

**DS-2DF4420WG-XEY****Aluminum Alloy 4MP 20x Explosion-proof Network Speed Dome**

- Ex-mark: ATEX: Ex II 2GD Ex db IIC T6 Gb /Ex tb IIIC T80°C Db; IECEx: Ex db IIC T6 Gb /Ex tb IIIC T80°C Db
- Supports H.265 video compression
- For explosive gas mixture atmospheres: Zone 1, Zone 2, Zone 21, Zone 22.
- 20 × optical zoom, focal length 4.8 mm to 96 mm
- 4 MP 1/2.8" progressive scan CMOS
- 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: 0.005Lux @ (F1.6 , AGC ON) B/W: 0.001Lux @ (F1.6, AGC ON)                                                                                                             |
| Shutter Speed               | 1/1 s to 1/30000 s                                                                                                                                                           |
| Day & Night                 | ICR                                                                                                                                                                          |
| Zoom                        | 20 × optical, 16 × digital                                                                                                                                                   |
| Slow Shutter                | yes                                                                                                                                                                          |
| Lens                        |                                                                                                                                                                              |
| Focal Length                | 4.8 mm to 96 mm, 20 × optical                                                                                                                                                |
| FOV                         | Horizontal field of view: 55° to 2.6°,<br>vertical field of view: 30.6° to 1.5°,<br>diagonal field of view: 60.5° to 3°                                                      |
| Focus                       | semi-auto, manual, auto                                                                                                                                                      |
| Aperture                    | F1.6                                                                                                                                                                         |
| Zoom Speed                  | approx. 2.9s                                                                                                                                                                 |
| 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                                                                                                                                                                          |
| Preset Freezing             | yes                                                                                                                                                                          |
| 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)<br>60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720)                                         |
| Sub-Stream                  | 50 Hz: 25 fps (704 × 576, 640 × 480, 352 × 288)<br>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)<br>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                                                                                                                                                                                |
| <b>Network</b>           |                                                                                                                                                                                    |
| Protocols                | IPv4/IPv6,HTTP,HTTPS,802.1X,QoS,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP, RTP,TCP/IP,UDP,IGMP,DHCP,PPPoE,Bonjour                                                                  |
| Simultaneous Live View   | Up to 20 channels                                                                                                                                                                  |
| API                      | Open Network Video Interface (Profile S, Profile G, Profile T),ISAPI,SDK                                                                                                           |
| User/Host                | Up to 32 users. 3 levels: Administrator, Operator and User                                                                                                                         |
| Security                 | User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering                          |
| Network Storage          | NAS (NFS, SMB/CIFS),auto network replenishment (ANR)                                                                                                                               |
| Client                   | iVMS-4200, iVMS-4500, iVMS-5200, Hik-Connect                                                                                                                                       |
| Web Browser              | IE 10 to 11; Chrome 57+; Firefox 52+; Safari 12+                                                                                                                                   |
| <b>Image</b>             |                                                                                                                                                                                    |
| Image Parameters Switch  | yes                                                                                                                                                                                |
| Image Settings           | saturation, brightness, sharpness, contrast                                                                                                                                        |
| Day/Night Switch         | auto                                                                                                                                                                               |
| Wide Dynamic Range (WDR) | 120dB WDR                                                                                                                                                                          |
| SNR                      | > 52dB                                                                                                                                                                             |
| Defog                    | yes                                                                                                                                                                                |
| Image Enhancement        | HLC/BLC/3D DNR/EIS/Regional Exposure/Regional Focus                                                                                                                                |
| Privacy Mask             | up to 24 masks                                                                                                                                                                     |
| <b>Interface</b>         |                                                                                                                                                                                    |
| Ethernet Interface       | RJ45, self-adaptive 10M/100M Ethernet port                                                                                                                                         |
| On-board Storage         | support microSD/microSDHC/microSDXC cards, up to 256 GB                                                                                                                            |
| Alarm                    | 1 input(s), 1 output(s)                                                                                                                                                            |
| <b>Event</b>             |                                                                                                                                                                                    |
| Basic Event              | Motion detection,video tampering alarm,alarm input and output,exception (IP address conflict, HDD full, illegal login, HDD error, network disconnected, Abnormal Reboot)           |
| Smart Event              | intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection,face detection           |
| 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. |
| Smart Linkage            | manual tracking                                                                                                                                                                    |
| <b>General</b>           |                                                                                                                                                                                    |
| Power                    | 12 VDC $\pm$ 25 %, max. 7 W,<br>PoE (802.3af), Class A, 36-57V, max. 7W                                                                                                            |
| Dimension                | $\varnothing$ 184.5 mm $\times$ 231.7 mm ( $\varnothing$ 7.26" $\times$ 9.12")                                                                                                     |
| Weight                   | Approx. 3.53kg (7.78 lb.)                                                                                                                                                          |
| Material                 | ADC12                                                                                                                                                                              |
| Operating Condition      | Temperature: -30°C to 60°C (-22°F to 140°F) , Humidity: $\leq$ 95%                                                                                                                 |
| General Function         | mirror,password protection,watermark,IP address filter                                                                                                                             |
| Cable Length             | 1.8 m (5.91 ft.)                                                                                                                                                                   |

| Approval                   |                                                                                                                                                                                                                        |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                |
| Explosion-Proof Protection | ATEX: II 2 G D Ex db IIC T6 Gb/Ex tb IIIC T80°C Db IP68,<br>IECEx: Ex db IIC T6 Gb/Ex tb IIIC T80°C Db IP68                                                                                                            |

## ▪ DORI

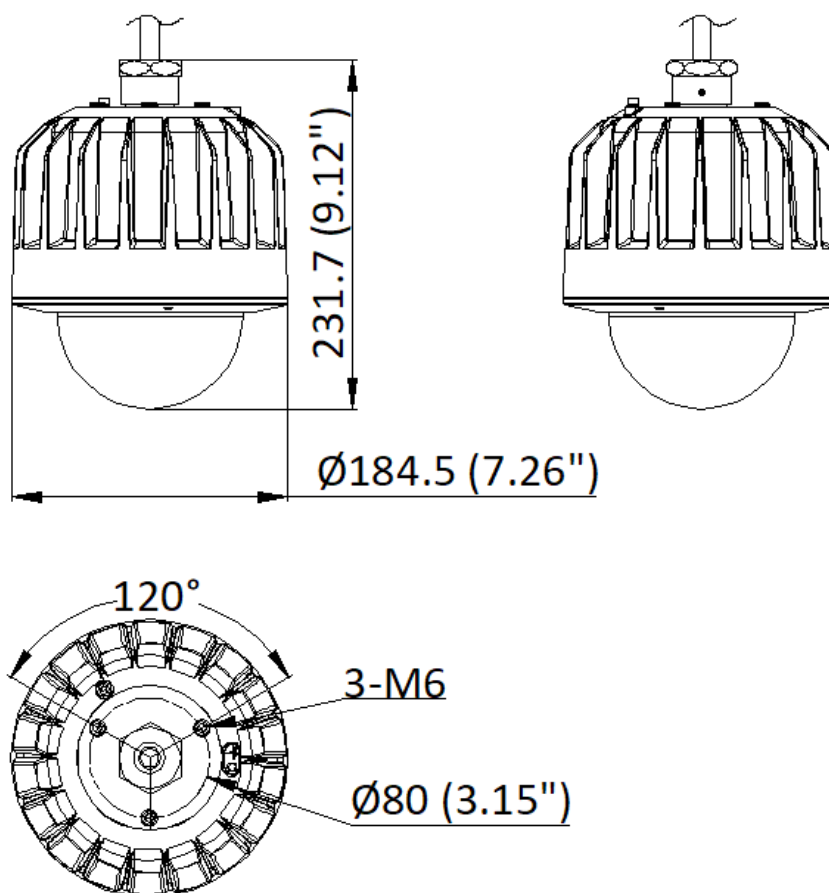
The DORI (detect, observe, recognize, identify) distance gives the general idea of the camera ability to distinguish persons or objects within its field of view. It is calculated based on the camera sensor specification and the criteria given by EN 62676-4: 2015.

| DORI            | Detect            | Observe            | Recognize        | Identify         |
|-----------------|-------------------|--------------------|------------------|------------------|
| Definition      | 25 px/m           | 63 px/m            | 125 px/m         | 250 px/m         |
| Distance (Tele) | 1280m (4198.4 ft) | 507.9m (1665.9 ft) | 256m (839.68 ft) | 128m (419.84 ft) |

## ▪ Available Model

DS-2DF4420WG-XEY

## ▪ Dimension



Unit: mm (inch)

▪ Accessory

▪ Included

DS-2704ZJ-P-Y



▪ Optional

DS-2XE2702-M04(A)  
DC)

DS-2XE2703-M06(A)  
DC)

DS-2713ZJ-P-Y

DS-2XE2601-1(CS)



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