

IPMX-D20F-IRW1

2MP Starlight Dome Network Camera



- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- H.265 & H.264 dual-stream encoding
- Outputs 2MP (1920 × 1080)@25/30 fps
- Starlight Support, max IR distance: 98ft
- Intelligent detection: Intrusion, tripwire
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 128 GB Micro SD card
- 12V DC/PoE power support
- IP67, IK10 protection

System Overview

The IPMX-D20F-IRW1 is a 2MP dome camera featuring our latest generation of 1/2.8" STARVIS CMOS sensors and H.265/H.264 triple-stream encoding. It adopts our vandal proof dome style housing with a 2.8mm fixed lens. This camera also has enhanced night vision due to both Smart IR and Starlight functions. IR illumination up to ~98'.

The additional features include IVS functions for IVS Tripwire, Intrusion, Object Abandoned/Missing support and Face Detection support. The camera is protected by both IP67 and IK10 ratings and dual powered via PoE or 12V.

Made in South Korea and conforms to the Trade Agreements Act (TAA).

Functions

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

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265

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.

Starlight

For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Intelligent Video Analysis (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 Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

Protection (IP67, IK10, wide voltage)

The camera allows for $\pm 25\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV 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 complies with an IK10 impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.)

Technical Specification

Camera

Image Sensor	1/2.8" 2 Megapixel progressive CMOS
Effective Pixels	1920 (H) × 1080 (V)
RAM/ROM	256 /32 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100000 s
Minimum Illumination	0.007Lux/F1.6(Color,1/3s,30IRE) 0.06Lux/F1.6(Color,1/30s,30IRE) 0Lux/F1.6(IR on)
IR Distance	Distance up to 30m (98ft)
IR On/Off Control	Auto / Manual
IR LEDs	18

Lens

Lens Type	Fixed				
Mount Type	φ14				
Focal Length	2.8mm				
Max. Aperture	F1.6				
Angle of View	H: 110° , V:58°				
Optical Zoom	N/A				
Close Focus Distance	0.7m				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	141 ft	17 ft	9 ft	13 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0° ~355° ;Tilt:0° ~65° ;Rotation:0° ~355°
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Smart Event

General 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	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: 1080P(1~50/60fps) Sub Stream: D1(1~50/60fps) Third Stream: 1080P(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/regional custom
Gain Control	Auto / Manual
Noise Reduction	3D DNR

Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Smart IR	Support
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	IHTTP; 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 (RCA)
RS485	N/A
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC

Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
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	109.9mm×81mm (4.33"×3.19")
Net Weight	0.41kg (0.91lb)
Gross Weight	0.53 kg (1.17lb)

Accessories

Dimensions (mm/in)

