

# IPMX-D40F-IRW1

4MP IR mini Dome Network Camera



- 1/3" 4 Megapixel progressive scan CMOS
- H.265 & H.264 triple-stream encoding
- 25/30fps@4M(2688x1520)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- 2.8mm fixed lens
- 1/1 Alarm in/out, 1/1 audio in/out
- Max IR LEDs Length 30m
- Micro SD memory, IP67, IK10, E-PoE

## System Overview

A little dome camera, packing some big brain power – the IPMX-D40F-IRW1.

This small form factor dome camera adopts a 4MP, 1/3" CMOS sensor enabling 4 Megapixel video at up to 20FPS. This sensor sits atop a 2.8mm fixed lens, and is paired with IR LEDs capable of supplying illumination up to 98'. The image sensor itself has a strong 120 dB dynamic range, making this dome camera a 'True WDR' camera. The camera also supports extended PoE (E-PoE).

The real magic of this camera lies in its AI (Advanced Intelligence) suite of features, which includes: Tripwire, Intrusion, Scene Change, and Face Detection.

With all of the above features packed into a small form factor, this dome camera excels in a wide array of installation environments including: retail outlets, commercial business, public venues, and even public

## Functions

### ePoE Technology

ePoE technology adopts advanced 2D-PAM3 coding modulation from the 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. It supports PoE and PoC power supply technology, which has greatly simplified construction and wiring. ePoE technology offer a new way to accomplish long distance transmission between IP cameras and network switches. It allows for a more flexible surveillance system design, improves reliability, and saves on construction and wiring costs.

### Wide Dynamic Range(WDR)

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.

### Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

### Environmental

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, allowing the camera to operate in the harshest environments.

### 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 effective 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.

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

## Technical Specification

### Camera

Image Sensor	1/3" 4 Megapixel progressive scan CMOS
Effective Pixels	2688(H)x1520(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s
Minimum Illumination	0.06Lux/F1.6( Color,1/3s,30IRE) 0.4Lux/F1.6( Color,1/30s,30IRE) 0Lux/F1.6(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 30m (98ft)
IR On/Off Control	Auto / Manual
IR LEDs	18, 850nm Wavelength

### Lens

Lens Type	Fixed			
Mount Type	Board-in			
Focal Length	2.8mm			
Max. Aperture	F1.6			
Angle of View	H: 104°; V: 55°			
Optical Zoom	N/A			
Focus Control	Fixed			
Close Focus Distance	0.9m			
DORI Distance	Detect	Observe	Recognize	Identify
	184ft	72ft	36ft	20ft

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0° ~355°;Tilt:0° ~75°;Rotation:0° ~355°
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### Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

### Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688x1520)/3M(2304x1296)/ 1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ VGA(640x480)/CIF(352x288/352x240)
Frame Rate	Main Stream: 4M(1~25/30fps) Sub Stream: D1(1~25/30fps) Third Stream: 720P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps
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 Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Audio

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

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP; HTTPS; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

### Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
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### Interface

Video Interface	N/A
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, PoE (802.3af)(Class 0)
E-PoE	Support
Power Consumption	<5W

### Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Storage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

### Construction

Casing	Metal
Dimensions	109.9mmx81mm (4.33"x3.19")
Net Weight	0.41kg (0.91lb)
Gross Weight	0.53 kg (1.17lb)

Accessories

Dimensions (mm/in)

