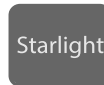


### IP-5DM-MVF-EA



## 5 Megapixel WDR IR AI Dome Network Camera

### Features

- > 1/2.7" 5Megapixel progressive scan CMOS
  - > H.265&H.264 triple-stream encoding
  - > 20fps@2592×1944
  - > WDR(120dB), Day/Night(ICR), 3D DNR, AWB, AGC, BLC
  - > Multiple network monitoring: Web viewer, VMS
  - > 2.7mm ~13.5mm motorized lens
  - > 1/1 Alarm in/out, 1/1 audio in/out
  - > Max. IR LEDs Length 40m
- Micro SD memory, IP67, IK10

### System Overview

EmPower AI series contains Face Capture, Perimeter Protection and People Counting functions. Powered by deep-learning Artificial Intelligence algorithms, significantly improved accuracy. Meanwhile, the series features starlight and smart IR technology. This series fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

### Functions

#### Face Capture

Face capture is a software application that automatically captures faces from within a digital image or a video frame from a video source. EmPower cameras use advanced deep learning algorithms and are trained by a large number of face data sources, enabling the camera to locate faces quickly and accurately from the video source and capture facial images.

#### Face Attributes

Through the use of deep learning algorithms to analyze facial images, EmPower cameras can extract six facial attributes from each frame, including Age, Gender, Expression (Jolly/Surprise/Normal/Rage/Sad/Disgusted/Confused/Frightened), Glasses, Mouth Mask, Moustache & Beard. Customers can acquire data of interest via face attributes statistics.

#### Perimeter Protection

EmPower's Perimeter Protection functions significantly improved accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or to a mobile client reduces system requirements and resources resulting in greater surveillance system efficiency.

#### People Counting

People Counting function uses advanced image processing technology to capture depth information from within images. The camera pairs this information with deep learning algorithms to analyze and detect human bodies and track target objects in real time. The camera provides statistics for separate individuals' entrance and exit with up to 95% counting accuracy.

#### Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. EmPower face detection camera can extract six facial attributes and output the metadata for analysis.

#### ePoE Technology

The ePoE technology of Saitell, designed internally, adopts advanced coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Saitell ePoE technology offers a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

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

The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides elective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.



### IP-5DM-MVF-EA



#### Technical Specification

##### Camera

Image Sensor	1/2.7" 5Megapixel progressive scan CMOS
Effective Pixels	2592(H) x 1944(V)
RAM/ROM	1GB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.01Lux/F1.5 ( Color,1/3s,30IRE) 0.09Lux/F1.5 ( Color,1/30s,30IRE) 0Lux/F1.5 (IR on)
IR Distance	Distance up to 40m (131ft)
IR On/Off Control	Auto/ Manual
IR LEDs	3

##### Lens

Lens Type		Motorized			
Mount Type		Board-in			
Focal Length		2.7mm~13.5mm			
Max. Aperture		F1.5			
Angle of View		H: 100°~28°, V:72°~21°(2592×1944) H: 104°~29°, V:55°~16°(2688×1520)			
Optical Zoom		5x			
Aperture Type		Auto			
Close Focus Distance		0.8m(2.62ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	64m(210ft)	26m(85ft)	13m(43ft)	6m(20ft)
	T	212m(696ft)	85m(279ft)	42m(138ft)	21m(69ft)

##### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~355°; Tilt:0°~65°; Rotation:0°~355°
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##### Artificial Intelligence

Face Capture	Support face image capture
Face Attributes	Support 6 kinds of face attributes extraction: Age, Gender, Expression(Jolly/Surprise/Normal/Rage/Sad/Disgusted/Confused/Frightened), Glasses, Mouth Mask, Moustache & Beard
Perimeter Protection	Tripwire, Intrusion(Human & Vehicle classification)
People Counting	Line crossing people counting, Region people counting

##### General Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access,Storage anomaly
General Intelligence	Object Abandoned/Missing

##### Video

Compression	H.265+/H.265/H.264+/H.264/H.264B/H.264H/MJPEG(sub stream)
Streaming Capability	3 Streams

Resolution	2592×1944/2688×1520/2304×1296/1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/VGA(640×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 2592×1944(1~20fps) Sub Stream: D1(1~20/30fps) Third Stream: 1080P(1~13fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32~ 8192Kbps H.265: 19~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
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)	Support
Smart IR	Support
Defog	Support
Digital Zoom	N/A
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

##### Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726/G.723
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##### Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP;SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP;QoS; UPnP;NTP
Interoperability	ONVIF(Profile S/Profile G), CGI,Milestone,Genetec,P2P
Streaming Method	Unicast / Multicast
Max. User Access	20 Users
Edge Storage	NAS FTP Mirco SD card 256GB
Web Viewer	IE(versions newer than IE8), Chrome, Firefox, Safari(versions newer than Safari 12)
Management Software	Unisight VMS
Smart Phone	iOS, Android

##### Certifications

Certifications	CE-LVD:EN60950-1 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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### IP-5DM-MVF-EA



#### Interface

Video Interface	1 Port(For adjustment only)
Audio Interface	1/1 channel In/Out
RS485	N/A
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC

#### Electrical

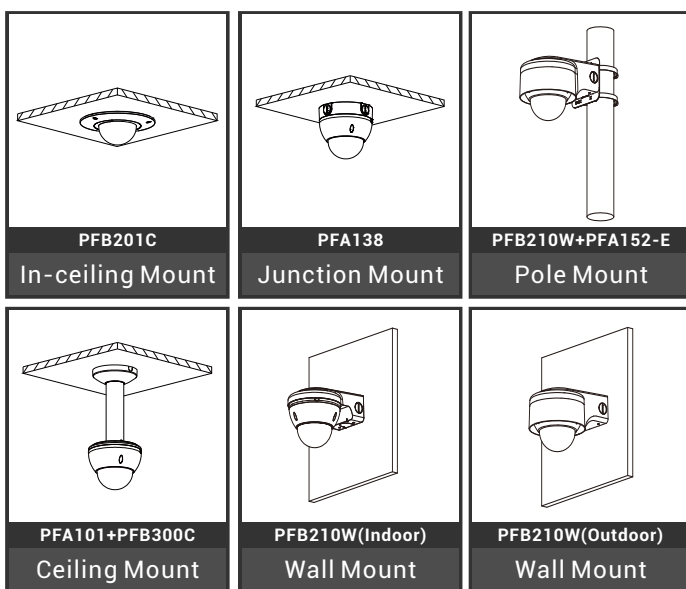
Power Supply	DC12V(±30%), AC24V(±30%), PoE(802.3af)(Class 0)
Power Consumption	DC12V:4.9W 12.4W(IR on) AC24V: 5.1W 11.9W(IR on) PoE:5.2W 11.6W(IR on)

#### Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / 10%RH~95% RH
Storage Conditions	+5° C ~ +40° C (+41° F ~ +104° F) (daily temperature difference within 15° C/59° F) / 10%RH~95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

#### Construction

Casing	Metal,plastic
Dimensions	Φ159mm×117.9mm (6.26"×4.64")
Net Weight	0.95kg (2.09lb)
Gross Weight	1.20kg (2.65lb)



### Accessories(Optional)



**PFA138**  
Junction Box



**PFB201C**  
Inceiling Mount



**PFA152-E**  
Pole Mount



**PFB210W**  
Wall Mount



**LR1002**  
ePoE Coax Converter



**PFA101**  
Mount Adapter



**PFB300C**  
Ceiling mount

### Dimensions(mm/inch)

