IPEL-B12V-IRW2
12MP IR Bullet Network Camera

IC REALTIME

- 12MP 1/1.7" CMOS image sensor, high image definition
- H.265 & H.264, five-steam encoding support
- Outputs 12MP (4000 × 3000) @25/30 fps
- Intelligent Motion Detect and Perimeter Protection
- IVS, People Counting and Face Detection
- DWDR, Day/Night(ICR), 3DNR,AWB,AGC,BLC,
- 2.7-12mm Motorized varifocal lens
- Max. IR LEDs Length 196 ft
- 256GB Micro SD memory, IP67, IK10, PoE

System Overview

The IPEL-B12V-IRW2 is a 12MP Ultra HD bullet camera featuring a 1/1.7" CMOS high image definition image sensor with a 2.7-12mm motorized varifocal lens. It outputs 12MP (4000 × 3000) @25/30 fps with H.265 support for optimized storage. In addition, the camera features an IR distance up to 196 feet and weatherproofed thanks to IP67 and protected with an IK10 rated housing. protection. The camera also comes equipped with a 256GB Micro SD card support for onboard storage.

This Elite series camera also sports an impressive AI suite with not only IVS and People Counting, but also Perimeter Protection, which features human/ vehicle recognition. This helps to drastically reduce false positive triggers. Working with other AI enabled recorders, the camera also supports Face Detection technology.

Functions

Starlight Technology
Featuring Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.01 lux).

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.

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).

Protection (IP67, IK10)
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+
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.

FS-04142022-HV1-D1.03

IC REALTIME

Technical Specification

Camera

Image Sensor	1/1.7"12 Megapixel progressive CMOS
Effective Pixels	4000 (H) × 3000 (V)
RAM/ROM	4GB/2GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
Minimum Illumination	0.01 Lux @F1.8
S/N Ratio	>56 dB
IR Distance	196.9 ft (60m)
IR On/Off Control	Auto / Manual
IR LEDs	4

Lens

Lens Type	Motorized vari-focal			
Mount Type	φ14			
Focal Length	2.7 mm-12 mm			
Max. Aperture	F1.8			
Angle of View	Horizontal: 103°–44°, Vertical: 75°–33°			
Close Focus Distance	3.9 ft (1.2 m)			

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	305 ft	121 ft	59 ft	29 ft
	T	672 ft	269 ft	134 ft	65 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°

Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.264+Smart H.265+
Streaming Capability	3 Streams
Resolution	12M (4000 × 3000); 8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728); 5M (2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536); 3M (2304 × 1296); 2M (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240); VGA (640 × 480)
Frame Rate	Main stream: 4000 × 3000 @1-25/30 fp
	Sub stream: 704 × 576@1-25fps, 704 × 480@1-30fps
	Third stream: 1920 × 1080 @1-25/30 fps
	Fourth stream: 1920 × 1080 @1-25/30 fps
	Fifth stream: 704 × 576 @1-25 fps; 704 × 480 @1-30 fps
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 kbps–16384 kbps H.265: 32 kbps–14080 kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / DWDR
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° (Support 90°/270° with 1080p resolution and lower.)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a, G.711Mu, G.726, AAC, G.723

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	Pv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P;RTMP
Streaming Method	Unicast / Multicast
Max. User Access	20 (Total bandwidth: 240 M.)
Edge Storage	NAS; FTP; SFTP Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B

Interface

Video Interface	N/A
Audio Interface	1 channel input/ output (3.5mm JACK port)
RS485	1 (baud rate range: 1200 bps–115200 bps)
Alarm	Input: 3 channels in: 5mA 3V–5V DC
	Output: 2 channels out: 1,000mA 30V DC/500mA 50V DC

Electrical

Power Supply	12V DC/24V AC/POE+(802.3at)
Power Consumption	<19.32W

Environmental

Operating Conditions	−40°F to +140°F (−40°C to +60°C) /Less than 95% RH
Storage Conditions	−40°F to +140°F (−40°C to +60°C)
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal + plastic
Dimensions	13.39" × 5.44" × 5.28" (340.1 mm × 138.3 mm × 134 mm) (L × W × H)
Net Weight	20.08 lb (9.11 kg)
Gross Weight	24.71 lb (11.21 kg)

AI Functions

IVS

Basic IVS	Tripwire; Intrusion, Abandoned object; missing object, loitering detection; people gathering; parking detection
Advanced IVS	People Counting, Face Detection

Perimeter Protection

Capabilities	Tripwire; Intrusion; Fast moving (These functions support the classification and detection of vehicle and human objects)

Video Metadata

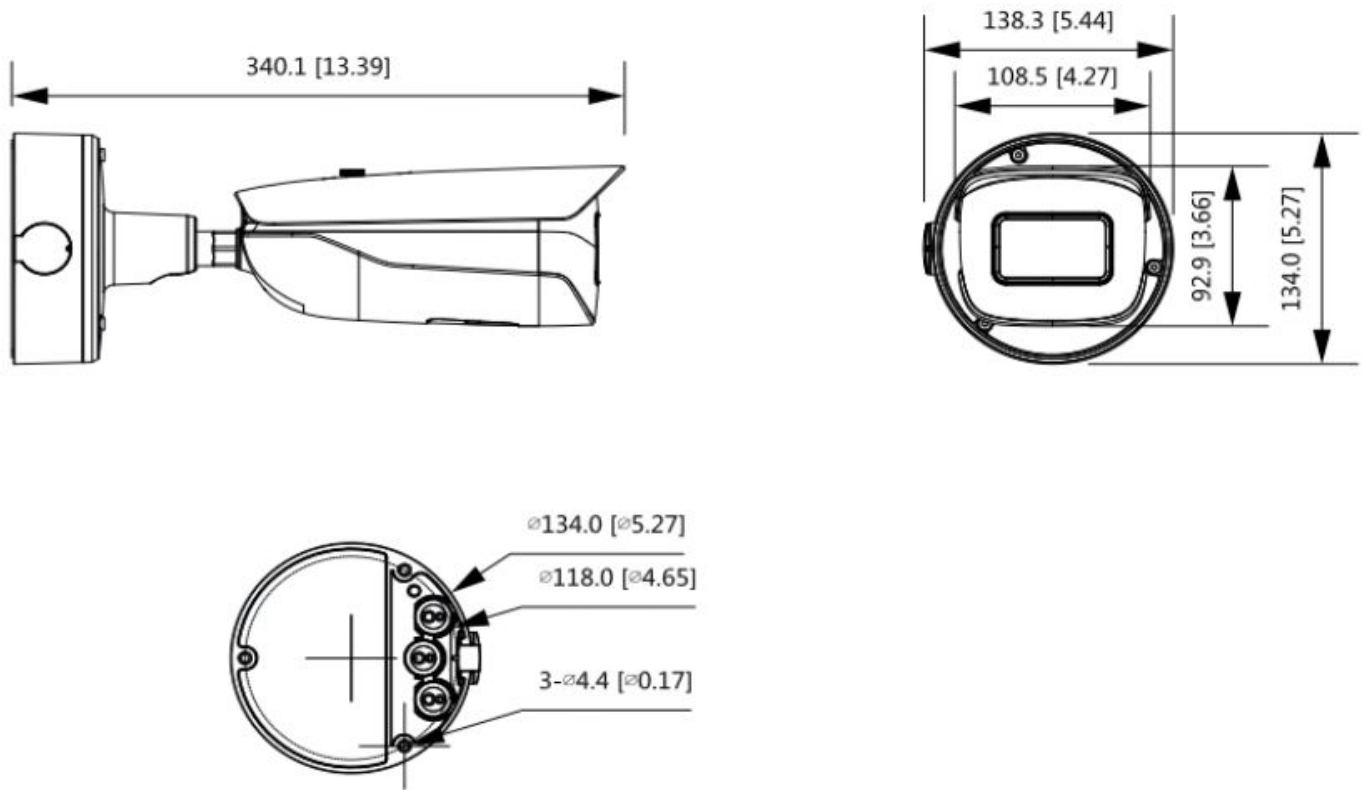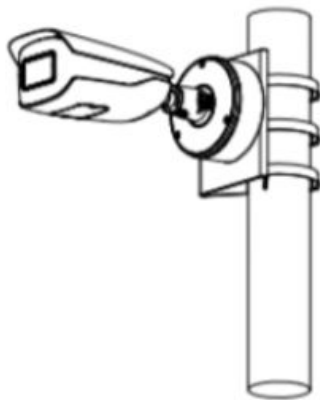|	
Non-Automobile Vehicle Attributes	Vehicle type (Bicycle, tricycle, unknown) , vehicle color, hat, clothing type, and clothing color (This function is not for cars, trucks, suv etc.)
Personnel Attribute	Clothing type, trousers type, clothing color, trousers color, backpack, hat, gender and umbrella),

Intelligent Search

Capabilities	Works together with AI enabled NVRs to perform refined intelligent search, event extraction and merging to event videos

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Dimensions (mm/in)

340.1 [13.39]

138.3 [5.44]

108.5 [4.27]

92.9 [3.66]

134.0 [5.27]

⌀134.0 [⌀5.27]

⌀118.0 [⌀4.65]

3-⌀4.4 [⌀0.17]

Accessories

**Included Mount
+MNT-POLIP**

Included Mount