Hikvision DS-2DF9C435IHS-DLW(T2) 4 MP 35× Network IR 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.

Key Feature
- Dual-sensor, 1/1.8” progressive scan CMOS
- Full-color image output
- Up to 2688 × 1512 resolution
- Min. illumination:
  - Color: 0.0005 Lux @ (F1.6, AGC ON)
  - B/W: 0.0001 Lux @ (F1.6, AGC ON)
  - 0 Lux with IR
- 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
- Up to 500 m IR distance. Smart IR
- Rain-sensing auto wiper
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.

<table>
<thead>
<tr>
<th>DORI</th>
<th>Detect</th>
<th>Observe</th>
<th>Recognize</th>
<th>Identify</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>25 px/m</td>
<td>63 px/m</td>
<td>125 px/m</td>
<td>250 px/m</td>
</tr>
<tr>
<td>Distance (Tele)</td>
<td>2606.9 m (8552.8 ft)</td>
<td>1034.5 m (3394.0 ft)</td>
<td>521.4 m (1710.6 ft)</td>
<td>260.7 m (854.3 ft)</td>
</tr>
</tbody>
</table>

**• Specification**

**Camera**
- Image Sensor: 1/1.8" progressive scan CMOS, dual-sensor structure
- Min. Illumination: Color: 0.0005 Lux @ (F1.6, AGC ON), B/W: 0.0001 Lux @ (F1.6, AGC ON), 0 Lux with IR
- Shutter Speed: 1/1 to 1/30,000 s
- Slow Shutter: Yes
- Day & Night: Controlled by dual-sensor
- Zoom: 35x optical, 16x digital
- Max. Resolution: 2688 × 1512

**Lens**
- Focus: Auto, semi-auto, manual, rapid focus
- Focal Length: 5.9 mm to 206.5 mm
- Zoom Speed: Approx. 4.4 s
- FOV:
  - Horizontal field of view: 58.9° to 2.2° (wide-tele)
  - Vertical field of view: 35.3° to 1.2° (wide-tele)
  - Diagonal field of view: 65.9° to 2.5° (wide-tele)
- Aperture: Max. F1.6

**Illuminator**
- Supplement Light Range: IR Distance: up to 500 m
- Smart Supplement Light: Yes

**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 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
- 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
### Video

| **Main Stream** | 50Hz: 25fps (2688 x 1512, 1920 x 1080, 1280 x 960, 1280 x 720)  
| 60Hz: 30fps (2688 x 1512, 1920 x 1080, 1280 x 960, 1280 x 720) |
| **Sub-Stream** | 50Hz: 25fps (704 x 576, 640 x 480, 352 x 288)  
| 60Hz: 30fps (704 x 480, 640 x 480, 352 x 240) |
| **Third Stream** | 50Hz: 25fps (1920 x 1080, 1280 x 960, 1280 x 720, 704 x 576, 640 x 480, 352 x 288)  
| 60Hz: 30fps (1920 x 1080, 1280 x 960, 1280 x 720, 704 x 480, 640 x 480, 352 x 240) |

**Video Compression**
- Main stream: H.265+/H.265/H.264+/H.264
- Sub-stream: H.265/H.264/MJPEG
- Third stream: 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

**Scalable Video Coding (SVC)**
- H.264 and H.265 encoding

**Region of Interest (ROI)**
- 8 fixed regions for each stream

### Audio

**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)

### Network

**Protocols**
- IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour

**API**
- ONVIF (Profile S, Profile G, Profile T), ISAPI, Hikvision SDK

**Simultaneous Live View**
- Up to 20 channels

**User/Host**
- Up to 32 users, 3 user levels: administrator, operator, and user

**Security**
- 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+

### Image

**Day/Night Switch**
- Day, night, auto, scheduled-switch

**Image Enhancement**
- BLC, HLC, 3D DNR

**Wide Dynamic Range (WDR)**
- 140 dB WDR

**Defog**
- Optical defog

**Image Stabilization**
- EIS (Built-in gyroscope to improve EIS performance)

**Regional Exposure**
- Yes

**Regional Focus**
- Yes

**Image Settings**
- Saturation, brightness, contrast, sharpness, gain, and white balance adjustable by client software or web browser

**Image Parameters Switch**
- Yes

**Privacy Mask**
- Up to 24 masks, polygon region, mosaic mask, mask color configurable

**SNR**
- ≥ 55 dB

### Interface

**Ethernet Interface**
- 1 RJ45 10M/100M self-adaptive Ethernet port

**On-board Storage**
- Built-in memory card slot, support microSD/microSDHC/microSDXC cards, up to 256 GB

**Alarm**
- 7 inputs, 2 outputs
<table>
<thead>
<tr>
<th>Audio</th>
<th>1 input (line in), max. input amplitude: 2-2.4 vpp, input impedance: 1 KΩ ± 10%; 1 output (line out), line level, output impedance: 600 Ω</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output</td>
<td>1.0V[p-p]/75Ω, PAL, NTSC, BNC connector</td>
</tr>
<tr>
<td>RS-485</td>
<td>1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)</td>
</tr>
<tr>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>Basic Event</td>
<td>Motion detection, video tampering alarm, alarm input and output, exception</td>
</tr>
<tr>
<td>Smart Event</td>
<td>Object removal detection, unattended baggage detection, intrusion detection, line crossing detection, region entrance detection, region exiting detection, audio exception detection</td>
</tr>
<tr>
<td>Smart Tracking</td>
<td>Manual tracking, auto-tracking</td>
</tr>
<tr>
<td>Alarm Linkage</td>
<td>Preset, patrol scan, pattern scan, memory card video recording, alarm output, send email, notify surveillance center, upload to FTP, smart tracking, NAS video recording</td>
</tr>
<tr>
<td>Deep Learning Function</td>
<td></td>
</tr>
<tr>
<td>Face Capture</td>
<td>Detects up to 30 faces at the same time. Supports detecting, tracking, capturing, grading, selecting of face in motion, and outputs the best face picture</td>
</tr>
<tr>
<td>Road Traffic and Vehicle Detection</td>
<td></td>
</tr>
<tr>
<td>Road Traffic</td>
<td>Supports vehicle detection (license plate number, vehicle model, and vehicle color recognition)</td>
</tr>
<tr>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Vandal-proof Alarm</td>
<td>Yes</td>
</tr>
<tr>
<td>General Function</td>
<td>Mirror, password protection, watermark, IP address filter</td>
</tr>
<tr>
<td>Power</td>
<td>36 VDC, max. 90 W, including max. 18 W for IR</td>
</tr>
<tr>
<td>Operating Condition</td>
<td>Temperature: -40°C to 70°C (-40°F to 158°F), Humidity: ≤ 95%</td>
</tr>
<tr>
<td>Wiper</td>
<td>Yes. Rain-sensing auto control</td>
</tr>
<tr>
<td>Material</td>
<td>ADC12</td>
</tr>
<tr>
<td>Dimension</td>
<td>Ø 293 mm × 422 mm (Ø 11.5&quot; × 16.6&quot;)</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 13 kg (28.7 lb)</td>
</tr>
<tr>
<td>Language</td>
<td>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)</td>
</tr>
<tr>
<td>Approval</td>
<td></td>
</tr>
<tr>
<td>EMC</td>
<td>Lightning Protection, Surge Protection and Voltage Transient Protection, ±6kV Line to Gnd, ±3kV Line to Line, IEC61000-4-5</td>
</tr>
<tr>
<td>Protection</td>
<td>IP67</td>
</tr>
</tbody>
</table>
### Accessory

**Included:**
- EUV-150S036ST-KW02
- Power 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-1619ZJ-HP2
  - Gooseneck Mount
- DS-1603ZJ-Corner-P
  - Corner mount

### Available Model

DS-2DF9C435IHS-DLW (T2)