Hikvision DS-2DF8836IX-AEL(W) (B) 8 MP 36 × Network IR Speed Dome adopts 2/3" progressive scan CMOS chip. With the 36 × optical zoom lens, the camera offers more details over expansive areas. This series of cameras can be widely used for wide ranges of high-definition, such as the rivers, forests, roads, railways, airports, ports, squares, parks, scenic spots, stations and large venues.

- 2/3" progressive scan CMOS
- Up to 4096 × 2160 resolution
- Min. illumination
  - Color: 0.005 Lux @(F1.5, AGC ON)
  - B/W: 0.0005 Lux @(F1.5, AGC ON)
  - 0 Lux with IR
- 36 × optical zoom, 16 × digital zoom
- Digital WDR, 3D DNR, HLC, Smart IR
- 24 VAC & Hi-PoE
- Up to 200 m IR distance
- Support H.265+/H.265 video compression
- Deep-learning-based target classification algorithm for auto-tracking 2.0 and perimeter protection
- Rapid focus
- IK 10, IP 67
## Specifications

### Camera Module

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Image Sensor</strong></td>
<td>2/3” progressive scan CMOS</td>
</tr>
<tr>
<td><strong>Min. Illumination</strong></td>
<td>Color: 0.005 Lux @(F1.5, AGC ON); B/W: 0.0005 Lux @(F1.5, AGC ON) 0 Lux with IR</td>
</tr>
<tr>
<td><strong>Shutter Time</strong></td>
<td>1 to 1/30,000 s</td>
</tr>
<tr>
<td><strong>White Balance</strong></td>
<td>Auto/Manual/ATW (Auto-tracking White Balance)/Indoor/Outdoor/Fluorescent Lamp/Sodium Lamp</td>
</tr>
<tr>
<td><strong>Gain</strong></td>
<td>Auto/Manual</td>
</tr>
<tr>
<td><strong>Day &amp; Night</strong></td>
<td>IR Cut Filter</td>
</tr>
<tr>
<td><strong>Digital Zoom</strong></td>
<td>16 x</td>
</tr>
<tr>
<td><strong>Privacy Mask</strong></td>
<td>24 programmable polygon privacy masks, mask color or mosaic configurable</td>
</tr>
<tr>
<td><strong>Focus Mode</strong></td>
<td>Auto/Semi-automatic/Manual</td>
</tr>
<tr>
<td><strong>3D DNR</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>BLC</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>HLC</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>WDR</strong></td>
<td>Digital WDR</td>
</tr>
<tr>
<td><strong>Optical Defog</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>EIS</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Regional Exposure</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Regional Focus</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Rapid Focus</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Lens

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focal Length</strong></td>
<td>7.5 to 270 mm, 36 x optical zoom</td>
</tr>
<tr>
<td><strong>Zoom Speed</strong></td>
<td>Approx. 7.8 s (optical lens, wide-tele)</td>
</tr>
<tr>
<td><strong>Field of View</strong></td>
<td>Horizontal field of view: 56.1° to 2.0° (wide-tele)  Vertical field of view: 33.4° to 1.1° (wide-tele)  Diagonal field of view: 62.9° to 2.3° (wide-tele)</td>
</tr>
<tr>
<td><strong>Working Distance</strong></td>
<td>10 mm to 1500 mm (wide-tele)</td>
</tr>
<tr>
<td><strong>Aperture Range</strong></td>
<td>F1.5 to F4.5</td>
</tr>
</tbody>
</table>

### PTZ

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Movement Range (Pan)</strong></td>
<td>360° endless</td>
</tr>
<tr>
<td><strong>Pan Speed</strong></td>
<td>Configurable, from 0.1°/s to 210°/s. Preset speed: 280°/s</td>
</tr>
<tr>
<td><strong>Movement Range (Tilt)</strong></td>
<td>From -20° to 90°</td>
</tr>
<tr>
<td><strong>Tilt Speed</strong></td>
<td>Configurable, from 0.1°/s to 150°/s. Preset speed: 250°/s</td>
</tr>
<tr>
<td><strong>Proportional Zoom</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Presets</strong></td>
<td>300</td>
</tr>
<tr>
<td><strong>Patrol Scan</strong></td>
<td>8 patrols, up to 32 presets for each patrol</td>
</tr>
<tr>
<td><strong>Pattern Scan</strong></td>
<td>4 pattern scans, record time over 10 minutes for each scan</td>
</tr>
<tr>
<td><strong>Power-off Memory</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Park Action</strong></td>
<td>Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>PTZ Status Display</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Preset Freezing</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Scheduled Task</strong></td>
<td>Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output</td>
</tr>
</tbody>
</table>

**Smart Features**

- **Perimeter Protection**: Intrusion, Line Crossing, Region Entrance, Region Exiting. Support alarm triggering by specified target types (human and vehicle). Reduce mistaken alarm caused by target types such as leaf, light, animal, and flag, etc.
- **Event Detection**: Face detection, unattended baggage detection, object removal detection, audio exception detection
- **Smart Tracking**: Manual tracking, auto tracking (support tracking specified target types such as human and vehicle), event tracking
- **Smart Record**: ANR (Automatic Network Replenishment), Dual-VCA
- **Region of Interest**: Eight fixed region for each stream

**IR**

- **IR Distance**: 200 m
- **Smart IR**: Yes

**Network**

- **Max. Resolution**: 4096 × 2160
- **Main Stream**: 50Hz: 25 fps (4096 × 2160, 3840 × 2160, 3072 × 1728, 2560 × 1440, 2048 × 1536, 1920 × 1080, 1280 × 960, 1280 × 720)  
  60Hz: 30 fps (4096 × 2160, 3840 × 2160, 3072 × 1728, 2560 × 1440, 2048 × 1536, 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)
- **SVC**: Yes
- **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  
  H.264 with Baseline/Main/High Profile
- **Audio Compression**: G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/PCM
- **Protocols**: IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, DHCP, PPPoE, UDP, IGMP, ICMP, Bonjour
- **Simultaneous Live View**: Up to 20 channels
- **User/Host**: Up to 32 users. 3 user 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

**System Integration**

- **Alarm Interface**: 7-ch alarm input/2-ch alarm output
Audio Interface
1-ch audio input, 2.0 to 2.4V p-p, 1k Ohm ± 10%
1-ch audio output, line level, impedance: 600Ω

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.

Network Interface
1 RJ45 10 M/100 M Ethernet interface, Hi-PoE

CVBS
Yes

RS-485
HIKVISION, Pelco-P, Pelco-D, self-adaptive

Network Storage
Built-in memory card slot, support Micro SD/SDHC/SDXC, up to 256 GB; NAS (NFS, SMB/ CIFS), ANR

API
ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK

Client
iVMS-4200, iVMS-4500, iVMS-5200, Hik-Connect

Web Browser
IE 8 to 11, Chrome 31.0+, Firefox 30.0+, Edge 16.16299+, Safari 11+

General

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)

Power
24 V, 3.0 A, 50/60Hz, AC (Max. 60 W, including max. 18 W for IR and max. 6 W for heater)
Hi-PoE, 42.5 to 57 V, 1.41 A (Max. 50 W, including max. 18 W for IR and max. 6 W for heater)

Working Environment
Temperature: -40°C to 70°C (-40°F to 158°F), humidity: ≤ 95%

Protection Level
IP67 Standard, IK10 (only supported by camera without wiper), 6000V Lightning Protection, Surge Protection and Voltage Transient Protection

Dimension
Φ 266.6 mm × 410 mm (Φ 10.50” × 16.14”)

Weight
Approx. 8 kg (17.64 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.

<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>3680.0 m (12073.5 ft)</td>
<td>1460.3 m (4791.1 ft)</td>
<td>736.0 m (2414.7 ft)</td>
<td>368.0 m (1207.3 ft)</td>
</tr>
</tbody>
</table>

Available Model
DS-2DF8836IX-AEL (B), without wiper, 24 VAC &Hi-PoE
DS-2DF8836IX-AELW (B), with wiper, 24 VAC &Hi-PoE
Dimensions

Accessory
- Included
  - DS-1681ZJ
    Installation Adapter

- Optional
  - DS-1604ZJ
    Wall Mount
  - DS-1602ZJ
    Wall Mount
  - DS-1604ZJ-box
    Wall Mount with Junction Box
  - DS-1604ZJ-box-pole
    Vertical Pole Mount with Junction Box

Unit: mm
DS-1604ZJ-box-corner
Corner Mount with Junction Box

DS-1661ZJ
Pendant Mount

DS-1662ZJ
Pendant Mount

DS-1667ZJ
Extendable Pole for Pendant Mount

DS-1682ZJ
Extendable Pole for Pendant Mount

DS-1663ZJ
Ceiling Mount

DS-1673ZJ
Horizontal Pole Mount

DS-1660ZJ
Parapet Mount

DS-1619ZJ
Gooseneck Mount

TEAC-66-243000V (EU)
MKAC-66-243000U (USA)
TEAC-66-243000VB (UK)
Power adapter

LAS60-57CN-RJ45
Hi-PoE Midspan