

# DS-2DF7A425IXG-EL 7A Series 4MP 25X DarkFighter IR Network Speed Dome

















Hikvision DS-2DF7A425IXG-EL(Y) 4 MP  $25 \times$  IR Network Speed Dome adopts 1/1.8" progressive scan CMOS chip. With the  $25 \times$  optical zoomlens, 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.

Hikvision has been dedicated to develop products with security since established.

Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection. In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security protection capability and protect your devices as well as your data from malicious cyber attacks.

- 1/1.8" Progressive Scan CMOS
- High quality imaging with 4 MP resolution
- 25 × optical zoom and 16 × digital zoom provide close up views over expansive areas
- Excellent low-light performance via DarkFighter 2.0 technology
- Clear imaging against strong back light due to 150 dB AWDR technology
- Supports rapid focus
- Smart Pan-Tilt Correction
- Built-in gyroscope to ensure stable image output
- Water and dust resistant (IP67), vandal proof (IK10) and corrosion resistant (NEMA 4X, optional)



## Specification

Camera				
Image Sensor	1/1.8 " progressive scan CMOS			
Max. Resolution	2688 × 1520			
Min. Illumination	Color: 0.0005 Lux @ (F1.6, AGC ON),B/W: 0.0001 Lux @ (F1.6, AGC ON),0 Lux with IR			
Shutter Speed	1/30 s to 1/30,000 s			
Day & Night	ICR			
Zoom	25 × optical,16 × digital			
Slow Shutter	yes			
Lens				
Focal Length	5.9mm to 147.5 mm			
501/	Horizontal field of view: 58.8° to 3.1°, vertical field of view: 34.4° to 1.7°, diagonal field			
FOV	of view: 66.0° to 3.5°			
Focus	Auto, semi-auto, manual, rapid focus			
Aperture	F1.6			
Zoom Speed	Approx. 4.5 s			
Illuminator				
Supplement Light Range	IR distance: up to 300 m			
PTZ				
Movement Range (Pan)	360°			
Movement Range (Tilt)	-20° to 90° (auto flip)			
Pan Speed	Pan speed: configurable from 0.1° to 550°/s, preset speed: 550°/s,Up to MAX 700°/s			
Tilt Speed	Tilt speed: configurable from 0.1° to 300°/s, preset speed 300°/s,Up to MAX 300°/s			
Proportional Pan	yes			
Presets	300			
Preset Freezing	yes			
Patrol Scan	8 patrols, up to 32 presets for each patrol			
Park Action	Preset,patrol scan			
3D Positioning	yes			
PTZ Status Display	yes			
Scheduled Task	Preset,patrol scan,dome reboot,dome adjust,aux output			
Power-off Memory	yes			
Video				
	50 Hz: 100 fps (1920 × 1080) 50 fps (2688 × 1520, 2560 × 1440, 1280 × 720) 60 Hz: 120			
Main Stream	fps (1920 × 1080) 60 fps (2688 × 1520, 2560 × 1440, 1280 × 720) *High frame rate is			
	supported under monitoring mode only.			
	50 Hz: 25 fps (704 × 576,640 × 480, 352 × 288)			
Sub-Stream	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)	yes		
Region of Interest (ROI)	fixed region		
Audio			
Audio Compression	G.711,G.722.1,G.726,MP2L2,PCM,AAC-LC		
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)16 Kbps 64 Kbps (AAC-LC)		
Network			
Protocols	IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,FTP,TCP/IP,UDP,IGMP,ICMP,DHCP,PPPoE,Bonjour,WebSocket,WebSockets		
Simultaneous Live View	Up to 20 channels		
API	ONVIF (ProfileS, ProfileG, ProfileT, ProfileM),ISAPI,SDK,ISUP		
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,Tl 1.3,host authentication (MAC address),TPM 2.0 (FIPS 140-2 level 2)		
Network Storage	NAS (NFS, SMB/CIFS)		
Client	iVMS-4200,Hik-Connect,HikCentral Pro		
Web Browser	Chrome 57.0+, Firefox 52.0+, Safari 11+		
Image			
Day/Night Switch	day, night, auto, scheduled-switch		
SNR	≥52dB		
Wide Dynamic Range (WDR)	150 dB		
Defog	Optical defog		
Image Stabilization	EIS (Built-in gyroscope to improve EIS performance)		
Image Enhancement	BLC, HLC, 3D DNR		
Privacy Mask	mask color or mosaic configurable,24 programmable polygon privacy masks		
Regional Focus	yes		
Regional Exposure	yes		
Interface			
Video Output	CVBS: 1.0 V[p-p]/75 Ω, PAL/NTSC, BNC connector		
Ethernet Interface	RJ45, self-adaptive 10M/100M Ethernet port		
Audio	1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: $1 \text{ K}\Omega \pm 10\%$ , 1 output (line out), line level, output impedance: $600 \Omega$		
Alarm	7 alarminputs, 2 alarmoutputs		
RS-485	HIKVISION, Pelco-P, Pelco-D, self-adaptive		
On-board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB.		
Event			
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegallogin, HDD full, HDD error), alarmin put and output, vandal-proof alam, audio exception detection, unattended baggage detection, object removal detection		
Linkage	Upload to FTP/NAS/memory card,notify surveillance center, send email, trigger recording, and PTZ actions (such as preset, patrol scan)		



Deep Learning Function				
	Detects up to 30 faces simultaneously,			
Face Capture	Uploads face with background and closed-up face pictures, Supports detecting,			
	tracking, capturing, grading, selecting of face in motion, and outputs the best face			
	picture			
Perimeter Protection	Line crossing detection, region entrance detection, intrusion detection, region exiting			
	detection			
Multi Tayant Tura Datastian	Supports simultaneous detection and capture of human body, face and vehicle,			
Multi-Target-Type Detection	Gets 7 face features, 14 human body features and 8 vehicle features			
	Up to 10 facelibraries. 30000 faces for each library. 150000 faces in total,			
Face Comparison	Recognizes face identity via face modeling, grading and comparing to those in face			
race comparison	library,			
	Supports facelibrary encryption			
	Smart Function:			
	Support license plate recognition of vehicles and motorcycles (only in checkpoint			
	scenario)			
	Support vehicle attribute detection, including vehicle type, color, brand, driving			
	direction, etc.			
	Support vehicle and non-vehicle counting			
	Blocklist and allowlist: up to 10,000 records			
Road Traffic and Vehicle	LPR Countries/Regions:			
Detection	4 areas (Europe, Middle East, Asia-Pacific, Africa) and more than 124 countries/regions			
Betteuton	Accuracy (Under recommended installation and lighting conditions):			
	License plate recognition rate ≥98%			
	Capture rate ≥99%			
	Driving direction accuracy rate ≥98%			
	Vehicle Capture Speed:			
	Front installation in checkpoint scenario: up to 120 km/h			
	Side installation: up to 80 km/h			
	Capture Mode: License Plate and Vehicle Mode, Vehicle Priority Mode			
Linkage and Tracking				
Smart Tracking	Manual tracking, auto-tracking 3.0			
	Support person arming. When the device detects the armed face or human body in the			
Object Tracking	monitoring scene, it triggers alarms, and tracks and captures the target. During the			
	tracking, the target location and other related information are uploaded.			
General				
	36 VDC± 25%, max. 90 W (Max. 52 W, including max. 6.4 W for IR and max. 8 W for			
Power	heater)			
	PoE 802.3bt, type4, class8, max. 90W (Max. 52 W, including max. 6.4 W for IR and			
	max. 8 W for heater)			
Dimension	Ø214.95 mm × 297.1 mm (Ø8.46" × 11.7")			
Weight	Approx. 5 kg (11.02 lb.)			
Operating Condition	Temperature: -40°C to 70°C (-40°F to 158°F) , Humidity: ≤ 95%			
General Function	mirror, password protection, watermark, IP address filter			



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
Approval	
Safety	CB (IEC 62368-1: 2014 + A11),CE-LVD (EN 62368-1: 2014/A11: 2017),LOA (IEC/EN 60950-1)
EMC	CE-EMC (EN 55032:2015, EN 61000-3-2:2019, EN 61000-3-3:2013, EN 50130-4:2011 +A1: 2014),IC VoC (ICES-003: Issue 6, 2019),RCM (AS/NZS CISPR 32:2015),KC (KN 32: 2015, KN 35:2015)
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,±6kV Line to Gnd, ±3kV Line to Line,IEC61000-4-5  IP67 Standard  IK10
Anti-Corrosion Protection	-Y: NEMA 4X (NEMA 250-2018)

#### 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)	2034.5 m (6674.87 ft)	807.3 m (2648.62 ft)	406.9 m (1334.97 ft)	203.4 m (667.32 ft)

### 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.

DS-2DF7A425IXG-ELY has MODERATE protection. DS-2DF7A425IXG-EL has NO SPECIFIC protection.

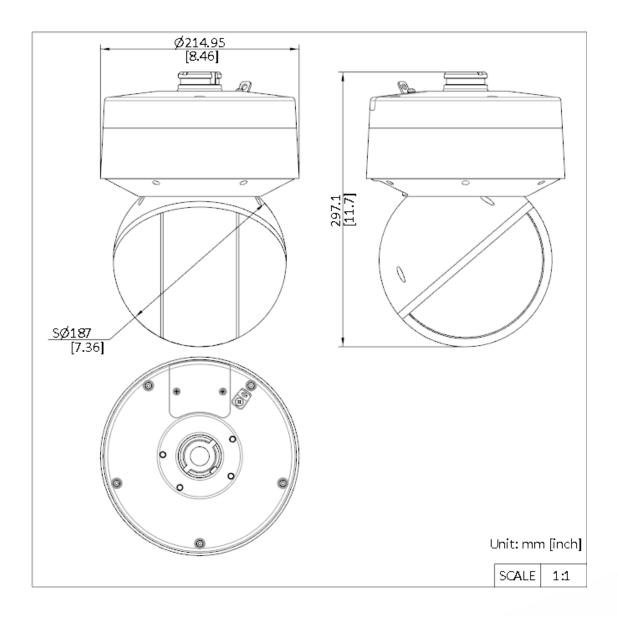
Level Description	
	Hikvision products at this level are equipped for use in
Top-level protection	areas where professional anti-corrosion protection is a
Top-Tevel protection	must. Typical application scenarios include coastlines,
	docks, chemical plants, and more.
	Hikvision products at this level are equipped for use in
	areas with moderate anti-corrosion demands. Typical
Moderate protection	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
No specific protection	areas where no specific anti-corrosion protection is needed.

#### Available Model

DS-2DF7A425IXG-EL

#### Dimension





### Accessory

#### Optional

Optional				
DS-2HZ9SDF37G-Y	DS-4660ZJ-PC	DS-4603ZJ-PA	DS-1674ZJ-P	DS-4612ZJ-PA
DS-1673ZJ-P	DS-1684ZJ-P	DS-1276ZJ-P	DS-4650ZJ-PC	





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