


## DS-2DF4220-DX(W/316L) 2 MP Explosion-Proof Network Speed Dome



- Ex-mark: ATEX:  II 2GD Ex db IIC T6 Gb /Ex tb IIIC T80 Db;  
IECEX: Ex db IIC T6 Gb /Ex tb IIIC T80°C Db
- 316L Stainless Steel
- Supports H.265 video compression
- Certificate No.: ATEX: SEV 20 ATEX 0415 X; IECEX: IECEX NEP 20.0018X
- 20 × optical zoom, focal length 4.7 mm to 94 mm
- 2 MP 1/2.8" progressive scan CMOS
- Digital WDR, 3D DNR
- High quality imaging with high-performance sensor



## ▪ Specification

Camera Module	
Image Sensor	1/2.8" progressive scan CMOS
Min. Illumination	Color: 0.015 Lux @ (F2.8, AGC ON) B/W: 0.003 Lux @ (F2.8, AGC ON)
Shutter Speed	1/1 s to 1/30,000 s
Slow Shutter	yes
Focus	semi-auto,manual,auto
Day & Night	ICR
Day/Night Switch	day,night,auto,scheduled-switch
WDR	digital WDR
HLC	yes
3D DNR	yes
Defog	yes
EIS	yes
Regional Exposure	yes
Regional Focus	yes
Image Settings	saturation, brightness, contrast, sharpness
Image Parameters Switch	yes
White Balance	auto, ATW, sodium lamp, fluorescent lamp, indoor, outdoor, MWB
Digital Zoom	16 ×
Optical Zoom	20 ×
Privacy Mask	up to 24 masks, mask color configurable
SNR	> 55dB
General Function	mirror, password protection, watermark, IP address filter
Gain Control	auto,manual
Lens	
Focal Length	4.7 mm to 94 mm, 20 × optical zoom
Zoom Speed	Approx. 3.4 s
FOV	horizontal FOV: 54.5° to 4° (Wide-Tele) vertical FOV: 31.5° to 2.5°(Wide-Tele) diagonal FOV: 61.5° to 4.5°(Wide-Tele)
Aperture	F2.8
PTZ	
Movement Range (Pan)	360°
Movement Range (Tilt)	0° to 90°
Pan Speed	pan speed: configurable from 0.1° to 160°/s; preset speed: 160°/s
Tilt Speed	tilt speed: configurable from 0.1° to 120°/s, preset speed 120°/s
Proportional Zoom	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>	
Max. Resolution	1920 × 1080
Stream Type	main stream, sub-stream, third stream
Main Stream	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720) 60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720)
Sub-Stream	50Hz: 25fps (704 × 576, 640 × 480, 352 × 288) 60Hz: 30fps (704 × 480, 640 × 480, 352 × 240)
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288) 60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240)
Video Compression	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
H.264+	yes
H.265+	yes
SVC	yes
ROI	yes
<b>Smart Features</b>	
Basic Event	motion detection, video tampering alarm, alarm input, alarm output, exception
Smart Event	intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection
Smart Record	ANR, Dual-VCA
Alarm Linkage	preset, patrol scan, memory card video recording, alarm output, sending email, notify surveillance center, upload to FTP, NAS video recording
Smart Encoding	H.265+, H.264+, ROI, SVC
<b>Network</b>	
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour
API	Open-ended API, ONVIF, ISAPI, Hikvision SDK, Third-party management platform
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 levels: Administrator, Operator and User
Security Measures	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering
Client	iVMS-4200, iVMS-4500, iVMS-5200, Hik-Connect
Web Browser	IE 8 to 11, Chrome 31.0+, Firefox 30.0+, Safari 11+
<b>Interface</b>	
Communication Interface	RJ45, Self-adaptive 10M/100M Ethernet port
On-board Storage	support microSD/microSDHC/microSDXC cards, up to 128 GB
Alarm Input	1 alarm input
Alarm Output	1 alarm output

Video Output	1.0V[p-p]/75Ω,PAL,NTSC,BNC connector
RS-485	Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive
<b>General</b>	
Power	DC9-12V, Max. 12 W; POE
Operating Conditions	Temperature: -30°C to 60°C (-22°F to 140°F) , Humidity: ≤ 95%
Material	Enclosure: stainless steel 316L
Dimensions	Φ 264.2 mm × 184 mm (10.40" × 7.24")
Weight	Approx. 8 kg (17.64 lb)
<b>Approval</b>	
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 6, 2016); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013); BIS (IS 13252(Part 1):2010+A1:2013+A2:2015)
Protection	IP68, TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection

### ▪ DORI

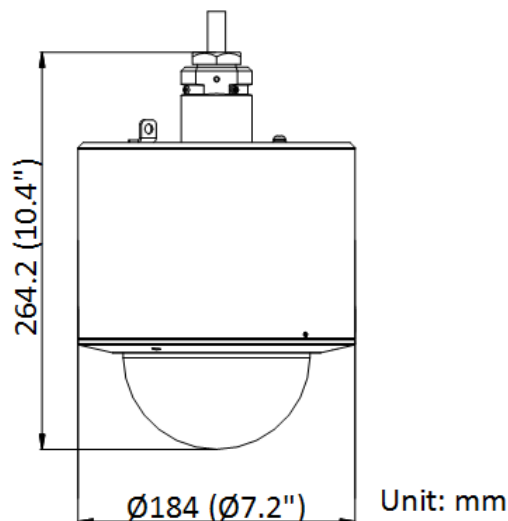
The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

DORI	Detect	Observe	Recognize	Identify
25 px/m	63 px/m	Definition	125 px/m	250 px/m
Distance (Tele)	1061.8 m (3483.6 ft)	421.4 m (1382.5 ft)	212.4 m (696.8 ft)	106.2 m (348.4 ft)

### ▪ Available Model

DS-2DF4220-DX(W/316L)

### ▪ Dimension



▪ **Accessory**

▪ **Included**

**DS-1772ZJ-ED2-AC**



▪ **Optional**

DS-2780ZJ-X/316L(OS)	DS-2781ZJ-X/316L(OS)	DS-1677ZJ-XS-1.0(DY)

Distributed by



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