



MPIX-20VDV-IRV-AI

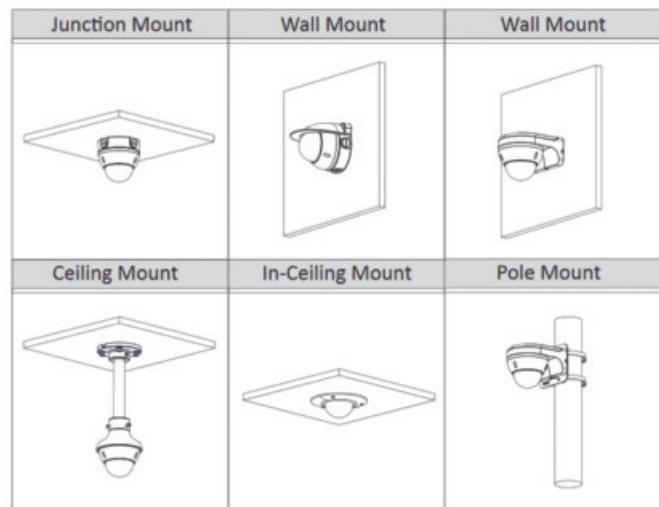
## 2MP IR Vari-focal Dome Network Camera



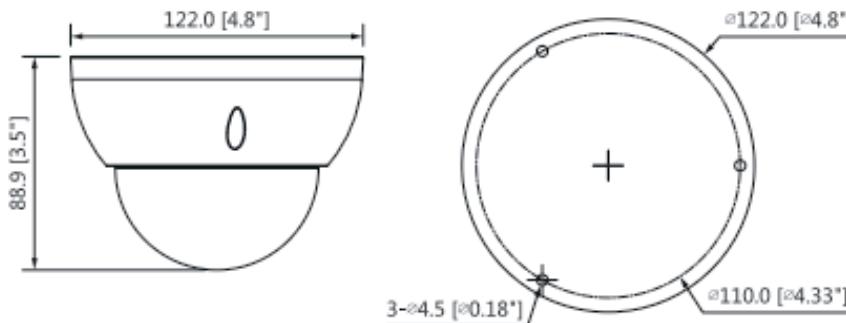
**VMS-PRO**  
Enterprise Class VMS Solution

### Features:

- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 2MP (1920 × 1080)@30 fps
- H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 40m(131.23ft)
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, line crossing
- Abnormality detection: Motion detection, video tampering, scene changing, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256GB Micro SD card
- 12V DC/POE power support
- IP67, IK10 protection
- Motion detection



**CE FCC**



**OnVIF**

## PRODUCT OVERVIEW

With advanced deep learning algorithm, WatchNET AI series network camera supports some intelligent functions, such as fenced area protection and smart motion detection. It adopts Sensefier solution, which makes a better image effect in low illuminance.

## SYSTEM FUNCTIONS

### Smart Motion Detection (SMD)

With intelligent algorithm, WatchNET Smart Motion Detection technology can effectively recognize the target types, flitting the motion detection alarm triggered by non-concerned target types. It can realize effective and accurate alarm.

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

Adopting advanced algorithm of auto stream control according to the environment, WatchNET smart encoding technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

### Cyber Security

WatchNET 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.

### Sensefier

WatchNET Sensfier technology mainly applies to the environment of low illumination, and it can provide clear colourful video. Even in the environment of minimum illumination, the technology can guarantee the good image effect.

### 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 works 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  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

### Fenced Area Protection:

With deep learning algorithm, WatchNET Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as line crossing, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

Model	MPIX-20VDV-IRV-AI	
Camera		
Image Sensor	1/2.8"2Megapixel progressive CMOS	
Effective Pixels	1920 (H) ×1080 (V)	
ROM/RAM	128 MB / 256 MB	
Scanning System	Progressive	
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100000 s	
Min. Illumination	0.002 Lux@F1.5 (Color, 30IRE) 0.0002 Lux@F1.5 (B/W, 30IRE) 0 Lux (Illuminator on)	
S/N Ratio	> 56 dB	
Illumination Distance	40 m (131.23 ft)	
Illum. On/Off Control	Auto/Manual	
Illuminator Number	2 (IR LED)	
Pan/Tilt/Rotation Range	Pan: 0°~355°; Tilt: 0°~75°; Rotation: 0°~355°	
Lens		
Lens Type	Motorized vari-focal	
Mount Type	φ14	
Focal Length	2.7 mm~13.5 mm	
Max. Aperture	F1.5	
Field of View	Horizontal: 108°~28° Vertical: 57° ~16° Diagonal: 130° ~33°	
Iris Type	Fixed	
Close Focus Distance	0.8 m (2.6 ft)	
Professional, Intelligent		
Fenced Area Protection	Line crossing; intrusion (Recognition of human and vehicle)	
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos	
Video		
Compression	H.265; H.264; H.264H; H.264B; MJPEG	
Smart Codec	Yes	
Video Frame Rate	<b>Main stream</b> (1920 × 1080@1~25/30 fps) <b>Sub stream</b> (704 × 576@1~25 fps/704 × 480@1~30fps) <b>Third stream</b> (1280 × 720@1~25/30 fps)	
Resolution	1080p (1920 × 1080); 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	Auto(ICR)/Color/B/W	
BLC/HLC/WDR	Yes/Yes/120 dB	
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom	
Gain Control	Auto/Manual	
Noise Reduction	3D DNR	
Motion Detection	OFF/ON (4 areas, rectangular)	
Region of Interest(RoI)	Yes (4 areas)	
Smart Illumination	Yes	
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1920×1080 resolution and lower.)	
Mirror	Yes	
Privacy Masking	4 Areas	

Alarm									
Alarm Event		Description							
DORI Distance	Lens	Detect	Observe	Recognize	Identify				
	W	44.1 m (144.7 ft)	17.6 m (57.7 ft)	8.8 m (28.9 ft)	4.4 m (14.4 ft)				
	T	153.1 m (502.3 ft)	61.2 m (200.8 ft)	30.6 m (82.9 ft)	15.3 m (50.2 ft)				
Network									
Ethernet		RJ-45 (10/100 Base-T)							
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								
	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								
Cyber Security	ONVIF(Profile S/Profile G);CGI;P2P;Milestone;Genetec								
Interoperability	Yes								
Scene Self-adaptation	20 (Total bandwidth: 64 M)								
User/Host	FTP; SFTP; Micro SD Card (support max. 256 G); WatchNET Cloud; NAS								
Storage	IE: IE8, IE9, IE11, Chrome, Firefox								
Management Software	HD-VMS & eVMS-PRO								
Smart Phone App	MVS-Lite , MVS-Pro & eVMS-PRO								
Mobile	IOS; Android								
Power									
Power Supply	12V DC/PoE (802.3af)								
Power Consumption	<8W								
General									
Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F)/less than 95%								
Storage Conditions	-40°C to +60°C (-40°F to +140°F)								
Ingress protection	IP67, IK10								
Construction									
Casing	Metal								
Dimensions	Φ122 mm × 88.9 mm (Φ4.8" × 3.5")								
Net Weight	492 g (1.1 lb)								
Gross Weight	663 g (1.5 lb)								

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