off Control	Auto/ Manual
IR LEDs	3

Lens

Lens Type	Fixed			
Mount Type	Board-in			
Focal Length	1.98mm			
Max. Aperture	F2.8			
Angle of View	H: 180°, V:180°			
Optical Zoom	N/A			
Focus Control	Fixed			
Close Focus Distance	N/A			
DORI Distance	Detect	Observe	Recognize	Identify
	42m(138ft)	17m(56ft)	8m(27ft)	4m(14ft)

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	N/A
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Intelligence

IVS	Tripwire, Intrusion
Advanced Intelligent Functions	Heat Map

Video

Compression	H.265/H.264
Streaming Capability	3 Streams
Resolution	12M(4000x3000)/ 8M(2880x2880)/ 6M(2880x2160)/ 3M(2048x1536)/ 1.3M(1280x960)/ D1(704x576/704x480)/ CIF(352x288/352x240)
Frame Rate	Main Stream: 12M(1~25fps)/ 8M(1~25/30fps)
	Sub Stream: D1(1 ~ 25/30fps)
	Third Stream: 1.3M(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265: 3Kbps~ 9984Kbps H.264: 8Kbps~ 16384Kbps

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 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	16x
Flip	N/A
Mirror	N/A
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a/G.711Mu/AAC/ G.726
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Network

Ethernet	RJ-45 (100/1000Base-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
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, Easy4ip
Smart Phone	IOS, Android

Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
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Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out, 1 Built-in Mic
RS485	N/A
Alarm	2 channel In: 5mA 5VDC 2 channel Out: 1A 30VDC / 0.5A 50VAC

Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<12W

Environmental

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

Construction

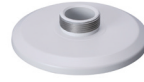
Casing	Metal
Dimensions	Φ149.8mm×47.7mm(Φ5.9"×1.88")
Net Weight	0.58kg(1.28lb)
Gross Weight	1.0kg(2.2lb)

Ordering Information

Type	Part Number	Description
12MP camera	HNC7V4120-IR	12MP Panoramic Network IR Fisheye Camera, NTSC
Accessories (optional)	PFA100	Mount Adapter
	PFB302S	Wall Mount
	PFA152	Pole Mount
	PFA105	Mount Adapter
	PFA110	Mount Adapter
	PFB300C	Ceiling Mount

Accessories

Optional:



PFA100
Mount Adapter



PFB302S
Wall Mount



PFA152
Pole Mount



PFA105
Mount Adapter



PFA110
Mount Adapter



PFB300C
Ceiling Mount

Wall Mount	Pole Mount
PFA100+PFB302S	PFA100+PFB302S+PFA152
Ceiling Mount	
PFA105+PFA110+PFB300C	

Dimensions (mm/inch)

