

## DS-2DF8A442IXS-AEL(T5) 4 MP 42× IR Network Speed Dome

DarkFighter



Hikvision DS-2DF8A442IXS-AEL(T5) 4MP 42× Network IR Speed Dome adopts 1/1.8" progressive scan CMOS chip. With the 42× optical zoom lens, the camera offers more details over expansive areas.

This series of cameras can be widely used for wide ranges of high-definition, such as the rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations and large venues, etc.

- 1/1.8" Progressive Scan CMOS
- High quality imaging with 4 MP resolution
- Excellent low-light performance with DarkFighter technology
- 42× optical zoom and 16× digital zoom provide close up views over expansive areas
- Expansive night view with up to 500 m IR distance
- Water and dust resistant (IP67) and vandal proof (IK10)
- Supports face capture to detect, capture, grade, and select faces in motion
- Light control by BLC and HLC according to the scene
- Supports road traffic to detect vehicles



## ▪ DORI

The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view.

It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance (Tele)	2965.5 m (9729.3 ft.)	1176.8 m (3860.9 ft.)	604.1 m (1982.0 ft.)	302.1 m (991.1 ft.)

## ▪ Specification

Camera	
Image Sensor	1/1.8" progressive scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON), B/W: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with IR
Shutter Speed	1/1 s to 1/30,000 s Auto, semi-auto, manual
Slow Shutter	Yes
Day & Night	Auto with IR cut filter
Zoom	42x optical, 16x digital
Max. Resolution	2560 × 1440
Lens	
Focus	Auto, semi-auto, manual, rapid focus
Iris	Auto, semi-auto, manual
Focal Length	6.0 mm to 252 mm
Zoom Speed	Approx. 4.5 s
FOV	Horizontal field of view: 56.6° to 1.7° (wide-tele), Vertical field of view: 33.7° to 0.9° (wide-tele), Diagonal field of view: 63.4° to 1.9° (wide-tele)
Aperture	Max. F1.2
Illuminator	
Supplement Light Type	IR
Supplement Light Range	Up to 500 m
Smart Supplement Light	Yes
PTZ	
Movement Range (Pan)	360°
Movement Range (Tilt)	-20° to 90° (auto flip)
Pan Speed	Pan speed: configurable from 0.1° to 210°/s; preset speed: 280°/s
Tilt Speed	Tilt speed: configurable from 0.1° to 150°/s, preset speed 250°/s
Proportional Pan	Yes
Presets	300
Patrol Scan	8 patrols, up to 32 presets for each patrol
Pattern Scan	4 pattern scans, record time over 10 minutes for each scan
Power-off Memory	Yes
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
3D Positioning	Yes
PTZ Status Display	Yes
Preset Freezing	Yes

Scheduled Task	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output
<b>Video</b>	
Main Stream	50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288) 60 Hz: 30 fps (704 × 480, 640 × 480, 352 × 240)
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288) 60 Hz: 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream: H.265/H.264/MJPEG Third stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16384 Kbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	8 fixed regions for each stream
<b>Audio</b>	
Audio Compression	G.711alaw, G.711ulaw, G.722.1, G.726, MP2L2, PCM
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)
<b>Network</b>	
Network Storage	NAS (NFS, SMB/ CIFS), ANR
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, UDP/IP, IGMP, ICMP, Bonjour, TLS/SSL
API	ISUP, ISAPI, Hikvision SDK, Open Network Video Interface (Profile S, Profile G, Profile T, Profile M)
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 levels: Administrator, Operator and User
Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS/SSL 1.3, host authentication (MAC address), TPM 2.0 (FIPS 140 -2 level 2), AES 128
Client	HikCentral, iVMS-4200, Hik-Connect
Web Browser	IE11, Chrome 57.0+, Firefox 52.0+, Safari 11+
<b>Image</b>	
Image Settings	Saturation, brightness, contrast, sharpness, gain (AGC), and white balance (AWB) adjustable by client software or web browser
Day/Night Switch	Day, night, auto, scheduled-switch
Image Enhancement	BLC, HLC, 3D DNR (Dynamic Noise Reduction)
Wide Dynamic Range (WDR)	140 dB WDR
Defog	Optical defog
Image Stabilization	Yes. Built-in gyroscope to improve EIS performance.
Regional Exposure	Yes
Regional Focus	Yes
Privacy Mask	Up to 24 masks, polygon region, mosaic mask, mask color configurable
SNR	≥ 52 dB

<b>Interface</b>	
Ethernet Interface	1 RJ45 10M/100M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot, support MicroSD/MicroSDHC/MicroSDXC, up to 256 GB
Alarm	7 inputs, 2 outputs
Audio	1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 K $\Omega$ $\pm$ 10%; 1 output (line out), line level, output impedance: 600 $\Omega$
Video Output	1.0V[p-p]/75 $\Omega$ , PAL, NTSC, BNC connector
RS-485	HIKVISION, Pelco-P, Pelco-D, self-adaptive
<b>Event</b>	
Basic Event	Motion detection, video tampering alarm, alarm input and output, exception
Smart Event	Line crossing detection, region entrance detection, unattended baggage detection, object removal detection, intrusion detection, region exiting detection, vandal-proof alarm, audio exception detection
Smart Tracking	Manual tracking, auto-tracking
Alarm Linkage	Alarm actions, such as Preset, Patrol Scan, Pattern Scan, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Send Email, etc.
<b>Deep Learning Function</b>	
Face Capture	Support detecting up to 30 faces at the same time. Support detecting, tracking, capturing, grading, selecting of face in motion, and output the best face picture of the face. gender, color, bag and hat features supported by customization
Face Comparison	Yes
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
<b>Road Traffic and Vehicle Detection</b>	
Road Traffic	Support vehicle detection (license plate number, vehicle model, and vehicle color recognition)
<b>General</b>	
General Function	Mirror, password protection, watermark, IP address filter
Power	24 VAC (Max. 60 W, including max. 18 W for IR and max. 6 W for heater), Hi-PoE (Max. 50 W, including max. 18 W for IR and max. 6 W for heater)
Operating Condition	Temperature: -40°C to 70°C (-40°F to 158°F), Humidity: $\leq$ 95%
Dimension	$\varnothing$ 267 mm $\times$ 405 mm ( $\varnothing$ 10.51" $\times$ 15.94")
Weight	Approx. 8.5 kg (18.74 lb.)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
<b>Approval</b>	
EMC	FCC SDoC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC VoC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 2015)

Safety	UL (UL 62368-1) CB (IEC 62368-1:2014+A11); CE-LVD (EN 62368-1:2014+A11:2017), BIS (IS 13252(Part 1):2010/ IEC 60950-1: 2005); LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	Lightning Protection, Surge Protection and Voltage Transient Protection, ±6 kV Line to Gnd, ±3kV Line to Line, IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)

## ▪ Available Model

DS-2DF8A442IXS-AEL (T5)(CP)

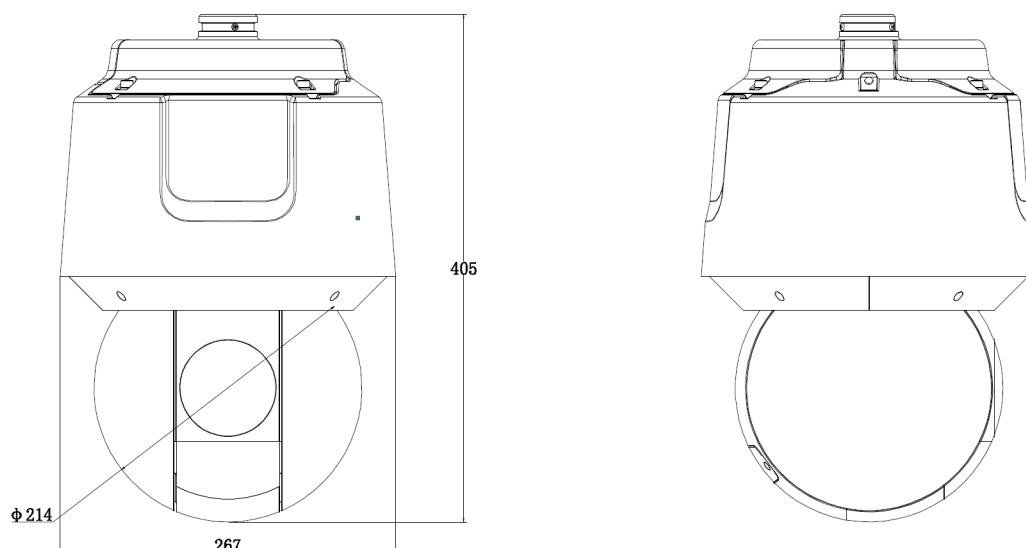
## ▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.














Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

## ▪ Dimension



▣ **Accessory**

▣ **Optional**

<p><b>DS-1604ZJ-Pole-P</b> Vertical pole mount</p>	<p><b>DS-1682ZJ-P</b> Pendant Mount</p>	<p><b>DS-1604ZJ-BOX- CORNER-P</b> Wall mount</p>	<p><b>DS-1673ZJ-P</b> Vertical pole mount</p>	<p><b>DS-1604ZJ-P</b> Wall mount</p>
				
<p><b>DS-1604ZJ-BOX- POLE-P</b> Vertical pole mount</p>	<p><b>DS-1604ZJ-BOX- P</b> Wall mount</p>	<p><b>DS-1667ZJ-P</b> Pendant Mount</p>	<p><b>DS-1661ZJ-P</b> Pendant Mount</p>	<p><b>DS-1660ZJ-P</b> Wall mount</p>
				
<p><b>DS-1663ZJ-P</b> In-ceiling mount</p>	<p><b>DS-1604ZJ- Corner-P</b> Corner mount</p>	<p><b>DS-1662ZJ-P</b> Pendant Mount</p>		
				

Distributed by

**HIKVISION®****Headquarters**

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T +86-571-8807-5998  
overseasbusiness@hikvision.com

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Australia**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Canada**  
T +1-866-200-6690  
sales.canada@hikvision.com

**Hikvision Thailand**  
T +662-275-9949  
sales.thailand@hikvision.com

**Hikvision Europe**  
T +31-23-5542770  
sales.eu@hikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Turkey**  
T +90 [216]521 7070- 7074  
sales.tr@hikvision.com

**Hikvision Malaysia**  
T +601-7652-2413  
sales.my@hikvision.com

**Hikvision UK & Ireland**  
T +01628-902140  
sales.uk@hikvision.com

**Hikvision South Africa**  
Tel: +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Kazakhstan**  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

**Hikvision Vietnam**  
T +84-974270888  
sales.vt@hikvision.com

**Hikvision UAE**  
T +971-4-4432090  
salesme@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Tashkent**  
T +99-87-1238-9438  
uzb@hikvision.ru

**Hikvision Hong Kong**  
T +852-2151-1761  
info.hk@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision Korea**  
T +82-[0]31-731-8817  
sales.korea@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
info.pl@hikvision.com

**Hikvision Indonesia**  
T +62-21-2933759  
Sales.Indonesia@hikvision.com

**Hikvision Colombia**  
sales.colombia@hikvision.com