

IPEG-B40V-IRW3

4MP IR Varifocal Bullet Network Camera



- 4-MP 1/2.9" CMOS image sensor,
- H.265+ & H.265 dual-stream encoding
- 4 MP (2688 × 1520)@20 fps, and 2560 × 1440(2560 × 1440)@25/30 fps.
- WDR (120dB), 3DNR, AWB, AGC, BLC
- Intelligent Motion Detect, Perimeter Protection
- 2.7~13.5mm varifocal lens, Max IR length 196ft
- 256GB Micro SD Support, IP67, PoE

System Overview

The IPEG-B40V-IRW3 is a 4MP bullet camera featuring our latest generation of 1/3" CMOS sensors with H.265 support. It adopts our vandal proof bullet style housing, and supports IR illumination up to ~164'. The camera also features a motorized, 2.7mm-13.5mm lens which offers up a 104-29 degree horizontal field of view and 4x optical zoom. The zoom level is fully controllable directly from the camera interface, enabling you to obtain the perfect shot.

This Edge camera has also been updated with the addition of IVS (Intelligent Video System), Perimeter Protection and Intelligent Motion Detect. This allows the camera to utilize AI Search and event extraction with IC Realtime AI NVRs for a streamlined playback experience.

Functions

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.

Protection (IP67, 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), the camera is the choice for installation in even the most unforgiving environments

iMD (Intelligent Motion Detect)

This is an upgraded version of motion detection currently known as Intelligent Motion Detection (iMD). The upgraded Plus version greatly improves alarm accuracy by pre-loading a deep learning algorithm that recognizes people and vehicles. Motion detection alerts containing a human and/or vehicle intrusion event are now possible with up to 95% accuracy. Eliminate false alarms, save time and keep stress levels low knowing you're protected.

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.

Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 196ft (60m).

Perimeter Protection

IC Realtime's Perimeter Protection features significantly improve detection accuracy. The benefits of Perimeter Protection include up to a 90% reduction in false alarms. Other advantages include a decrease in pixel count requirement for object detection, which translates into more efficiency with less strain on the system. Perimeter Protection options let you customize tripwires based on the object type and allow intelligent automation within a limited area of access such as pedestrian or vehicle-only zones. The combination of advanced AI analytics and real-time alerts maximizes efficiency & balance of the total systems capacity and resources resulting in greater surveillance system efficiency.

Technical Specification

Camera

Image Sensor	1/2.9" CMOS
Effective Pixels	2688 (H) × 1520 (V) (4 Megapixels)
ROM/ RAM	128MB/ 128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Minimum Illumination	0.006 lux@F1.5 (Color, 30 IRE) 0.0006 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
IR Distance	196.0 ft (60 m)
IR On/Off Control	Auto / Manual
IR LEDs	4

Lens

Lens Type	Motorized vari-focal			
Mount Type	φ14			
Focal Length	2.7 mm–13.5 mm			
Max. Aperture	F1.5			
Angle of View	Horizontal: 104°–29°, Vertical: 54°–16°			
Focus Control	Fixed			
Close Focus Distance	2.6 ft (0.8 m)			
DORI Distance	Detect	Observe	Recognize	Identify
	209 ft	83 ft	41 ft	20 ft
	688 ft	275 ft	137 ft	68 ft

Pan/Tilt/Rotation

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

Compression	H.265; H.264; H.264H; H.264B; MJPEG (sub stream only)
Smart Codec	Smart H.265+, Smart H.264+
Streaming Capability	2 Streams
Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (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: 4MP, 2688 × 1520@(1–20 fps)/2560 × 1440@(1–25/30 fps) Sub Stream: stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps–6144 Kbps H.265: 12 Kbps–6144 Kbps
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	Supported
Defog	N/A

Flip	0°/90°/180°/0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution.)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Intelligence

Basic IVS	Tripwire; Intrusion
Perimeter Protection	Tripwire; Intrusion(These functions support the classification and detection of vehicle and human objects)
Intelligent Motion Detect	Supported
AI Search	Works together with AI-enabled IC Realtime NVRs to perform refined intelligent search, event extraction and merging to event videos

Audio

Compression	G.711a; G.711Mu; G.726; PCM
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Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; IGMP; P2P
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
Max. User Access	6 (Total bandwidth: 36 M)
Edge Storage	FTP; SFTP; Micro SD card (support max. 256 GB)
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	IC Now, IC Now Pro
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B
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Interface

Video Interface	N/A
Audio Interface	Built-in Microphone
RS485	N/A
Alarm	N/A

Electrical

Power Supply	DC12V, PoE (802.3af)
Power Consumption	Basic: 2.4 W (12 VDC); 3.1 W (PoE) Max. (H.265+intelligence on +WDR +IR on): 8.7 W (12 VDC); 10.1 W (PoE)

Environmental

Operating Conditions	-22° F ~ +140° F (-30° C ~ +60° C) / Less than 95% RH
Storage Conditions	-40°F to +140°F (-40°C to +60°C)
Ingress Protection	IP67
Vandal Resistance	N/A

Construction

Casing	Metal
Dimensions	9.39" × 3.57" × 3.57" (238.5 mm × 90.7 mm × 90.7 mm)
Net Weight	1.6 lb (0.73 kg)
Gross Weight	2.2 lb (0.99 kg)

Accessories

Dimensions (mm/in)

