IPEG-E40F-IRW1
4MP Starlight Eyeball Network Camera

IC REALTIME

- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- H.265&H.264 dual-stream encoding
- Outputs 4MP (2560 × 1440)@30 fps, 4MP (2688 × 1520) @ 20 fps
- WDR, 3D DNR, HLC, BLC
- 2.8 mm fixed lens, Built in Microphone
- Starlight support, Max. IR LEDs Length 98ft
- 256GB Micro SD memory, IP67, PoE

System Overview

New from the Edge series of IC Realtime cameras is the IPEG-E40F-IRW1. This eyeball turret dome form factor camera is capable of 4MP@ 30FPS and comes packed with high end features, including 120dB WDR and Starlight support for a more colorful image in low illumination environments and backed with 98ft of IR distance.

The camera is also upgraded with H.265 encoding technology, which provides a more efficient video encoding capacity, saves bandwidth and storage space compared to H.264. In addition, the camera includes a built-in microphone for audio, 256GB SD card storage and is waterproof and dust-proof by complying to IP67 standards.

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 (0.009 lux).

Wide Dynamic Range(WDR)
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Environmental
With a temperature range of -40°C to +60°C (-40°F to +140°F) , the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. 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.

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

Technical Specification

Camera

Image Sensor	1/3" 4 Megapixel progressive CMOS
Effective Pixels	2688 (H) × 1520 (V)
RAM/ROM	128MB /128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Minimum Illumination	0.008 Lux @ F1.6
S/N Ratio	More than 50dB
IR Distance	Distance up to 30 m (98.43 ft)
IR On/Off Control	Auto / Manual
IR LEDs	2

Lens

Lens Type	Fixed
Mount Type	M12
Focal Length	2.8mm
Max. Aperture	F1.6
Angle of View	Horizontal: 102.0°, Vertical: 55.0°
Optical Zoom	N/A
Focus Control	Fixed
Close Focus Distance	0.9 m (2.95 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	183ft	73ft	36ft	18ft

Pan/Tilt/Rotation

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

Video

Compression	H.265; H.264; H.264B; MJPEG
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 fps-20 fps) 4MP 2560 × 1440 (1 fps-25/30 fps)
	Sub Stream: D1 704 × 576 (1 fps-25fps) D1 704 × 480 (1 fps-30fps)
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	Support
Starlight	Support
Digital Zoom	16x
Flip	0°/90°/180°/270° (Supports 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

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec
Streaming Method	Unicast / Multicast
Max. User Access	20
Edge Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart BUL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

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	<6.6W

Environmental

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

Construction

Casing	Metal + Plastic
Dimensions	100.9 mm × 109.9 mm (3.97" × 4.33")
Net Weight	0.39 kg (0.9 lb)
Gross Weight	0.56 kg (1.2 lb)

Accessories

Dimensions (mm/in)

100.9 [3.97]

83.3 [3.28]

4-4.5 × 5.5

∅84.0 [∅3.31]

∅109.9 [∅4.33]

3-120