

# IPEG-E40F-IRW2

4MP Eyeball Network Camera



- 4MP 1/3" CMOS image sensor, low luminance, and high definition image.
- H.265 & H.264 dual-stream encoding
- Outputs 4MP (2560 × 1440) @1-25/30 fps
- DWDR, 3D DNR, HLC, BLC
- 2.8 mm fixed lens, Max. IR LEDs Length 98ft
- IP67, PoE, TAA Compliant. Made in South Korea.

## System Overview

The IPEG-E40F-IRW2 is a 4MP Eyeball Turret style camera in IC Realtime's cost-effective Edge lineup. The camera comes equipped with high end features including H.265 encoding and Starlight support with DWDR for a more colorful image in daylight as well as low illumination environments and Smart IR support with up to 98ft of illumination.

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

## Functions

### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 rating, making it suitable for indoor or outdoor environments.

### Environmental

With a temperature range of -40°F to +140°F (-40°C to +60°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.

### Interoperability

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

### 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 98ft (30m).

## Technical Specification

### Camera

Image Sensor	1/3" 4 Megapixel progressive CMOS
Effective Pixels	2560 (H) × 1440 (V)
RAM/ROM	64MB/ 16MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Minimum Illumination	0.03 lux@F2.0 (Color,30 IRE) 0.003 lux@F2.0 (B/W,30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
IR Distance	98.43 ft (30 m)
IR On/Off Control	Auto / Manual
IR LEDs	1

### Lens

Lens Type	Fixed				
Mount Type	M12				
Focal Length	2.8mm				
Max. Aperture	F2.0				
Angle of View	Horizontal: 90°, Vertical: 50°				
Optical Zoom	N/A				
Focus Control	Fixed				
Close Focus Distance	3.28 ft (1 m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	223ft	89ft	44ft	22ft

### Pan/Tilt/Rotation

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

Compression	H.265; H.264; H.264B; MJPEG (Sub Stream Only)
Streaming Capability	2 Streams
Resolution	4M (2560 × 1440); 3M (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: 2560 × 1440@(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: 32 kbps–4096 kbps H.265: 12 kbps–4096 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
Starlight	Support
Digital Zoom	16x
Flip	0°/180° (0° by default)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; NTP; Multicast
Interoperability	ONVIF (Profile S/Profile T); CGI; P2P
Cyber Security	Configuration encryption; trusted execution; digest; security logs; HTTPS; trusted upgrade; WSSE; trusted boot; account lockout; generation and importing of X.509 certification; video encryption
Streaming Method	Unicast / Multicast
Max. User Access	6 (Total bandwidth: 24 M)
Edge Storage	FTP
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

### Certifications

Certifications	FCC Part 15, Subpart B
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### Interface

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

### Electrical

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 1.6 W (12 VDC); 2.4 W (PoE) Max. (ICR + H.265+IR intensity): 3.6 W (12 VDC); 4.7 W (PoE)

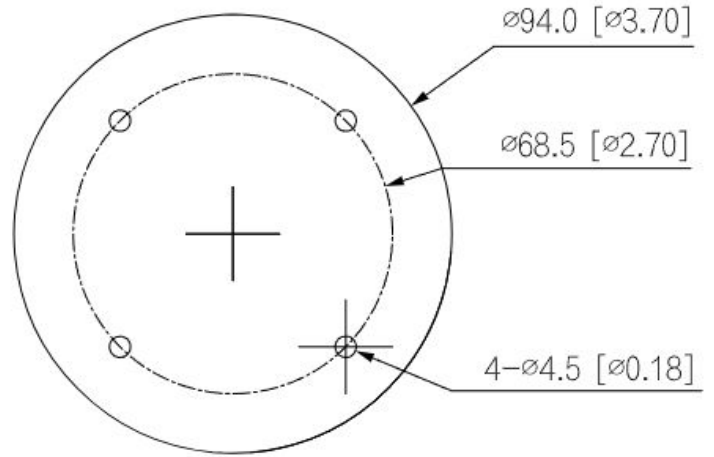
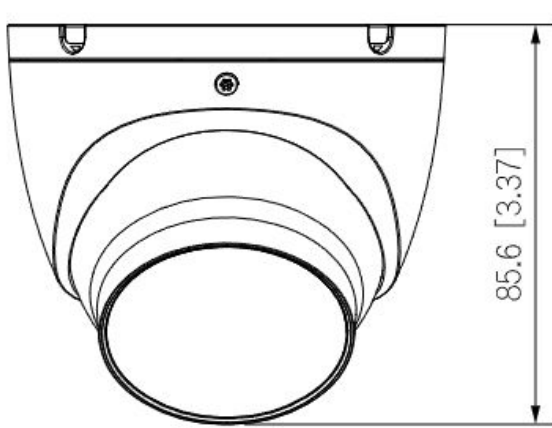
### Environmental

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

### Construction

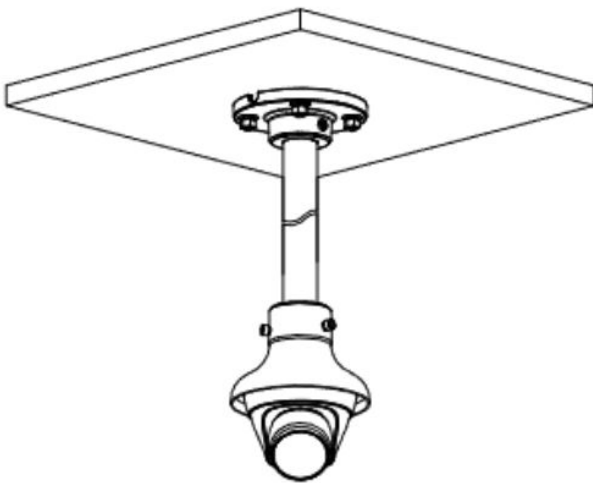
Casing	Metal + Plastic
Dimensions	3.37" × Φ3.70" (85.6 mm × Φ94.0 mm)
Net Weight	0.71 lb (0.32 kg)
Gross Weight	0.95 lb (0.43 kg)

Dimensions (mm/in)



Accessories

**MNT-ADAPT-SM +  
MNT-CEILING-30**



**MNT-IPMINIDOME-WALL-2**

