PIXVIDEO
image without compromises

PIX-NDF402WDETDI

4MP Smart Dual Light Active Deterrence Fixed-focal Wi-Fi Eyeball Network Camera

- 4-MP 1/3" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2560 ×1440)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light and IR LED, and the max. illumination distance is 30 m.
- SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access and SMD(human).
- Supports max.256 G Micro SD card; built in Mic.
- 12 VDC power supply.
- IP67 protection.
- Supports human detection.

4Mp	Smart Codec	Day/Night	Two-way Talk	Smart Dual Light	IP67	Human Detection

System Overview

With features of simple installation, easy operation, and high performance-cost ratio, Pixvideo network camera is applicable to small and medium-sized scenes, such as homes/residences, small-sized retail stores, and other small and medium-sized enterprises.

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.

Day/Night
Pixvideo Day/Night function provides color image when illumination is adequate; when illuminance is inadequate, it switches night mode and provides white and black image. It can guarantee that the network camera can work normally when illuminance changes.

Two-way Talk
With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

Smart Dual Light
Pixvideo Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Cyber Security
Pixvideo network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Human Detection
Pixvideo intelligent algorithms extract moving human targets from videos and filters out alarms that are triggered by non-human targets to increase the accuracy and effectiveness of alarms.

Technical Specification

Camera

Image Sensor	1/3" CMOS
Max. Resolution	2560 (H) × 1440 (V)
ROM	16 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.6 (Color, 30 IRE) 0.0005 lux@F1.6(B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 30 m (98.53 ft) (IR) Up to 30 m (98.53 ft) (Warm light)
Illuminator On/Off Control	Auto
Illuminator Number	1 (IR LED); 1 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm;3.6 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 98°; V: 55°; D: 115° 3.6 mm: H: 78°; V: 41°; D: 94°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1 m (3.28 ft) 3.6 mm: 1.7 m (5.58 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	61.2 m (200.78 ft)	24.5 m (80.38 ft)	12.2 m (40.03 ft)	6.1 m (20.01 ft)
	3.6 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)

Intelligence

Human Detection	Support the classification and accurate detection of human

Video

Video Compression	H.264B; H.264; H.264H; H.265
Smart Codec	Smart H.265+; Smart H.264+
Video Frame Rate	Main stream: 2560 × 1440@(1–25/30 fps); sub stream: 640 × 480@(1–25/30 fps); *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	2 streams
Resolution	4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720)

Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–4096 kbps; H.265: 12 kbps–4096 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	DWDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/180°
Mirror	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes
Built-in Speaker	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; abnormal audio input; intensity change; SMD (human)

Network

Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	IEEE 802.11b/g/n 2.4–2.4835 GHz, 2.4 G
SDK and API	Yes
Network Protocol	IPv4; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; DHCP; DNS; NTP; Multicast; RTMP; P2P
Interoperability	ONVIF (Profile S/Profile G); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	Micro SD card (support max. 256 GB)
Browser	IE; Chrome; Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS;Android
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; HTTPS; trusted upgrade; WSSE; trusted boot; account lockout; generation and importing of X.509 certification; video encryption

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; CE-RED: Radio Equipment Directive 2014/53/EU

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Power

Power Supply	12 VDC
Power Consumption	Basic: 2.2 W (12 VDC); Max. (H.265+ illuminator intensity): 7.1 W (12 VDC)

Environment

Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	−30 °C to +60 °C (-22°F to +140°F)
Storage Humidity	≤95%
Protection	IP67

Structure

Casing Material	Inner core: Metal + Plastic; Cover: Plastic
Product Dimensions	Φ109.9 mm × 102.2 mm (Ø4.33" × 4.02")
Net Weight	353 g (0.78 lb)
Gross Weight	602 g (1.33 lb)

Accessories

PIX-ACM247
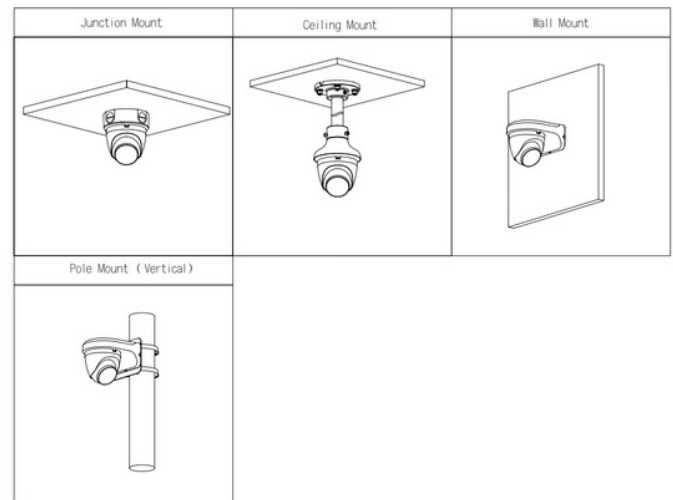Junction Box

PIX-ACM255
Wall Mount Bracket

PIX-ACM262
Pole Mount Bracket

PIX-ACM251
Mount Adapter

PIX-ACM244
Ceiling Mount Bracket

Junction Mount

Ceiling Mount

Wall Mount

Pole Mount (Vertical)

Dimensions (mm[inch])

83.3 [3.28]

4–4.5 × 5.5[0.18 × 0.22]

ø84.0 [ø3.31]

102.2 [4.02]

3–120°

ø109.9 [ø4.33]