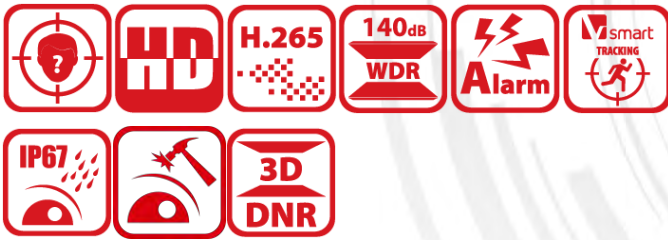# HIKVISION®

DS-2DF8A442IXG-ELY
4MP 42X DarkFighter IR Network Speed

- 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
- Supports road traffic to detect vehicles
- Smart Pan-Tilt Correction

▪ 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
Slow Shutter	Yes
Day ＆ Night	IR cut filter
Zoom	42x optical, 16x digital
Max. Resolution	2560 × 1440
Lens	
Focus	Auto, semi-auto, manual, rapid focus
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	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
Video	
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
Audio	
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)
Network	
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, IGMP, ICMP, Bonjour
API	ISUP, ISAPI, Hikvision SDK, Open Network Video Interface (Profile S, Profile G, Profile T)
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, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.3, host authentication (MAC address)
Client	HikCentral, iVMS-4200, Hik-Connect
Web Browser	IE11, Chrome 57.0+, Firefox 52.0+, Safari 11+
Image	
Image Settings	Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser
Day/Night Switch	Day, night, auto, scheduled-switch
Image Enhancement	BLC, HLC, 3D DNR
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
Supplement Detection	
Satellite Positioning	NO
Interface	
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: 0-3.3Vpp, input impedance: 4.7KΩ±5%; 1 output (line out), line level, output impedance: 600 Ω
Video Output	1.0V[p-p]/75Ω, PAL, NTSC, BNC connector
RS-485	HIKVISION, Pelco-P, Pelco-D, self-adaptive

Event	
Linkage	Upload to FTP/NAS/memory card,notify surveillance center,send email,trigger recording,and PTZ actions (such as preset, patrol scan, pattern scan)
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
Deep Learning Function	
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
Face Comparison	Yes
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
Road Traffic and Vehicle Detection	
Road Traffic	Support vehicle detection (license plate number,vehicle model, and vehicle color recognition)
General	
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: ≤ 95%
Dimension	⌀ 267 mm × 405 mm (⌀ 10.51" × 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
Approval	
EMC	FCC SDoC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC VoC (ICES-003: Issue 6, 2019); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 62368-1) CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014); CE-LVD (EN 62368-1:2014+A11:2017), BIS (IS 13252(Part 1):2010+A1:2013+A2:2015); LOA (SANS IEC60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Anti-Corrosion Protection	NEMA 4X, WF2
Protection	IP67 Standard, Lightning Protection, Surge Protection and Voltage Transient Protection, ±6kV Line to Gnd, ±3kV Line to Line, IEC61000-4-5, IK10

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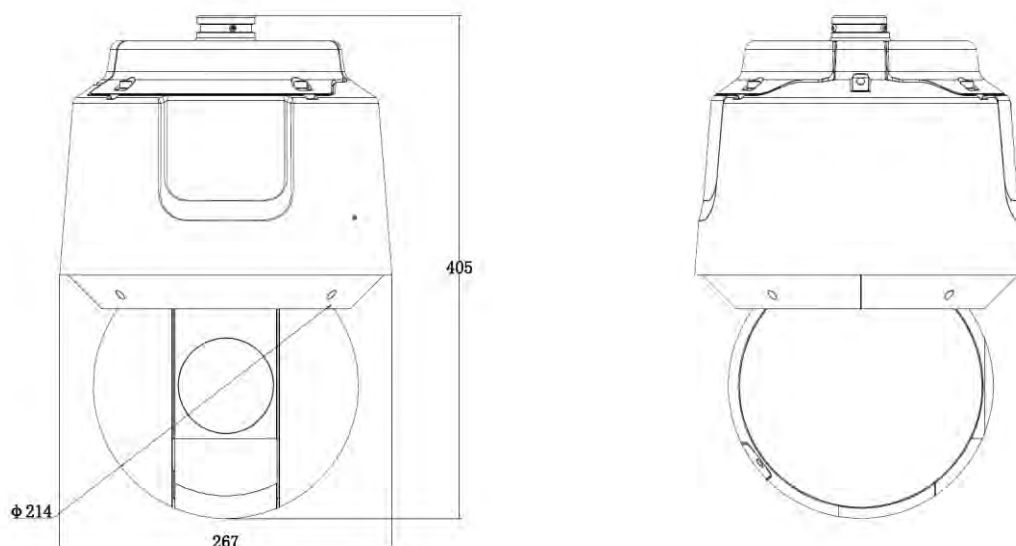
It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
Definition	25 px/m	63 px/m	125 px/m	250 px/m
Distance (Tele)	3475.9 m (11403 ft.)	1379.3 m (4525.3 ft.)	695.2 m (2280.8 ft.)	347.6 m (1140.4 ft.)

▪ Available Model

DS-2DF8A442IXG-ELY

▪ Dimension

▪ Accessory

▪ Optional

DS-1602ZJ-AKS Wall mount	DS-1604ZJ-BOX-Corner-Y Corner mount	DS-1604ZJ-BOX-Y Wall mount