

IPEL-D12V-IRW2

12MP IR AI Dome Network Camera



- 12MP 1/1.7" CMOS image sensor, high image definition
- H.265 & H.264, five-stream encoding support
- 12MP (4000 × 3000) @25/30 fps
- IVS, Perimeter Protection
- Face Detection and Recognition, Metadata
- DWDR, Day/Night(ICR), 3DNR,AWB,AGC,BLC,
- 2.7-12mm Motorized varifocal lens
- Max. IR LEDs Length 131 ft
- 256GB Micro SD memory, IP67, IK10
- 12V DC, 24V AC, POE+, ePoE support

System Overview

IC Realtime's IPEL-D12V-IRW2 is a 12MP Ultra HD Vandal-proof Dome camera featuring a 1/1.7" CMOS high image definition image sensor paired 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 131 feet and enclosed in an IP67 weatherproof and IK10 rated casing. 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 and Recognition technology with a built-in Face database.

Functions

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.

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 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.

Intelligent Video Analysis (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

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 131ft (40m).

Face Recognition

IC Realtime's Face Recognition technology extracts the features of captured faces and compares them with that in user-created face database to recognize the person's identity.

Technical Specification

Camera

Image Sensor	1/1.7"12 Megapixel progressive CMOS
Effective Pixels	4000 (H) × 3000 (V)
RAM/ROM	2GB/ 4GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
Minimum Illumination	0.01 Lux@F1.8 (Color, 30IRE) 0.001 Lux@F1.8 (B/W, 30IRE) 0 Lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	131.2 ft (40 m)
IR On/Off Control	Auto / Manual
IR LEDs	3

Lens

Lens Type	Motorized vari-focal
Mount Type	Ø14
Focal Length	2.7 mm-12 mm
Max. Aperture	F1.8
Angle of View	Horizontal: 103°–44°, Vertical: 75°–33°
Iris Type	Auto
Close Focus Distance	3.9 ft (1.2 m)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	318 ft	124 ft	62 ft	29 ft
	T	672 ft	269 ft	134 ft	65 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–355°, Tilt: 0°–80°, Rotation: 0°–355°
-------------------------	---

Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG (sub stream only)
Smart Codec	Smart H.264+Smart H.265+
Streaming Capability	5 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 fps 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° (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, 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

Audio Interface	1/1 channel In/ Out (3-pin terminal with 2.54mm clearance; with audio cable)
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) support
ePOE	Support
Power Consumption	Basic power consumption: 6.1W (12V DC); 6.1W (24V AC active power); 5.4W (PoE) Max. power consumption: 17.9W (12V DC); 17.1W(24V AC active power); 16.8W (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
Vandal Resistance	IK10

Construction

Casing	Metal + Plastic
Dimensions	(5.08" × 6.22") 129.1 mm × 157.9 mm
Net Weight	3.31 lb (1.5 kg)
Gross Weight	3.53 lb (1.6 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),

ANPR

Capabilities	Automatic number-plate recognition. Track, priority, snapshot Vehicle attributes: License plate, vehicle type, vehicle color
--------------	---

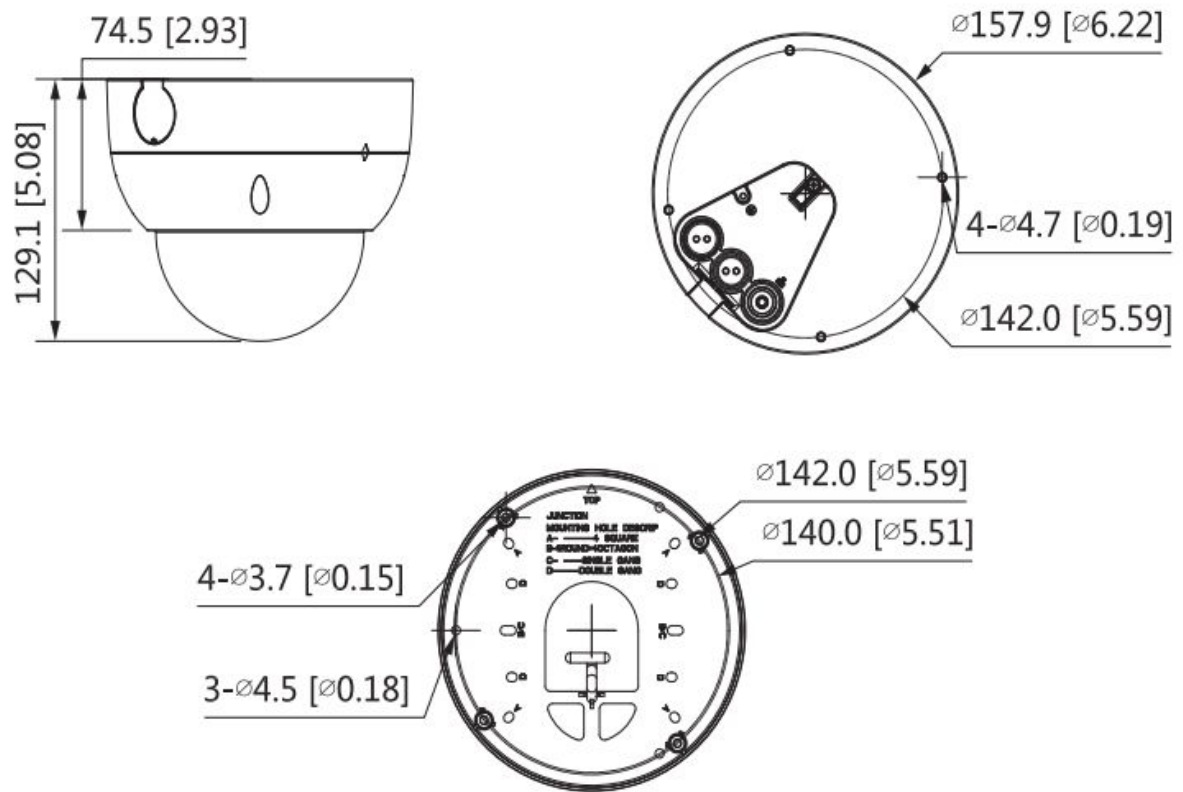
Intelligent Search

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

Face Recognition

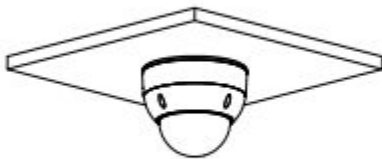
General Mode	Face detection; track; snapshot; snapshot optimization; face enhancement; face exposure; face attribute extraction including 6 attributes (gender, age, glasses, expressions, mask and beard) and 8 expressions (anger, calm, happiness, sadness, disgust, surprise, confusion and fear)
Counting Mode	Advanced person counter, filtering of specified face database, and exporting of reports before and after removing duplicate faces.
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.
AI Search	Supports face image search, similarity threshold can be set for each target face image.
Database	Supports up to 5 face databases with 50,000 face pictures in total; supports non-living filtering

Dimensions (mm/in)

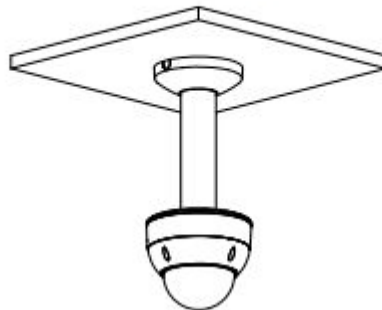


Accessories

Integrated Junction
Box + Plate (Included)



MNT-DVIR-V2 +
MNT-CEILING-MPA



MNT-IPMINIDOME-WALL-3

