

# DS-2DF9C435I5HS-DLW (T2) 4MP 35 × Network Laser PTZ Camera



















Hikvision DS-2DF9C435I5HS-DLW (T2) 4MP 35 × Network Laser PTZ Camera belongs to the DarkFighterX camera family. With the patented dual-sensor design, it is able to process color and brightness independently and outputs one FULL-COLOR image.

This series of cameras can be widely used for wide ranges of high-definition, such as the river, forest, road, railway, airport, port, square, park, scenic spot, station and large venue, etc.

- Dual-sensor, 1/1.8" progressive scan CMOS
- Full-color image output
- Min. illumination:

Color: 0.0005 Lux @(F1.6, AGC ON) B/W: 0.0001 Lux @(F1.6, AGC ON) 0 Lux with laser

- 35 × optical zoom, 16 × digital zoom
- 140 dB WDR, 3D DNR, HLC, BLC, EIS, Optical Defog
- Support H.265+/H.265 video compression
- Support rapid focus
- Deep-learning-based target classification algorithm for auto-tracking 3.0 and perimeter protection
- Rain-sensing auto wiper
- Up to 500 m laser distance. Smart laser





# Specification

| Camera Module                 |  |  |  |
|-------------------------------|--|--|--|
| Image Sensor                  | 1/1 8" progressive scan CMOS dual sensor structure   |  |  |
| Min. Illumination             | 1/1.8" progressive scan CMOS, dual-sensor structure Color: 0.0005 Lux @ (F1.6, AGC ON), B/W: 0.0001 Lux @ (F1.6, AGC ON), 0 Lux with             |  |  |
| Shutter Speed                 | laser 1/1 to 1/30,000 s  |  |  |
| Slow Shutter                  | Yes  |  |  |
| Focus                         | semi-auto, manual, auto  |  |  |
| Day & Night                   | electronic   |  |  |
| Day/Night Switch              | day, night, auto, scheduled-switch   |  |  |
| BLC                           | Yes  |  |  |
| WDR                           | 140 dB WDR   |  |  |
| HLC                           | Yes  |  |  |
| 3D DNR                        | Yes  |  |  |
| Defog                         | Yes  |  |  |
| EIS                           | Yes. Built-in gyroscope to improve EIS performance.  |  |  |
| 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                  | 35 ×   |  |  |
| Privacy Mask                  | up to 24 masks, polygon region, mosaic mask, mask color configurable   |  |  |
| Picture Overlay               | Yes  |  |  |
| SNR                           | ≥55 dB   |  |  |
| General Function              | mirror, password protection, watermark, IP address filter  |  |  |
| Lens                          |  |  |  |
| Focal Length                  | 5.9 mm to 206.5 mm   |  |  |
| Zoom Speed                    | approx. 4.4 s  |  |  |
|                               | Horizontal field of view: 58.9° to 2.2° (wide-tele)  |  |  |
| FOV                           | Vertical field of view: 35.3° to 1.2°(wide-tele)   |  |  |
|                               | Diagonal field of view: 65.9° to 2.5° (wide-tele)  |  |  |
| Min. Working Distance         | 100 mm-1500 mm (wide-tele)   |  |  |
| Aperture Range                | F1.6 to F4.4   |  |  |
| PTZ                           |  |  |  |
| Movement Range (Pan)          | 360°   |  |  |
| Movement Range (Tilt)         | -25° 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 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   |  |  |
| Pattern Scan Power-off Memory | Yes  |  |  |
| Park Action                   | preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan,  |  |  |
| 3D Positioning                | yes  |  |  |
| PTZ Status Display            | Yes  |  |  |
| Preset Freezing               | Yes  |  |  |
|                               | preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan,  |  |  |
| Scheduled Task                | preset, pattern scan, patrol scan, auto scan, tilt scan, random scan, frame scan, panorama scan, dome reboot, dome adjust, aux output            |  |  |
| Video                         |  |  |  |
| Max. Resolution               | 2688 × 1512  |  |  |
| Stream Type                   | main stream, sub-stream, third stream  |  |  |
| Main Stream                   | 50Hz: 25fps (2688 × 1512, 2560 × 1440, 1920×1080, 1280 × 960, 1280×720)<br>60Hz: 30fps (2688×1512, 2560 × 1440, 1920×1080, 1280 × 960, 1280×720) |  |  |
| Sub-Stream                    | 50Hz: 25fps (704 × 576, 640 × 480, 352 × 288)<br>60Hz: 30fps (704 × 480, 640 × 480, 352 × 240)   |  |  |



| Third Stream                  | 50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)   |  |  |
|-------------------------------|--|--|--|
| Video Compression             | 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  |  |  |
| Audio                         | 0.744   0.744   0.700   0.700   0.700   0.700  |  |  |
| 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 Kbps to 192 Kbps(MP2L2)   |  |  |
| Smart Features                |  |  |  |
| 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.                           |  |  |
| Road Traffic                  | Support vehicle detection (license plate number, vehicle model, and vehicle color recognition)   |  |  |
| Basic Event                   | motion detection, video tampering alarm, alarm input and output, exception   |  |  |
| Smart Event                   | unattended baggage detection, object removal detection, Intrusion Detection, Line Crossing Detection, Region Entrance Detection, Region Exiting Detection, Audio Exception Detection, vandal-proof alarm |  |  |
| Smart Tracking                | manual tracking, event tracking, auto-tracking   |  |  |
| Smart Record                  | ANR, Dual-VCA  |  |  |
| Alarm Linkage                 | preset, patrol scan, pattern scan, memory card video recording, alarm output, sending email, notify surveillance center, upload to FTP, smart tracking, null, NAS video recording                        |  |  |
| Smart Encoding                | H.265+, H.264+, ROI, SVC   |  |  |
| Network                       |  |  |  |
| Protocols                     | IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,R TP,TCP/IP,UDP,IGMP,ICMP,DHCP,PPPoE,Bonjour   |  |  |
| API                           | ISAPI ,Hikvision SDK,ONVIF (Profile S, Profile G, Profile T)   |  |  |
| Simultaneous Live View        | 20   |  |  |
| User/Host                     | 32   |  |  |
| Security Measures             | Authenticated username and password, MAC address binding, HTTPS encryption,802.1X authenticated access, IP address filter  |  |  |
| Web Browser                   | IE 8 to 11, Chrome 57+, Firefox 52+, Safari 12+  |  |  |
| Interface                     |  |  |  |
| On-board Storage              | Built-in microSD slot, support microSD/microSDHC/microSDXC cards,up to 256 GB  |  |  |
| Alarm Input                   | 7 alarm inputs   |  |  |
| Alarm Output                  | 2 alarm output   |  |  |
| Audio Input                   | 1 audio input, 2.0 to 2.4Vp-p, 1k Ohm±10%  |  |  |
| Audio Output                  | 1 audio output, line level, impedance: 600 $\Omega$  |  |  |
| Video Output                  | 1.0V[p-p]/75 $\Omega$ ,PAL,NTSC,BNC connector  |  |  |
| RS-485                        | Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive  |  |  |
| Supplement Light              |  |  |  |
| Laser Distance                | 500 m  |  |  |
| Smart Laser                   | Yes  |  |  |
| General                       |  |  |  |
| Power                         | 36 VDC   |  |  |
| Power Consumption and Current | max. 90 W, including max. 18 W for laser   |  |  |
| Operating Conditions          | Temperature: -40°C to 70°C (-40°F to 158°F), Humidity: ≤ 95%   |  |  |
| Wiper                         | Yes. Rain-sensing auto control   |  |  |
| Material                      | ADC12  |  |  |
| Dimensions                    | Φ 293 mm × 422 mm (Φ 11.5" × 16.6")  |  |  |
|                               | ·  |  |  |
| Weight                        | Approx. 13 kg (28.66 lb.)  |  |  |



| Web Client Language | 32 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) |  |
|---------------------|--|--|
| Approval            |  |  |
| EMC                 | Lightning Protection, Surge Protection and Voltage Transient Protection, $\pm 6kV$ Line to Gnd, $\pm 3kV$ Line to Line, IEC61000-4-5   |  |
| Protection          | IP67   |  |

#### **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) | 2606.9 m (8552.8 ft) | 1034.5 m (3394.0 ft) | 521.4 m (1710.6 ft) | 260.7 m (854.3 ft) |

# Typical Application

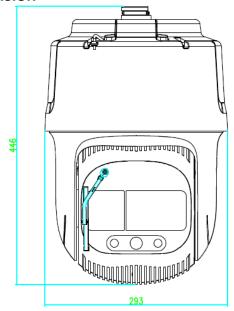
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

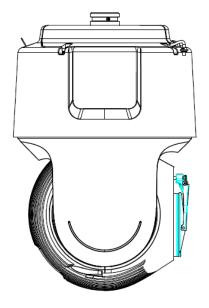
This model has NO SPECIFIC PROTECTION.

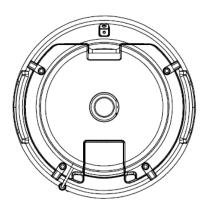
| Level                  | Description   |
|------------------------|---|
| Top-level protection   | Hikvision products at this level are equipped for use in areas where professional anti-corrosion          |
|                        | protection is a must. Typical application scenarios include coastlines, 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







Unit:mm

# Accessory

#### Included:



EUV-150S036ST-KW02 Power adapter



Installation Adapter

### Optional:



DS-1603ZJ-P Wall mount



DS-1603ZJ-Pole-P Vertical pole mount



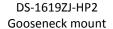
DS-1668ZJ(20)-P Pendant mount



DS-1668ZJ-P Pendant mount









DS-1603ZJ-Corner-P Corner mount

#### Available Model

DS-2DF9C435I5HS-DLW (T2)

Distributed by

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