

## Specification

| Camera Module         |   |
|-----------------------|---|
| Image Sensor          | 1/3" progressive scan CMOS  |
| Min. Illumination     | Color: 0.02 Lux @(F1.6, AGC ON)<br>B/W: 0.002 Lux @(F1.6, AGC ON)   |
| White Balance         | Auto/Manual/ATW (Auto-tracking White Balance)/Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp   |
| Gain                  | Auto/Manual   |
| Shutter Time          | 50Hz: 1/1 s to 1/30,000 s<br>60Hz: 1/1 s to 1/30,000 s  |
| Day & Night           | IR Cut Filter   |
| Digital Zoom          | 16×   |
| Privacy Mask          | 24 programmable privacy masks   |
| Focus Mode            | Auto/Semi-automatic/Manual  |
| WDR                   | Digital WDR   |
| Lens                  |   |
| Focal Length          | 4.7 mm to 94 mm, 20× optical zoom   |
| Zoom Speed            | Approx. 2.7 s (optical lens, wide-tele)   |
| FOV                   | Horizontal field of view: 58.3° to 3.2° (wide-tele)<br>Vertical field of view: 35.8° to 1.9° (wide-tele)<br>Diagonal field of view: 64.8° to 3.8° (wide-tele) |
| Working Distance      | 10 mm to 1500 mm (wide-tele)  |
| Aperture Range        | F1.6 to F3.5  |
| PTZ                   |   |
| Movement Range (Pan)  | 360° endless  |
| Pan Speed             | Configurable, from 0.1°/s to 150°/s<br>Preset speed: 270°/s   |
| Movement Range (Tilt) | From -30° to 90° (Auto Flip)  |
| Tilt Speed            | Configurable, from 0.1°/s to 120°/s<br>Preset Speed: 200°/s   |
| Proportional Zoom     | Yes   |
| Presets               | 300   |
| Patrol Scan           | 8 patrols, up to 32 presets for each patrol   |
| Pattern Scan          | 4 pattern scans, with the recording time not less than 10 minutes per pattern   |
| Power-off Memory      | Yes   |
| Park Action           | Preset/Patrol/Pattern/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan  |
| 3D Positioning        | Yes   |
| PTZ Status Display    | Yes   |
| Preset Freezing       | Yes   |
| Scheduled Task        | Preset/Patrol/Pattern/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output   |
| Compression Standard  |   |
| Video Compression     | Main Stream: H.264/MJPEG<br>Sub-Stream: H.264/MJPEG/MPEG4   |
| H.264 Type            | Baseline Profile/Main Profile/High Profile  |
| H.264+                | Yes   |
| Video Bitrate         | 32 Kbps to 16384 Kbps   |
| Audio Compression     | G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/PCM   |
| Audio Bitrate         | 64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-160Kbps(MP2L2)/8-48 Kbps(PCM)  |
| SVC                   | Yes   |
| Smart Feature         |   |
| Basic Event Detection | Motion Detection, Video Tampering Detection, Video Loss, Alarm Input, Alarm Output, Exception   |
| Smart Detection       | Audio Exception Detection   |
| Smart Tracking        | Event Tracking  |

|                        |  |
|------------------------|--|
| Smart Record           | ANR (Automatic Network Replenishment), Dual-VCA  |
| ROI                    | Main stream and sub-stream respectively support eight fixed areas.   |
| <b>Image</b>           |  |
| Max. Resolution        | 1920 × 1080  |
| Main Stream            | 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720)<br>60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720)   |
| Sub-Stream             | 50Hz: 25fps (704 × 576, 352 × 288, 176 × 144)<br>60Hz: 30fps (704 × 480, 352 × 240, 176 × 120)   |
| Image Enhancement      | HLC/BLC/3D DNR/Defog/Regional Exposure/Regional Focus  |
| <b>Network</b>         |  |
| Network Storage        | Built-in memory card slot, support Micro SD/SDHC/SDXC, up to 256 GB; NAS (NFS, SMB/CIFS), ANR  |
| Alarm 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. |
| Protocols              | IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, Bonjour  |
| API                    | ONVIF (Profile S, Profile G), ISAPI, SDK   |
| Simultaneous Live View | Up to 20 channels  |
| User/Host              | Up to 32 users.<br>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 +, Firefox 30+, Safari 8+   |
| <b>Interface</b>       |  |
| Alarm                  | 2-ch alarm input/1-ch alarm output   |
| Audio                  | 1-ch audio Input/1-ch audio output   |
| Network Interface      | 1 RJ45 10 M/100 M Ethernet Interface   |
| RS-485                 | Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive  |
| SDI                    | 1 HD-SDI Output:<br>720P@25fps/30fps/50fps/60fps, 1080P@25fps/30fps/50fps/60fps, 1080I@50fps/60fps   |
| <b>General</b>         |  |
| Power                  | 12 VDC (max. 24 W)   |
| Working Environment    | Temperature: -10°C to 50°C (14°F to 122°F)<br>Humidity: ≤ 90%  |
| Material               | Aluminum alloy, ADC12<br>PC+ABS,FR3010 or SABIC C2950  |
| Dimensions             | Φ 176.6 mm × 202.7 mm (Φ 6.95" × 7.98")  |
| Weight                 | Approx. 1.8 kg (3.97 lb)   |

## 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) | 1367.3m (4485.9 ft) | 542.6m (1780.2 ft) | 273.5m (897.3 ft) | 136.7m (448.5 ft) |

## Order Model

iDS-2DF5220S-D4/JY