IPEG-E80F-IRW2
8MP Eyeball Network Camera

IC REALTIME

- 8MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- H.265 & H.264 dual-stream encoding
- Outputs max. 8MP (3840 × 2160) @20 fps
- 120 dB WDR, Day/Night(ICR), 3DNR, HLC, BLC
- Smart IR, Max. IR LEDs Length 98 ft
- Built-in Mic, IP67, PoE

System Overview

The IPEG-E80F-IRW2 is IC Realtime's 4K camera the Edge lineup. This eyeball turret camera outputs 8 Megapixels (4K) @ 15fps. The camera is upgraded with IVS, Perimeter Protection and Intelligent Motion Detect, bringing technology normally found in our MX line. Furthermore, the camera comes with Smart IR Illumination up to 98 feet and housed in an IP67, weatherproof housing. Other feature include a built-in mic, Smart H.265 and PoE support.

It is also ONVIF compliant, making it a great choice to update existing third-party systems to 4K resolution.

Functions

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 98ft (30m).

Protection (IP67, wide voltage)
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.Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with unstable voltage.

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.

Environmental
With a temperature range of -40°F to +131°F (-40°C to +55°C) , 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.

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.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer

IC REALTIME

Technical Specification

Camera

Image Sensor	1/2.7" CMOS
Effective Pixels	3840 (H) × 2160 (V)
RAM/ROM	256MB/ 128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Minimum Illumination	0.009 lux@F2.0 (Color, 30 IRE) 0.0009 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
IR Distance	98.4 ft (30 m)
IR On/Off Control	Auto / Manual
IR LEDs	1

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm
Max. Aperture	F2.0
Angle of View	Horizontal:106°; vertical: 56°
Iris Type	Fixed aperture
Close Focus Distance	4.27 ft (1.3 m)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	288 ft	115 ft	57 ft	28 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–78°; Rotation: 0°–360°

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	3840 × 2160 (3840 × 2160); 3072 × 2048 (3072 × 2048); 3072 ×1728 (3072 × 1728); 2880 × 1620 (2880 × 1620); 2688 × 1520 (2688 × 1520); 3M (2048 × 1536); 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: 3840 × 2160@(1–20 fps)/ 2688 × 1520@ (1–25/30 fps) Sub stream: 704 × 576@(1–25 fps)/ 704 × 480@(1–30 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 3 Kbps–8192 Kbps H.265: 3 Kbps–8192 Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / 120 dB WDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto / Manual
Noise Reduction	3D NR
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° (supports 90°/270° with 2688×1520 resolution and lower)
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

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification
Interoperability	ONVIF (Profile S/Profile G/Profile T); P2P
Max. User Access	20 (Total bandwidth: 48 M)
Edge Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	IC Now, IC Now Pro
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B

Interface

Video Interface	N/A
Audio Interface	Built-in Mic
Alarm	N/A

Electrical

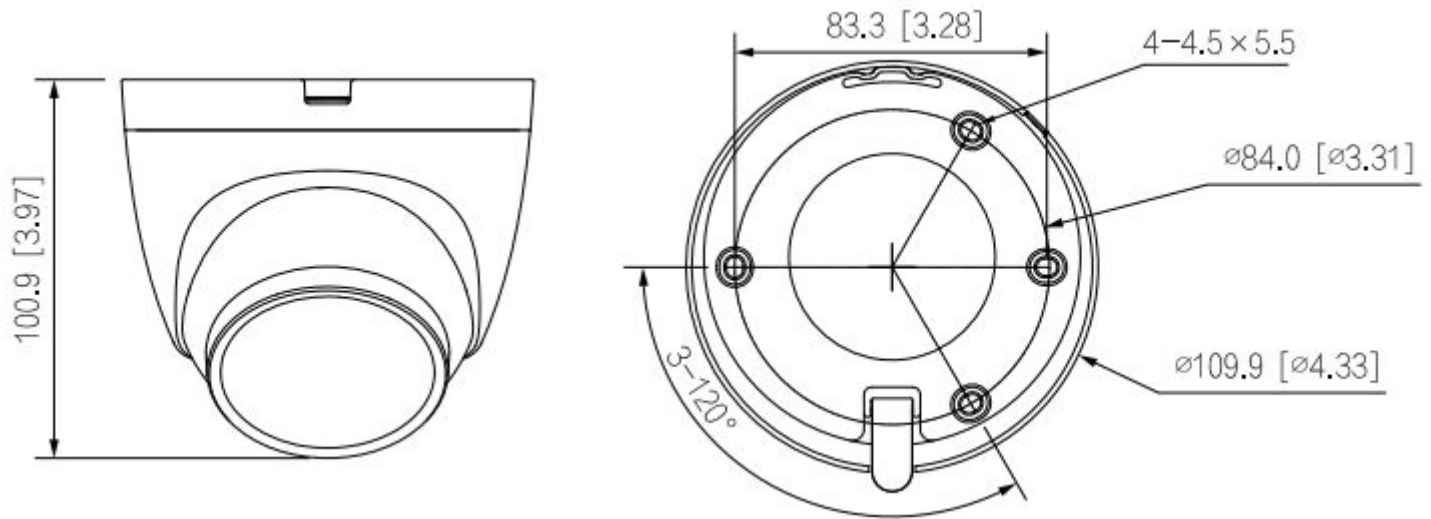|	
Power Supply	DC12V, PoE (802.3af)
Power Consumption	Basic: 2.7 W (12 VDC); 3.4 W (PoE) Max. (H.265+ max. resolution + max. stream+ WDR + max IR + IVS): 4.5 W (12 VDC); 5.4 W (PoE)

Environmental

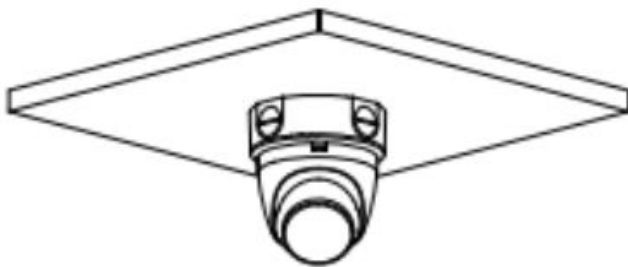|	
Operating Conditions	−40 °F to 131 °F (−40 °C to +55 °C)/Less than 95% RH
Storage Conditions	−40 °F to 131 °F (−40 °C to +55 °C)
Ingress Protection	IP67

Construction

Casing	Metal+ Plastic Cover
Dimensions	3.97" × Φ4.33" (100.9 mm × Φ109.9 mm)
Net Weight	0.82 lb (0.37 kg)
Gross Weight	1.23 lb (0.56 kg)

Dimensions (mm/in)

83.3 [3.28]

4-4.5×5.5

100.9 [3.97]

ø84.0 [ø3.31]

ø109.9 [ø4.33]

3-120°

Accessories

MNT-JUNCTIONBOX-3

MNT-IPMINIDOME-WALL