

IPMX-B20F-IRB1

2MP WDR IR Mini Bullet Network Camera



- 1/2.8" 2 Megapixel progressive Starvis CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- IVS: Tripwire, Intrusion, Face Detect supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- 3.6mm fixed lens
- Max. IR LEDs Length 30m
- IP67, PoE

System Overview

Bigger is better, at least with image sensors!

The IPMX-B20F-IRB1 is a 2MP bullet camera featuring our latest generation of 1/2.8" CMOS sensors capable of 1080 @ 60fps with H.265 support. It adopts our popular compact style bullet housing, and supports IR illumination up to 100'.

Due to the larger image sensor, this camera supports a large dynamic range (120 dB), and is considered a 'True' WDR camera. On top of the image sensor sits a fixed, 3.6mm lens which offers up a 93 degree horizontal field of view. The camera also supports IVS functions with Tripwire, Intrusion and Face Detect. These features make the camera well suited for exterior applications on commercial as well as residential installations

Functions

Smart H.265+

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.

Environmental

With a temperature range of -30 °C to +60 °C (-22 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

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

Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

HEVC

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.

Technical Specification

Camera

Image Sensor	1/2.8" 2 Megapixel progressive CMOS
Effective Pixels	1920 (H) × 1080 (V)
RAM/ROM	256MB / 32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s
Minimum Illumination	0.009 Lux/F2.0(Color,1/3s,30IRE) 0.07 Lux/2.0(Color,1/30s,30IRE) 0 Lux/F2.0(IR on)
IR Distance	Distance up to 30m (98ft)
IR On/Off Control	Auto / Manual
IR LEDs	18

Lens

Lens Type	Fixed				
Mount Type	Board-in				
Focal Length	3.6mm				
Max. Aperture	F2.0				
Angle of View	H: 87°; V: 48°				
Optical Zoom	N/A				
Close Focus Distance	N/A				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6mm	180 ft	72 ft	36 ft	20 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°
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Smart Event

IVS	Tripwire, Intrusion, Object Abandoned/Missing, Face Detect
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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: 24~9472Kbps H.265: 14~5632Kbps
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)
Smart IR	Support
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	N/A
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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
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	N/A
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<6W

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

Construction

Casing	Metal
Dimensions	161.9mm×69.8mm×69.8mm (6.37"×2.75"×2.75")
Net Weight	0.38Kg (0.84lb)
Gross Weight	0.44Kg (0.97lb)

Accessories

Dimensions (mm/in)

