VKD MS 440

4MP 4x PTZ Network Camera

· 1/3" 4Megapixel CMOS
· Powerful 4x optical zoom
· WDR, Day/Night(ICR), Ultra DNR
· Max. 25/30fps@4M/3M
· IVS
· Support PoE
· IP66, IK10

| H.265 | WDR | ICR D/N | IP66 | Vandal-proof | PoE |

System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, the camera provides a wide monitoring range and great detail. The camera delivers 4MP resolution at 25/30fps. The camera is equipped with smooth control, high quality image, and good protection, meeting compact size demands of video surveillance applications.

Functions

Wide Dynamic Range
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Environmental
Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -30 °C to +60 °C (-22 °F to +140 °F)with 95% humidity. The camera complies with the IK10 Vandal Resistance impact rating. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF

Technical Specification

Camera

Image Sensor	1/3" CMOS
Effective Pixels	2592(H) x 1520(V), 4 Megapixels
RAM/ROM	256M/128M
Electronic Shutter Speed	1/1s~1/30,000s
Scanning System	Progressive
Minimum Illumination	Color: 0.05Lux@F1.6; B/W: 0.005Lux@F1.6
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A

Lens

Focal Length	2.7mm~11mm
Max. Aperture	F1.6 ~ F2.8
Angle of View	H: 112.5° ~ 30°
Optical Zoom	4x
Focus Control	Auto/Manual
Close Focus Distance	100mm~ 1000mm

DORI Distance

*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

Detect	Observe	Recognize	Identify
180m(591ft)	72m(236ft)	36m(118ft)	18m(59ft)

PTZ

Pan/Tilt Range	Pan: 0° ~ 355°; Tilt: 0° ~ 90°
Manual Control Speed	Pan: 0.1° ~100° /s; Tilt: 0.1° ~60° /s
Preset Speed	Pan: 100° /s; Tilt: 60° /s
Presets	300
PTZ Mode	8 Tour(up to 32 preset per tour)
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	DH-SD

Intelligence

Event Trigger	Motion detection, Video tampering, Network disconnection, IP address conflict, Illegal access, Storage anomaly
Auto Tracking	N/A
IVS	Tripwire, Intrusion,Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video

Compression	H.265/H.264
Streaming Capability	3 Streams
Resolution	4M(2592×1520)/3M(2304×1296)/1080P(1920× 1080)/720P(1280×720)/D1(704×576/704×480)/ CIF(352×288/352×240)
Frame Rate	Main stream: 4M/3M/1080P/1.3M/720P (1~25/30fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 720P/D1/CIF (1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 448K ~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR (120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detetion	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	N/A
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Network

Ethernet	RJ-45 (10XBase-T/100Base-TX)
Wi-Fi	N/A
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS,PPPOE,DDNS,FTP, IP Filter,QoS,Bonjour,802.1x
Interoperability	ONVIF Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1

Interface	
Video Interface	N/A
RS485	N/A
Audio I/O	N/A
Alarm I/O	N/A

Electrical	
Power Supply	DC 12V/1.5A, PoE(802.3af)
Power Consumption	10W

Environmental	
Operating Conditions	-30°C ~ 60°C (-22°F ~ +140°F) / Less than 95% RH
Ingress Protection	IP66
Vandal Resistance	IK10

Construction	
Casing	Metal
Dimensions	Φ122 (mm) x 89 (mm)
Net Weight	0.66kg(1.46lb)
Gross Weight	0.71kg(1.57lb)

Accessories

Optional :

SFD02AJ
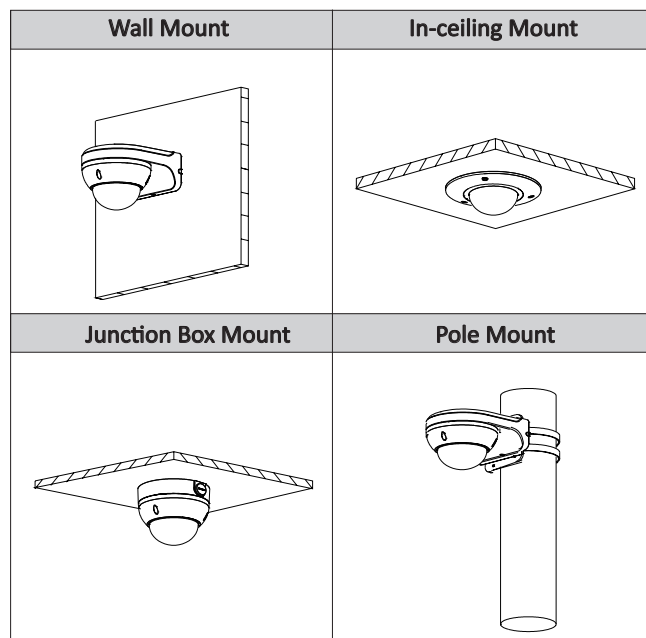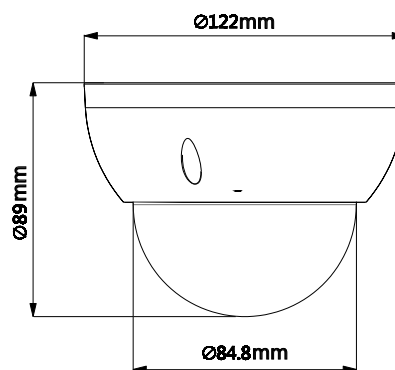Mount Adapter

DC12V/2A
Power Adapter

SFD03W
Wall Mount

SFU00AP2
Pole Mount

PFB200C
Ceiling Mount

Wall Mount	In-ceiling Mount
Junction Box Mount	Pole Mount

Dimensions (mm)

⌀122mm

⌀89mm

⌀84.8mm