

## DS-2CD4D16FWD-IZ(S)

### 1.3 MP Low Light Smart Dome Camera



## smart IPC

The low light smart cameras are able to capture high quality colored images in dim light environment. DS-2CD4D16FWD-IZ(S) offers high resolution, 120dB WDR, Auto-iris, PoE, Defog, EIS, 3D DNR, 6 behavior analyses, 1 exception detection, and face detection to meet a wide variety of applications.

- 1/3" Progressive Scan CMOS
- Auto-iris
- 1280 × 960 @ 60fps
- Low light
- H.265, H.265+
- 120dB WDR
- IP66
- 6 behavior analyses, 1 exception detection, and face detection



## Function Description

### Smart

- 6 behavior analyses, 1 exception detection, and face detection
- Smart recording: Support edge recording and dual-VCA
- Smart encoding: Support low bit rate, low latency, ROI enhance encoding

### Image

- 1280 × 960 @60fps
- Support rotate mode, suitable for environment as corridor
- Support target cropping, details can be seen with low bandwidth
- Streaming smoothness setting for different requirements of image quality and fluency
- Support H.265+/H.265/H.264+/H.264/MJPEG video compression, multi-level video quality configuration; support Baseline Profile/Main Profile/High Profile H.264 encoding complexity, and Main Profile H.265 encoding complexity
- Multiple OSD color: Black & white self-adaptive; Custom
- 120dB WDR is supportable for backlight environment
- Support defog, BLC, EIS

### System

- Support ONVIF (profile S/profile G), ISAPI protocol
- Support three streams, and Support 20 channels live view at the same time
- Lightning protection, surge protection, voltage transient protection, anti-static protection

### Interface

- Support standard 128G microSD/SDHC/SDXC card storage
- Support 10M/100M Ethernet port
- Support Audio I/O, dual-track, RS-485 (-S)
- Support Alarm I/O (-S)
- Support CVBS analog output (4CIF resolution)

### Security

- Support three-level user authentication management, user and password authorization, and IP address filtering
- Support security certificate as HTTPS
- Lock user IP after certain times failed login attempts

## Specifications

<b>Camera</b>	
Image Sensor	1/3" Progressive Scan CMOS
Min. Illumination	Color: 0.005 Lux @ (F1.2, AGC ON), 0.007 Lux @ (F1.4, AGC ON), 0 Lux with IR B/W: 0.0005 Lux @ (F1.2, AGC ON), 0.0007 Lux @ (F1.4, AGC ON), 0 Lux with IR"
Shutter Speed	1 s - 1/100,000 s
Slow Shutter	Support
Lens	2.8 – 12 mm F1.4, horizontal angle of view 98.4° - 30.2°
Lens Mount	Φ14
Auto-iris	DC drive
Day & Night	IR Cut Filter
Digital Noise Reduction	3D DNR
WDR	120dB
3-Axis Adjustment	Pan: 0° to 355°, tilt: 0° to 70°, rotate: 0° to 355°
<b>Compression Standard</b>	
Video Compression	Main stream: H.265/H.264 Sub stream: H.265/H.264/MJPEG Third stream: H.265/H.264
H.264 Type	Baseline Profile/Main Profile/High Profile
H.264+	Support
H.265 Type	Main Profile
H.265+	Support
Video Bit Rate	32 Kbps – 16 Mbps
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio Bit Rate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)
<b>Image</b>	
Max. Resolution	1280 × 960
Main Stream	50Hz: 50fps (1280 × 960, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 60fps (1280 × 960, 1280 × 720, 704 × 480, 640 × 480)
Sub Stream	50Hz: 25fps (704 × 576, 640 × 480, 352 × 288, 320 × 240) 60Hz: 30fps (704 × 480, 640 × 480, 352 × 240, 320 × 240)
Third Stream	50Hz: 25fps (1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240) 60Hz: 30fps (1280 × 960, 1280 × 720, 704 × 480, 640 × 480, 352 × 240, 320 × 240)
Image Enhancement	BLC/HLC/3D DNR/Defog/EIS
Image Setting	Rotate mode, saturation, brightness, contrast, sharpness adjustable by client software or web browser
Region of Interest	Support 4 fixed region for each stream, and dynamic face tracking
Target Cropping	Support
Day/Night Switch	Auto/Schedule/Triggered by Alarm In (-S)
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
<b>Network</b>	
Network Storage	Support Micro SD/SDHC/SDXC card (128G), local storage and NAS (NFS/SMB/CIFS), ANR
Alarm Trigger	Motion detection, video tampering alarm, network disconnected, IP address conflict, illegal login, HDD full, HDD error
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour

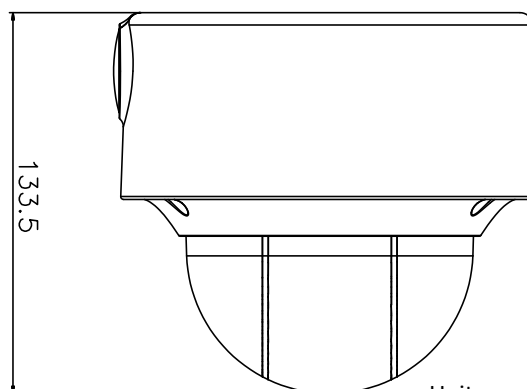
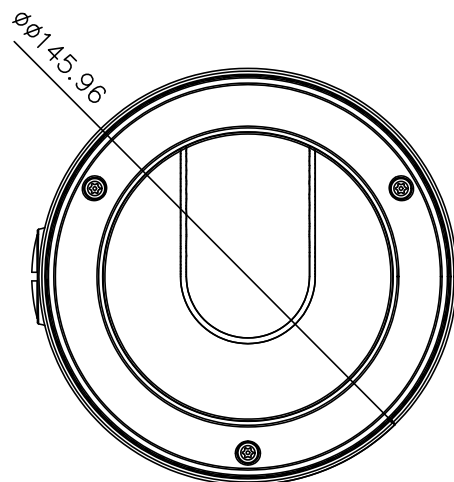
General Function	One-key reset, anti-flicker, three streams, heartbeat, password protection, privacy mask, watermark, IP address filter
Standard	ONVIF (PROFILE S, PROFILE G), PSIA, CGI, ISAPI
<b>Interface</b>	
Audio	With –S model: 1 input (line in), 1 output, dual-track
Communication Interface	1 RJ45 10M/100M Ethernet port; with –S model: 1 RS-485 interface
Alarm	With –S model: 2 inputs, 2 outputs (up to DC24V 1A or AC110V 500mA )
Video Output	1Vp-p composite output (75 Ω/BNC)
On-board storage	Built-in Micro SD/SDHC/SDXC slot, up to 128 GB
Reset Button	Yes
<b>Audio</b>	
Environment Noise Filtering	Support
Audio I/O	Support
Audio Sampling Rate	Max. 48 kHz
<b>Smart Feature-set</b>	
Behavior Analysis	Line crossing detection, intrusion detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection
Line Crossing Detection	Cross a pre-defined virtual line, up to 4 pre-defined virtual lines supported
Intrusion Detection	Enter and loiter in a pre-defined virtual region, up to 4 pre-defined virtual regions supported
Region Entrance Detection	Enter a pre-defined virtual region from the outside place
Region Exit Detection	Exit from a pre-defined virtual region
Object Removal Detection	Objects removed from the pre-defined region, such as the exhibits on display.
Unattended Baggage Detection	Objects left over in the pre-defined region such as the baggage, purse, dangerous materials
Exception Detection	Scene change detection
Face Detection	Human face appears in the image can be detected and trigger linkage method
<b>General</b>	
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F), Humidity 95% or less (non-condensing)
Power Supply	12 V DC ± 20%, PoE (802.3af, class 3) Terminal block for DC input
Power Consumption and Current	12 V DC ± 20%: max. 9W/0.75A PoE (802.3af): max. 10W/0.21A
IR Range	10 m to 30 m
Protection Level	IP66
Dimensions	Φ145.96 × 133.5 mm (Φ5.75" × 5.26")
Weight	1200 g (2.65 lb.)

## Available Models:

DS-2CD4D16FWD-IZ; DS-2CD4D16FWD-IZS

*\*-S: with 1 audio input (line in), 1 audio output, 1 RS-485, 2 alarm inputs and 2 alarm outputs*

## Dimensions



Unit: mm

## Accessories



DS-1273ZJ-DM32  
Wall Mount



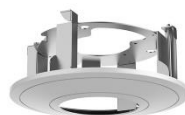
DS-1271ZJ-DM32  
Pendant Mount



DS-1275ZJ-SUS  
Vertical Pole Mount



DS-1276ZJ-SUS  
Corner Mount



DS-1227ZJ-DM32  
In-Ceiling Mount

Distributed by



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