

## DS-2CD4224F-I(Z)(H)(S)



### Key Features

- Up to 2 megapixel (1920×1080) @ 30 fps resolution
- Support H.264+
- Standard video compression with high compression ratio.
- Some specialized encoding functions are supported such as ROI (Region of Interest), SVC (Scalable Video Coding), etc.
- Progressive scan CMOS
- Support three streams, main stream and third stream can up to 2MP, sub-stream for mobile surveillance
- Built-in Micro SD / SDHC / SDXC card slot, up to 128GB
- High-performance and long service life Infrared LED, Approx. 20 to 30 meters(can be up to 80m with 8-20mm/8-32mm lens)
- Support motorized VF lens(-Z model)
- Support heater(-H model)
- Support 3D DNR
- Support Digital WDR
- Support Defocus Detection and alarm linkage
- Support smart face detection. People face can be detected and image encoding on face area can be automatically enhanced.
- Support Environmental Noise Filtering
- Support Audio Exception Detection, alarm will be triggered when the sound intensity is over the previous threshold.
- Support Smart Video Analysis functions such as Intrusion Detection, which can be configured on the local IE menu of camera.
- **Support people counting, volume of visitor flow can be kept and exported**
- IR cut filter with auto switch
- Two-way audio
- Support Smart Defog
- Support EIS
- PoE (Power over Ethernet)
- Up to 20 channels live view at the same time

- Auto-iris, electronic shutter, rotate mode for different surveillance environments
- Support local analog video output for adjustment and installation
- 3-axis (pan/tilt/rotation) positioning allows adjustment for optimum camera rotation and position
- Ingress Protection level: IP66
- LOGO picture can be overlaid on video
- Other functions: IP address filtering, anonymous access, PTZ control, alarm, reset button, mirror, etc.

## Specification

Model	DS-2CD4224F-I(Z)(H)(S)
Parameter	2 Megapixel CMOS Network Bullet Camera
<b>Camera</b>	
Image Sensor	1/2.8" Progressive Scan CMOS
Min. Illumination	0.01 Lux @ (F1.2, AGC ON), 0 lux with IR 0.014 Lux @ (F1.4, AGC ON), 0 lux with IR
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Support
Lens	No -Z: 2.8-12mm @ F1.4, angle of view: 113-33.8° 8-20mm @ F1.6, angle of view: 40°-16.5°(optional) -Z: 2.8-12mm @ F1.4, angle of view: 113-33.8° 8-32mm @ F1.4, angle of view: 31.2°-10.2°(optional)
Lens Mount	Φ14
Auto-iris	DC drive
Day & Night	IR cut filter with auto switch
Digital Noise Reduction	3D DNR
Wide Dynamic Range	DWDR
<b>Compression Standard</b>	
Video Compression	H.264+/H.264/MPEG4/MJPEG
H.264 Type	Baseline Profile / Main Profile / High Profile
Video Bit Rate	32 Kbps – 16 Mbps
Audio Compression	G.711/G.722.1/G.726/MP2L2
Audio Bit Rate	64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32-128Kbps(MP2L2)
<b>Image</b>	
Max. Resolution	1920 × 1080
Frame Rate	50Hz: 25fps (1920 × 1080) 25fps (1280 × 960), 25fps (1280 × 720) 60Hz: 30fps (1920 × 1080) 30fps (1280 × 960), 30fps (1280 × 720)
Third Stream	Independent with Main Stream and Sub Stream, up to 50Hz: 25fps(1920 × 1080)

	60Hz: 30fps (1920 × 1080)
BLC	Support
HLC	Support
Smart Defog	Support
EIS	Support
Image Setting	Rotate mode, Saturation, Brightness, Contrast adjustable by client software or web browser
Day/Night Switch	Auto/Schedule/Triggered by Alarm In
ROI	Support 4 different areas configuration in all the three streams with adjustable 6 levels. Automatically dynamic tracking with face detection can be configured.
Picture Overlay	LOGO picture can be overlaid on video with 128x128 24bit bmp format
<b>Network</b>	
Network Storage	NAS (Support NFS,SMB/CIFS)
Alarm Trigger	Intrusion detection, Line crossing detection, Defocus detection, Scene change detection, Motion detection, Face detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP, PPPoE,NTP,UPnP,SMTP,SNMP,IGMP,802.1X,QoS,IPv6,Bonjour
Security	User Authentication, Watermark, IP address filtering, Anonymous access
Standard	ONVIF, PSIA, CGI, ISAPI
<b>Interface</b>	
Communication Interface	1 RJ45 10M/100M Ethernet interface
On-board storage	Built-in Micro SD/SDHC/SDXC slot, up to 128 GB
Reset Button	Yes
<b>General</b>	
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F) Humidity 95% or less (non-condensing) -H: -40 °C – 60 °C (-40 °F – 140 °F) with smart heater on
Smart Heater	-H: support
Power Supply	12 VDC ± 10% / PoE (802.3af)
Power Consumption	Max. 11 W -Z/-H: Max. 12W
IR Range	2.8-12mm: Approx. 20 to 30 meters 8-20mm/8-32mm: Approx. 80 meters
Ingress Protection level	IP66
Dimensions	98 × 105 × 328.8 mm (3.86" ×" × 12.94")

