



### Key Features

- Up to 1.4 megapixel (1280 × 1024) @ 30 fps resolution
- H.264 high profile encoding with 1280×1024 @ 30fps, 1280×720 @ 60fps
- 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 1.4MP, sub-stream for mobile surveillance
- Built-in Micro SD / SDHC / SDXC card slot, up to 128GB
- Support 3D DNR
- Support Digital WDR
- Support ABF (-A model)
- Support P-Iris lens(-P model)
- Support Wi-Fi(-W model)
- 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
- Built-in microphone, 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
- LOGO picture can be overlaid on video
- Other functions: IP address filtering, anonymous access, PTZ control, alarm, reset button, mirror, etc.

## Specification

Model	DS-2CD4012F-(A)(P)(W)
Parameter	1.4 Megapixel CMOS ICR Network Box Camera
<b>Camera</b>	
Image Sensor	1/3" Progressive Scan CMOS
Min. Illumination	Color: 0.01 Lux @ (F1.2, AGC ON) B/W: 0.001 Lux @ (F1.2, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Support
Lens Mount	C/CS mount
Auto-iris	DC drive(-P: support P-Iris)
Day & Night	IR cut filter with auto switch
Digital Noise Reduction	3D DNR
Wide Dynamic Range	DWDR
Focus	ABF(-A model)
<b>Compression Standard</b>	
Video Compression	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	1280 × 1024
Frame Rate	50Hz: 25fps (1280 × 1024), 25fps (1280 × 960), 50fps (1280 × 720) 60Hz: 30fps (1280 × 1024), 30fps (1280 × 960), 60fps (1280 × 720)
Third Stream	Independent with Main Stream and Sub Stream, up to 50Hz: 25fps(1280 × 1024) 60Hz: 30fps (1280 × 1024)
BLC	Support
HLC	Support

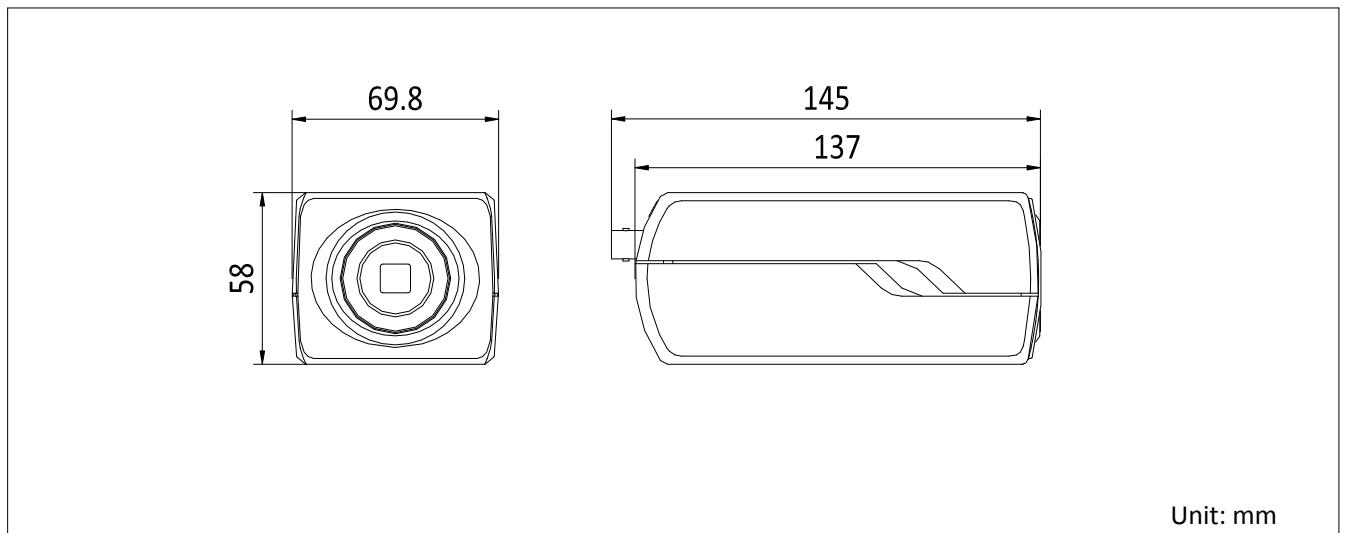
Smart Defog	Support
EIS	Support
Image Setting	Rotate mode, Saturation, Brightness, Contrast adjustable by client software or web browser
Day/Night Switch	Auto/Schedule/Triggered by Alarm In
ROI	Support 4 different areas configuration in all the three streams with adjustable 6 levels. Automatically dynamic 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, Defocus 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>Wi-Fi Specification(Only for the products with Wi-Fi module built-in)</b>	
Wireless Standards	IEEE802.11b, 802.11g, 802.11n
Frequency Range	2.4 GHz ~ 2.4835 GHz
Channel Bandwidth	20/40MHz Support
Protocols	802.11b: CCK, QPSK, BPSK 802.11g/n: OFDM
Security	64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, WPS
Transmit Output Power	11b: 17±1.5dBm @ 11Mbps 11g: 14±1.5dBm @ 54Mbps 11n: 12.5±1.5dBm
Receive Sensitivity	11b: -90dBm @ 11Mbps (Typical) 11g: -75dBm @ 54Mbps (Typical) 11n: -74dBm (Typical)
Transfer Rates	11b: 11Mbps 11g: 54Mbps 11n: up to 150Mbps
Wireless Range	50m(depend on environment)
Wireless Standards	IEEE802.11b, 802.11g, 802.11n

Interface	
Audio Input	1-ch 3.5 mm audio interface, Mic in/Line in. 1 built-in Microphone
Audio Output	1-ch 3.5 mm audio interface
Communication Interface	1 RJ45 10M/100M Ethernet port, 1 RS-485 interface and 1 RS-232 interface
Alarm Input	1
Alarm Output	1
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
General	
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F) Humidity 95% or less (non-condensing)
Power Supply	24 V AC ± 10%, 12 V DC ± 10%, PoE (802.3af)
Power Consumption	Max. 6 W (Max. 9W with IR cut filter on) -W: Max. 7 W (Max. 10W with IR cut filter on)
Dimensions	69.8×58×145 mm (2.68" × 2.56" × 5.70")
Weight	830 g (1.83 lbs)

## Order Models

DS-2CD4012F, DS-2CD4012F-A, DS-2CD4012F-W, DS-2CD4012F-P, DS-2CD4012F-AW, DS-2CD4012F-AP, DS-2CD4012F-PW, DS-2CD4012F-APW

## Dimensions



## Accessories



TV0550D-MPIR Auto Iris  
Manual Focusing 3MP IR Lens



TV2810D-MPIR Auto Iris  
Manual Focusing 3MP IR Lens



P-iris M13VP288IR



DS-1322HZ-C/H/CW/HW Outdoor Housing



DS-1320HZ Indoor Housing



DS-1213ZJ Wall Mounting  
Outdoor



DS-1212ZJ Wall Mounting  
Indoor