DS-2CD2045FWD-I
4 MP IR Fixed Bullet Network Camera

Key Features

- 1/2.5" Progressive Scan CMOS
- 2688 × 1520 @30 fps
- 2.8, 4, 6, 8, 12 mm fixed lens
- H.265+, H.265, H.264+, H.264
- 4 Behavior analyses
- 120dB WDR
- Powered by Darkfighter
- IR range: up to 30 m

- BLC/3D DNR/ROI/HLC
- IP67
- Built-in microSD/SDHC/SDXC card slot, up to 128 GB
- Color: 0.008 lux @(F1.2, AGC ON), 0.014 lux @(F1.6, AGC ON), 0 lux with IR

www.hikvision.com
## Specification

### Camera

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor</td>
<td>1/2.5&quot; Progressive Scan CMOS</td>
</tr>
<tr>
<td>Min. Illumination Color</td>
<td>0.008 lux @F1.2, AGC ON, 0.014 lux @F1.6, AGC ON, 0 lux with IR</td>
</tr>
<tr>
<td>Shutter Speed</td>
<td>1/3 s to 1/100,000 s</td>
</tr>
<tr>
<td>Slow Shutter</td>
<td>Yes</td>
</tr>
<tr>
<td>Day &amp; Night</td>
<td>IR Cut Filter</td>
</tr>
<tr>
<td>Digital Noise Reduction</td>
<td>3D DNR</td>
</tr>
<tr>
<td>WDR</td>
<td>120dB</td>
</tr>
<tr>
<td>3-Axis Adjustment</td>
<td>Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°</td>
</tr>
</tbody>
</table>

### Lens

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal Length</td>
<td>2.8, 4, 6, 8, 12 mm</td>
</tr>
<tr>
<td>Aperture</td>
<td>F1.6</td>
</tr>
<tr>
<td>Focus</td>
<td>Fixed</td>
</tr>
<tr>
<td>Lens Mount</td>
<td>M12</td>
</tr>
</tbody>
</table>

### IR

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR Range</td>
<td>Up to 30 m</td>
</tr>
<tr>
<td>Wavelength</td>
<td>850nm</td>
</tr>
</tbody>
</table>

### Compression Standard

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.264 Type</td>
<td>Main Profile/High Profile</td>
</tr>
<tr>
<td>H.264+</td>
<td>Main stream supports</td>
</tr>
<tr>
<td>H.265 Type</td>
<td>Main Profile</td>
</tr>
<tr>
<td>H.265+</td>
<td>Main stream supports</td>
</tr>
<tr>
<td>Video Bit Rate</td>
<td>32 Kbps to 16 Mbps</td>
</tr>
</tbody>
</table>

### Smart Feature-set

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Event</td>
<td>Line crossing detection, intrusion detection, unattended baggage detection, object removal detection, face detection, scene change detection</td>
</tr>
<tr>
<td>Basic Event</td>
<td>Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)</td>
</tr>
<tr>
<td>Linkage Method</td>
<td>Trigger recording: memory card, network storage, pre-record and post-record Trigger captured pictures uploading: FTP, HTTP, NAS, Email Trigger notification: HTTP, ISAPI, Email</td>
</tr>
<tr>
<td>Region of Interest</td>
<td>Support 1 fixed region for main stream and sub-stream</td>
</tr>
</tbody>
</table>

### Image

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Resolution</td>
<td>2688 x 1520</td>
</tr>
<tr>
<td>Main Stream</td>
<td>50Hz: 25 fps (2688 x 1520, 2304 x 1296, 1920 x 1080, 1280 x 720) 60Hz: 30 fps (2688 x 1520, 2304 x 1296, 1920 x 1080, 1280 x 720)</td>
</tr>
<tr>
<td>Sub-Stream</td>
<td>50Hz: 25 fps (640 x 480, 640 x 360, 320 x 240)</td>
</tr>
</tbody>
</table>
### Third Stream
- 60Hz: 30 fps (640 × 480, 640 × 360, 320 × 240)
- 50Hz: 25 fps (1280 × 720, 640 × 360, 352 × 288)
- 60Hz: 30 fps (1280 × 720, 640 × 360, 352 × 240)

### Image Enhancement
- BLC/3D DNR/HLC

### Image Setting
- Rotate mode, saturation, brightness, contrast, sharpness, AGC, and white balance adjustable by client software or web browser

### Target Cropping
- No

### SVC
- H.264 and H.265 encoding support

### Day/Night Switch
- Day/Night/Auto/Schedule

### Network
- **Network Storage**: Support microSD/SDHC/SDXC card (128G), local storage and NAS (NFS, SMB/CIFS), ANR
- **Protocols**: TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, RTSP, RTP, RTCP, PPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
- **General Function**: Anti-flicker, three streams, heartbeat, mirror, privacy masks, password reset via e-mail, pixel counter, HTTP listening
- **API**: ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, Ehance
- **Security**: Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS 1.2, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, TLS1.2
- **Simultaneous Live View**: Up to 6 channels
- **User/Host**: Up to 32 users
  - 3 levels: Administrator, Operator and User
- **Client**: iVMS-4200, Hik-Connect, Hik-Central
- **Web Browser**: Plug-in required live view: IE8+
  - Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+
  - Local Service: Chrome 41.0+, Firefox 30.0+

### Interface
- **Video Output**: No
- **Communication Interface**: 1 RJ45 10M/100M self-adaptive Ethernet port
- **On-board storage**: Built-in microSD/SDHC/SDXC slot, up to 128 GB
- **Reset Button**: Yes

### General
- **Operating Conditions**: -30 °C to +60 °C (-22 °F to +140 °F), humidity 95% or less (non-condensing)
- **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)
- **Power Supply**: 12 VDC ± 25%, Ø 5.5 mm coaxial plug power
  - PoE (802.3af, class 3)
- **Power Consumption and Current**: 12 VDC, 0.5 A, max. 5.5 W
  - PoE (802.3af, 36V to 57V), 0.2 A to 0.1 A, max. 7 W
- **Protection Level**: IP67
- **Material**: Metal
- **Dimensions**: Camera: Ø70 × 155 mm (Ø2.8” × 6.1”)
  - Package: 216 × 121 × 118 mm (8.5” × 4.8” × 4.7”)
- **Weight**: Camera: 410 g (0.9 lb.)
Available Model

DS-2CD2045FWD-I (2.8/4/6/8/12 mm)

Dimension

Accessory

DS-1280ZJ-XS
Junction Box

DS-1280ZJ-XS(Black)
Junction Box

Distributed by

Hikvision USA
T +1-908-896-0400
sales.usa@hikvision.com

Hikvision Italy
T +39-0423-65892
info.it@hikvision.com

Hikvision Singapore
T +65-6694-4718
sg@hikvision.com

Hikvision Africa
T +27 [10] 0351172
sale.africa@hikvision.com

Hikvision Europe
T +31-23-55-62-770
info.eu@hikvision.com

Hikvision France
T +33(0)1-85-339-450
info.fr@hikvision.com

Hikvision Oceania
T +61-2-6589-4233
salesau@hikvision.com

Hikvision Hong Kong
T +852-2151-1761

Hikvision Middle East
T +971-4-8816086
salesme@hikvision.com

Hikvision Spain
T +34-91-737-16-55
info.es@hikvision.com

Hikvision Canada
T +1-800-850-9400
sales.usa@hikvision.com

Hikvision Russia
T +7-495-669-87-99
salesru@hikvision.com

Hikvision Poland
T +48-22-460-01-50
poland@hikvision.com

Hikvision Korea
T +82-31-731-8841
sales.korea@hikvision.com

Hikvision India
T +91-22-28469900
sales@pramahikvision.com

Hikvision UK
T +01628-902140
support.uk@hikvision.com

Hikvision Brazil
T +55-11-3318-0050
lotus.support@hikvision.com

Headquarters
No.505 Qianao Roa, Binjiang District,
Hangzhou 310051, China
T +86-571-8807-5980
overseasbusiness@hikvision.com

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