

# PIX-NDF501FA

## 5MP WizMind Fisheye Network CAMERA



**WizMind**

Launched by Pixvideo Technology, Pixvideo WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

### Series Overview

With fisheye lens, Pixvideo Fisheye series camera can realize 360° surveillance, and it is widely applied in various scenes such as airports, shopping centers, banks and hotels.

### Functions

#### Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Pixvideo smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

#### Heat Map

Pixvideo heat map technology is used to display the crowd density and people appearance probability. Display the crowd status by different colors. Generally, the crowd status is the statistics of people quantity in space and time dimensions.

#### In Area No.

With advanced stereo image technology and deep learning algorithm, Pixvideo In Area No. technology recognizes human targets accurately to count people in area in real-time. You can set people quantity threshold, when the number larger or smaller than the threshold, it triggers linkage. It is applicable in the scene that has limit on people quantity.

- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- 120dB WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire, people counting in area
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card, built-in Mic
- 12V DC/PoE power supply, easy for installation
- IP67, IK10 protection
- Heat map for people counting. You can adjust the number of people, time threshold to generate a heat map, which can be exported.



### True WDR

With advanced Wide Dynamic Range (120dB WDR) technology, Pixvideo network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

### Cyber Security

Pixvideo network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

### Protection (IP67, IK10, wide voltage)

**IP67:** The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normal after soaking in 1 m deep water for 30 minutes.

**IK10:** The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

**Wide voltage:** The camera allows  $\pm 30\%$  (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

## Technical Specification

### Camera

Image Sensor	1/2.7" 5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.006 Lux@F2.0 (Color, 30IRE) 0.0006 Lux@F2.0 (B/W, 30IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–55° Rotation: 0°–360°

### Lens

Lens Type	Fixed-focal			
Mount Type	M12			
Focal Length	1.4 mm			
Max. Aperture	F2.0			
Field of View	Horizontal: 180° Vertical: 180° Diagonal: 180°			
Iris Type	Fixed			
Close Focus Distance	0.2 m (0.7 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	28 m (91.9 ft)	11.2 m (36.7 ft)	5.6 m (18.4 ft)	2.8 m (9.2 ft)

### Smart Event

Heat Map	Yes
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### Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion
People Counting	Support people counting in area, and displaying and outputting yearly/monthly/daily reports (matching devices are needed); support people counting in 4 areas
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

### Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main stream (2592 × 1944 @1–25/30 fps) sub stream (704 × 576 @1–25 fps/704 × 480 @1–30 fps) third stream (1280 × 720 @1–25/30 fps)
Stream Capability	3 streams
Resolution	5M (2592 × 1944); 3M (2048 × 1536); UXGA (1600 × 1200); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)

Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas)
Region of Interest (RoI)	Yes (4 areas)
Privacy Masking	4 areas

### Audio

Built-in MIC	Yes
Audio Compression	PCM; G.711a; G.711Mu; G726

### Alarm

Alarm Event	No SD card; SD card full; SD card error; service life warning (supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay alarm; people counting; people No. exception detection; safety exception
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### Network

SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE: IE8, IE9 and IE11 Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

### Certification

Certification	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
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## Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V–5V DC
Alarm Output	1 channel out: 300mA 12V DC

## Power

Power Supply	12V DC/PoE
Power Consumption	Basic power consumption: 3.7W (12V DC); 4.7W (PoE) Max. power consumption (H.265 + intelligent function + WDR): 5.1W (12V DC); 6W (PoE)

## Environment

Operating Conditions	–30°C to +55°C (–22°F to +131°F)/Less than 95% RH
Storage Conditions	–40°C to +60°C (–40°F to +140°F)
Protection Grade	IP67; IK10

## Structure

Casing	Metal
Dimensions	62.0 mm × Φ110.0 mm (2.44" × Φ4.3")
Net Weight	387 g (0.9 lb)
Gross Weight	502 g (1.1 lb)

## Accessories

### Optional



ACM206  
Junction Box



ACM253  
Wall Mount



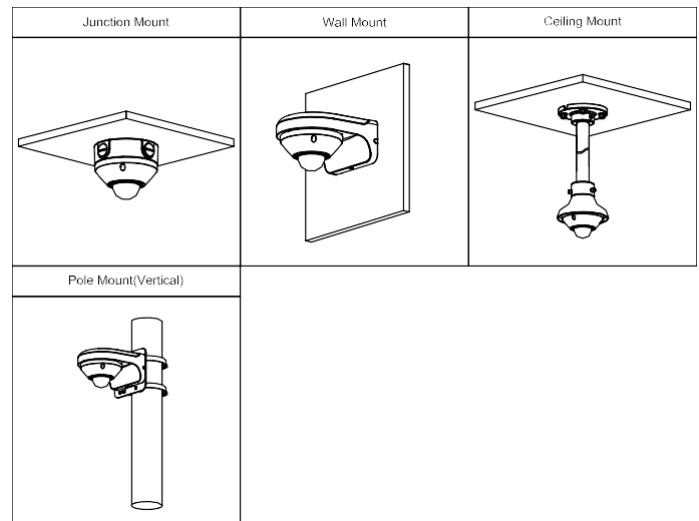
ACM244  
Ceiling Mount



ACM243  
Mount Adapter



ACM262E  
Pole Mount



## Dimensions (mm[inch])

