

IPVFX-D40V-IRW1

4MP Starlight Varifocal Dome Network Camera



- 1/ 2.7" 4 Megapixel progressive CMOS
- H.265 & H.264 triple-stream encoding
- Outputs max. 4MP (2688 × 1520)@30 fps
- WDR(120dB), Day/Night(ICR), 3DNR, AGC, BLC
- 2.7~13.5mm varifocal lens
- Starlight Support, Max IR LEDs Length 164ft
- Micro SD support up to 256GB, IP67, IK10, PoE

System Overview

IC Realtime's IPVFX-D40V-IRW1 is a 4MP dome camera featuring our latest generation of 1/ 2.7" CMOS sensors. It adopts our IK10 vandal-proof dome style housing, and features Starlight supported IR illumination up to ~131'. The camera also includes H.265 encoding for optimized storage and is also ONVIF compliant, making it suitable for most third party NVRs and VMS.

Functions

Smart(H.265+ & H.264+)

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

Wide dynamic range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Starlight

For challenging low-light applications, Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Protection (IP67, IK10, wide voltage)

The camera allows for $\pm 25\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), The camera complies with an IK10 impact rating making it capable of withstanding the equivalent of 11.02 lbs (5 kg) of force dropped from a height of 15.75 in. (40 cm)

Environmental

With a temperature range of -40°C to $+60^{\circ}\text{C}$ (-40°F to $+140^{\circ}\text{F}$), 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.

Technical Specification

Camera

Image Sensor	1/2.7"4 Megapixel progressive CMOS
Effective Pixels	2688(H) x1520(V)
RAM/ROM	512MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100000 s
Minimum Illumination	0.005 Lux@F1.5
IR Distance	Distance up to 164ft (50m)
IR On/Off Control	Auto / Manual
IR LEDs	3

Lens

Lens Type	Motorized vari-focal				
Mount Type	φ14				
Focal Length	2.7mm~13.5mm				
Max. Aperture	F1.5				
Angle of View	Horizontal: 104°~27° Vertical: 55°~15°				
Iris Control	Fixed				
Close Focus Distance	2.62 ft (0.8 m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	210 ft	84 ft	42 ft	21 ft
	T	728ft	291 ft	145 ft	72 ft

Pan/Tilt/Rotation

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

Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG
Streaming Capability	3 Streams
Resolution	4M (2688 × 1520); 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 (2688 × 1520@1-25/30 fps) Sub Stream (704 × 576@1-25 fps/704 × 480@1-30 fps) Third Stream (1280 × 720@1-25/30 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 / 120dB WDR
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
Flip	0°/90°/180°/270° (Supports 90°/270° with 1920 × 1080 resolution.)
Mirror	Off / On
Privacy Masking	4 Areas

Audio

Compression	G.711a; G.711Mu; G726; 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;SNMP
Interoperability	ONVIF (Profile S/Profile G)
Max. User Access	20 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari

Certifications

Certifications	FCC Part 15, Subpart B
----------------	------------------------

Interface

Audio In	1 channel (RCA port)
Audio Out	1 channel (RCA port)
Alarm In	1 channel in: 5mA 3V-5V DC
Alarm Out	1 channel out: 300mA 12V DC

Electrical

Power Supply	12V DC (±30%); PoE (802.3af)
Power Consumption	Basic power consumption: 3.2W (12V DC); 4W (PoE) Max. power consumption (H.265 + WDR + max. stream + intelligent function enabled + Motorized vari-focal + IR at full intensity): 7W (12V DC); 8.2W (PoE)

Environmental

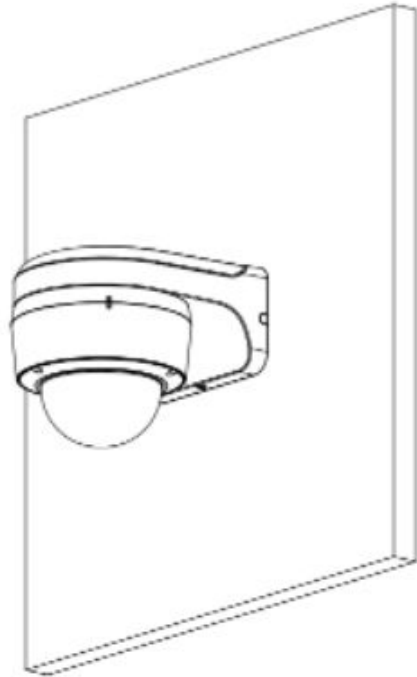
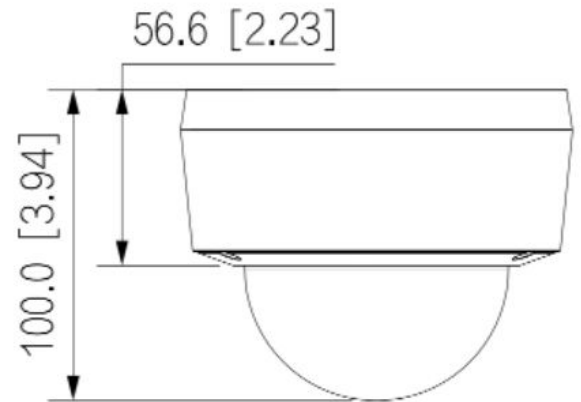
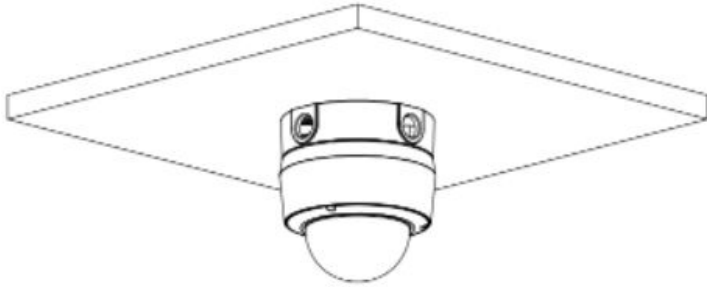
Operating Conditions	-22° F ~ +140° F (-30° C ~ +60° C) / Less than 95% RH
Storage Conditions	-40° F ~ +140° F (-40° C ~ +60° C) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	3.9" × Φ5.0 (100 mm × Φ126 mm)
Net Weight	1.3 lb (0.61Kg)
Gross Weight	1.8 lb (0.82Kg)

Accessories

Dimensions (mm/in)



mm [inch]

