

DS-2DF4420-DX(316L)(E)
316L 4MP 20x Explosion-proof Network Speed Dome



- Ex-mark: ATEX: Ex II 2GD Ex db IICT6 Gb /Ex tb IIICT80°C Db; IECEx: Ex db IICT6 Gb /Ex tb IIICT80°C Db
- Certificate No.: ATEX: SEV 20 ATEX 0415 X; IECEx: IECEx NEP 20.0018X
- 4 MP 1/2.8" progressive scan CMOS
- Supports H.265 video compression
- 20 × optical zoom, focal length 4.8 mm to 96 mm
- 316L stainless steel
- 120dB WDR, 3D DNR
- High quality imaging with high-performance sensor

▪ Specification

Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Max. Resolution	2560 × 1440
Min. Illumination	Color: 0.005 Lux @ (F1.6, AGC ON), B/W: 0.001 Lux @ (F1.6, AGC ON)
Shutter Speed	1/1 s to 1/30,000 s
Day & Night	IR cut filter
Zoom	20 × optical, 16 × digital
Slow Shutter	yes
Lens	
Focal Length	4.8 to 96 mm
FOV	Horizontal field of view: 55° to 2.6°, vertical field of view: 30.6° to 1.5°, diagonal field of view: 60.5° to 3.0°
Focus	Auto, semi-auto, manual
Aperture	F1.6
Zoom Speed	Approx. 2.9 s
PTZ	
Movement Range (Pan)	360° endless
Movement Range (Tilt)	0° to 90°, auto flip
Pan Speed	Configurable, from 0.1°/s to 160°/s, preset speed: 160°/s
Tilt Speed	Configurable, from 0.1°/s to 120°/s, Preset Speed: 120°/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
Park Action	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan
3D Positioning	Yes
PTZ Status Display	Yes
Scheduled Task	Preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output
Power-off Memory	Yes
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 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)	Yes

Network	
Protocols	IPv4/IPv6,HTTP,HTTPS,802.1X,QoS,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP, RTP,TCP/IP,UDP,IGMP,DHCP,PPPoE
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (Profile S, Profile G, Profile T),ISAPI,SDK
User/Host	Up to 32 users. 3 user levels: administrator, operator, and user
Security	host authentication (MAC address),HTTPS encryption,IP address filter,802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5),Password protection,complicated password
Network Storage	NAS (NFS, SMB/CIFS),auto network replenishment (ANR)
Client	iVMS-4200,Hik-Connect
Web Browser	Chrome80+, Firefox80+, Safari13+, Edge89+
Image	
Image Parameters Switch	Yes
Image Settings	Saturation, brightness, sharpness, contrast
Day/Night Switch	auto
Wide Dynamic Range (WDR)	120 dB
SNR	≥ 52 dB
Defog	yes
Image Enhancement	BLC,HLC,3D DNR
Privacy Mask	mask color or mosaic configurable,up to 8 programmable polygon privacy masks
Regional Focus	Yes
Regional Exposure	Yes
Interface	
Ethernet Interface	1 RJ45 10/100 M self-adaptive Ethernet port
On-board Storage	Built-in memory card slot,support microSD/microSDHC/microSDXC card, up to 256 GB
Alarm	1 input(s), 1 output(s)
Event	
Basic Event	Motion detection,video tampering alarm,exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Smart Event	Line crossing detection,intrusion detection,region entrance detection,region exiting detection
Linkage	Upload to FTP/NAS/memory card,notify surveillance center,send email,trigger alarm output,trigger recording,and PTZ actions (such as preset, patrol scan, pattern scan)
General	
Power	12 VDC ± 25%, max. 7 W, PoE (802.3af), Class A, 36-57V, max. 7W
Dimension	Ø184 mm × 264.2 mm (Ø7.2" × 10.4")
Weight	Approx. 8 kg (17.64 lb.)
Material	SUS316L stainless steel with anti-corrosion surface spray treatment
Operating Condition	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
General Function	mirror,password protection,watermark,IP address filter
Cable Length	1.8 m (5.91 ft.)
Demist	Yes

Approval	
EMC	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)
Safety	CB (IEC 62368-1: 2014 + A11),CE-LVD (EN 62368-1: 2014/A11: 2017)
Protection	IP68 (IEC 60529-2013),TVS 6000 V lightning protection, surge protection and voltage transient protection
Explosion-Proof Protection	ATEX: SEV 20 ATEX 0415 X; Ex II 2GD Ex db IIC T6 Gb /Ex tb IIIC T80°C Db;;IECEX: IECEX NEP 20.0018X;Ex db IIC T6 Gb /Ex tb IIIC T80°C Db,For explosive gas atmospheres, the maximum surface temperature is 85°C; For flammable dust atmospheres, the maximum surface temperature is 80°C; IIC: for explosive gas atmospheres other than mines susceptible to firedamp; For explosive gas mixture atmospheres: Zone 1, Zone 2, Zone 21, Zone 22.
Anti-Corrosion Protection	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)	1280 m (4198.4 ft)	507.9 m (1665.9 ft)	256 m (839.68 ft)	128 m (419.84 ft)

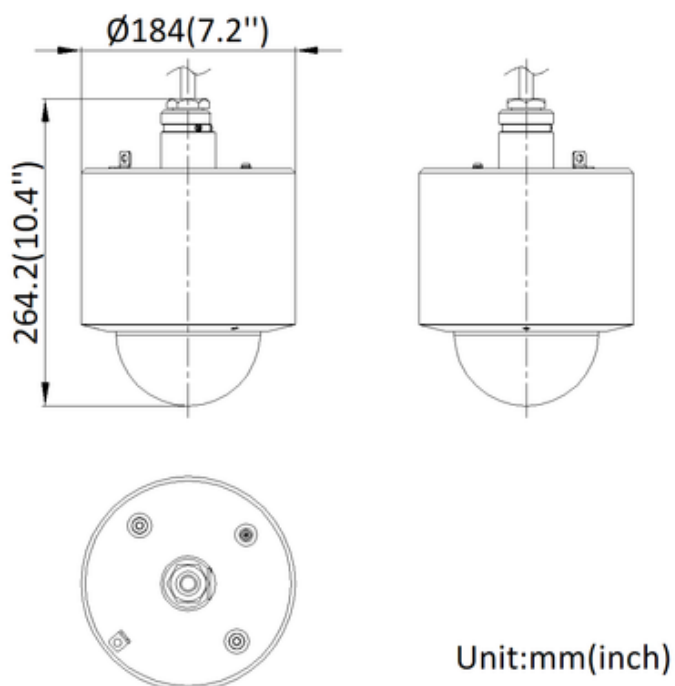
▪ Typical Application

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

This model has TOP-LEVEL 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

▪ Included

DS-1772ZJ-ED2-A

C



▪ Optional

DS-2XE2601-1-Y(SS)	DS-2XE2707CB-M1 2(316L)	DS-2XE2705-M04(3 16L)

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