

DS-2CD4312F-PTZ(S) 1.3 MP Smart PTZ Outdoor Dome Camera













DS-2CD4312F-PTZ(S) is Hikvision Smart IPC and features complete Smart functions including:

Smart Detection

Intrusion Detection, Line Crossing Detection, Object Left/Removal, Area Entering/Leaving, Scene Change Detection, Audio Surge Detection, Audio Loss Detection, Defocus Detection, Face Detection, Object Counting, etc.

Smart Codec

Smart Recording with dual-VCA, Low Bitrate, Low Latency, ROI enhancement, Multi-stream, Rotate Mode, Edge Recording, etc.

Smart Image Control

Support distortion correction



The DS-2CD4312F-PTZ(S) series Smart cameras are able to capture high quality colored images.
DS-2CD4312F-PTZ(S) offers 1.3MP HD resolution with up to 30fps, DWDR, PoE, Defog, motorized PTZ, 3D DNR and complete Smart Feature-set to meet a wide variety of applications.

- 1/3" Progressive Scan CMOS
- 1280 x 1024 @ 30fps frame rate
- Slow shutter
- DWDR
- Motorized PTZ
- 3D DNR
- Support 128G on-board storage
- AC24V/PoE



Key Features

Smart

- 6 behavior analysis, 4 exception detections, 1 recognition, 1 statistic function.
- Smart recording: Support edge recording and dual-VCA.
- Smart encoding: Support low bit rate; low latency; ROI enhance encoding
- Smart lens options: AF lens

Image

- HD 1280 × 1024@30fps
- Supports image distortion correction
- Support rotate mode, suitable for environment as corridor.
- Support regional cropping, details can be seen with low bandwidth.
- Code smoothness setting for different requirements of image quality and fluency.
- Support H.264+/H.264/MJPEG/MPEG4 video compression, multi-level video quality configuration; support Basic/Main/High Profile H.264 encoding complexity.
- Multiple OSD color: Black & white self-adaptive; Custom
- Digital WDR is supportable for backlight environment.
- Support defog, BLC, HLC.

Infrared

- Irradiation distance is up to 40m(2.8~12mm)/50m(8~32mm)
- Smart IR, prevent over-exposure in close distance

System

- Support ONVIF (profile S/profile G), CGI, PSIA, ISAPI protocol.
- Support three streams, and Support 20 channels live view at the same time.
- AF automatic fast focus, maintain focused during zooming
- Anti-thunder, anti-surge, anti-static, IP66 & IK10 protection level.
- Support motorized PTZ

Interface

- Support standard 128G Micro SD/SDHC/SDXC card storage.
- Support 10M/100M/1000M Ethernet Port.
- Support Audio I/O, support dual channel stereo audio (-S)
- Support Alarm I/O (-S)
- Support CVBS analog output (4CIF resolution) (-S)

Security

- Support three-level user authentication management, user and password authorization, IP address filtering and anonymous access.
- Support security certificate as HTTPS, SSH; support creating certificate.
- Basic and digest authentication is supportable in IE configuration
- Lock user IP for many times error login



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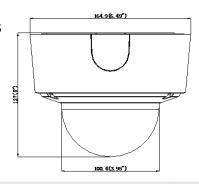


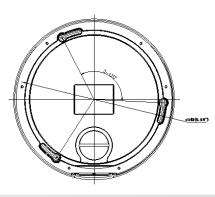
Specification

Camera		
Image Sensor	1/3" 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	1s ~ 1/100,000s	
Slow Shutter	Support	
Lens	2.8-12mm @ F1.4, angle of view: 98.4-30.2°; 8-32mm @ F1.4, angle of view: 27.8-9.1°	
Lens Mount	Ф14	
Auto-iris	DC drive	
Day & Night	IR Cut Filter with auto switch	
Compression Standard		
Video Compression	H.264+/H.264/MJPEG/MPEG4	
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)	
Image		
Max. Resolution	1280 × 1024	
Frame Rate	50Hz: 50fps (1280 × 1024)/(1280 × 960)/(1280 × 720) 60Hz: 60fps (1280 × 1024)/(1280 × 960)/(1280 × 720)	
Third Stream	Independent with Main Stream and Sub Stream, up to 50/60Hz: 25fps(1280 × 1024)	
Image Enhancement	BLC/HLC/3D DNR/ROI/Defog	
Image Setting	Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser	
Distortion Correction	Support	
Regional Cropping	Support	
Day/Night Switch	Auto/Schedule/Triggered by Alarm In	
Picture Overlay	LOGO picture can be overlaid on video with 128x128 24bit bmp format	
Network		
Network Storage	NAS (Support NFS,SMB/CIFS), ANR	
Alarm Trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, Storage exception	
Protocols	TCP/IP, UDP, 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(PROFILE S,PROFILE G),PSIA,CGI,ISAPI	
Interface		
Audio (-S)	2-ch 3.5 mm audio in (Mic in/Line in)/out interface	
Communication Interface	1 RJ45 10M/100M Ethernet port, 1 RS-485 interface (-S)	
Alarm (-S)	2 input, 2 output (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	



Dimensions





Environment Noise FilteringSupportAudio I/OSupport dual audio track, stereoAudio Sampling Rate16Hz / 32kHz / 44.1kHz / 48kHzSmart Feature-setBehavior AnalysisLine crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removalLine Crossing DetectionCross a pre-defined virtual lineIntrusion DetectionEnter and loiter in a pre-defined virtual regionRegion ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Audio		
Audio Sampling Rate16kHz / 32kHz / 44.1kHz / 48kHzSmart Feature-setLine crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removalLine Crossing DetectionCross a pre-defined virtual lineIntrusion DetectionEnter and loiter in a pre-defined virtual regionRegion EntranceEnter a pre-defined virtual region from the outside placeRegion ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralIK10Protection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)		Support	
Smart Feature-setBehavior AnalysisLine crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removalLine Crossing DetectionCross a pre-defined virtual lineIntrusion DetectionEnter and loiter in a pre-defined virtual regionRegion EntranceEnter a pre-defined virtual region from the outside placeRegion ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsФ159.8 × 146 mm(Ф6.29" × 5.75")Weight2100 g (4.63 lbs)	Audio I/O	Support dual audio track, stereo	
Behavior Analysis Line crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removal Line Crossing Detection Cross a pre-defined virtual line Intrusion Detection Enter and loiter in a pre-defined virtual region Region Entrance Enter a pre-defined virtual region from the outside place Region Exiting Exit from a pre-defined virtual region Unattended Baggage Objects left over in the pre-defined region such as the baggage, purse, dangerous materials Object Removal Objects removed from the pre-defined region, such as the exhibits on display. Exception Detections Scene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detection Recognition Face detection recognition Statistics Object Counting (Entrance and Exit object number is accounted and showed on screen in real time) General Protection Level IP66 Impact Protection IK10 IR Distance 40m(2.8~12mm)/50m(8~32mm) Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions	Audio Sampling Rate	16kHz / 32kHz / 44.1kHz / 48kHz	
Object removalLine Crossing DetectionCross a pre-defined virtual lineIntrusion DetectionEnter and loiter in a pre-defined virtual regionRegion EntranceEnter a pre-defined virtual region from the outside placeRegion ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C -60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Smart Feature-set		
Intrusion Detection Region Entrance Enter a pre-defined virtual region from the outside place Region Exiting Exit from a pre-defined virtual region Unattended Baggage Objects left over in the pre-defined region such as the baggage, purse, dangerous materials Object Removal Objects removed from the pre-defined region, such as the exhibits on display. Exception Detections Exception Detections Recognition Face detection recognition Statistics Object Counting (Entrance and Exit object number is accounted and showed on screen in real time) General Protection Level IP66 Impact Protection IK10 IR Distance 40m(2.8~12mm)/50m(8~32mm) Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Ф159.8 × 146 mm(Ф6.29" ×5.75") Weight Exit from a pre-defined virtual region from the outside place Enter a pre-defined virtual region from the outside place Exit from a pre-defined virtual region Diect Counting region Exit from a pre-defined virtual region Schall place Exit from a pre-defined virtual region Diect Counting region Exit from a pre-defined virtual region Such as the baggage, purse, dangerous parks and set place Exit from a pre-defined virtual region Diect Counting region Exit from a pre-defined virtual region Diect Counting region such as the exhibits on display. Scane charge purse, dangerous parks and exhibits on display. Exception Last exhibits	Behavior Analysis		
Region EntranceEnter a pre-defined virtual region from the outside placeRegion ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Line Crossing Detection	Cross a pre-defined virtual line	
Region ExitingExit from a pre-defined virtual regionUnattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Intrusion Detection	Enter and loiter in a pre-defined virtual region	
Unattended BaggageObjects left over in the pre-defined region such as the baggage, purse, dangerous materialsObject RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Region Entrance	Enter a pre-defined virtual region from the outside place	
Object RemovalObjects removed from the pre-defined region, such as the exhibits on display.Exception DetectionsScene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detectionRecognitionFace detection recognitionStatisticsObject Counting (Entrance and Exit object number is accounted and showed on screen in real time)GeneralProtection LevelIP66Impact ProtectionIK10IR Distance40m(2.8~12mm)/50m(8~32mm)Operating Conditions-30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensionsΦ159.8 × 146 mm(Φ6.29" ×5.75")Weight2100 g (4.63 lbs)	Region Exiting	Exit from a pre-defined virtual region	
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Recognition Face detection recognition Statistics Object Counting (Entrance and Exit object number is accounted and showed on screen in real time) General Protection Level IP66 Impact Protection IK10 IR Distance 40m(2.8~12mm)/50m(8~32mm) Operating Conditions -30 °C -60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Ф159.8 × 146 mm(Ф6.29" ×5.75") Weight 2100 g (4.63 lbs)	Object Removal	Objects removed from the pre-defined region, such as the exhibits on display.	
Statistics Object Counting (Entrance and Exit object number is accounted and showed on screen in real time) General Protection Level IP66 Impact Protection IK10 IR Distance 40m(2.8~12mm)/50m(8~32mm) Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Ф159.8 × 146 mm(Ф6.29" ×5.75") Weight 2100 g (4.63 lbs)	Exception Detections		
GeneralProtection LevelIP66Impact ProtectionIK10IR Distance $40m(2.8^{2}12mm)/50m(8^{3}2mm)$ Operating Conditions $-30 ^{2}C - 60 ^{2}C (-22 ^{2}F - 140 ^{2}F)$, Humidity 95% or less (non-condensing)Power SupplyAC24V/PoE(802.3at)Power ConsumptionMax. 13.5 WDimensions $0159.8 \times 146 \text{ mm}(06.29\% \times 5.75\%)$ Weight $2100 \text{ g} (4.63 \text{ lbs})$	Recognition	Face detection recognition	
Protection Level IP66 Impact Protection IK10 IR Distance $40m(2.8^{\sim}12mm)/50m(8^{\sim}32mm)$ Operating Conditions $-30 ^{\circ}\text{C} - 60 ^{\circ}\text{C} (-22 ^{\circ}\text{F} - 140 ^{\circ}\text{F})$, Humidity 95% or less (non-condensing) Power Supply $AC24V/PoE(802.3at)$ Power Consumption Max. 13.5 W Dimensions $\Phi159.8 \times 146 \text{mm}(\Phi6.29'' \times 5.75'')$ Weight $2100 \text{g} (4.63 \text{lbs})$	Statistics	Object Counting (Entrance and Exit object number is accounted and showed on screen in real time)	
Impact Protection IR Distance 40m(2.8~12mm)/50m(8~32mm) Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Ф159.8 × 146 mm(Ф6.29" ×5.75") Weight 2100 g (4.63 lbs)	General		
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Operating Conditions -30 °C - 60 °C (-22 °F - 140 °F), Humidity 95% or less (non-condensing) Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Ф159.8 × 146 mm(Ф6.29" ×5.75") Weight 2100 g (4.63 lbs)	Impact Protection	IK10	
Power Supply AC24V/PoE(802.3at) Power Consumption Max. 13.5 W Dimensions Φ159.8 × 146 mm(Φ6.29" ×5.75") Weight 2100 g (4.63 lbs)	IR Distance	40m(2.8~12mm)/50m(8~32mm)	
Power Consumption Max. 13.5 W Dimensions Φ159.8 × 146 mm(Φ6.29" ×5.75") Weight 2100 g (4.63 lbs)	Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F), Humidity 95% or less (non-condensing)	
Dimensions $\Phi 159.8 \times 146 \text{ mm}(\Phi 6.29'' \times 5.75'')$ Weight $2100 \text{ g } (4.63 \text{ lbs})$	Power Supply	AC24V/PoE(802.3at)	
Weight 2100 g (4.63 lbs)	Power Consumption	Max. 13.5 W	
	Dimensions	Φ159.8 × 146 mm(Φ6.29" ×5.75")	
Order Models	Weight	2100 g (4.63 lbs)	

Accessories

DS-2CD4312F-PTZ, DS-2CD4312F-PTZS



DS-1268ZJ Pendant Mount



DS-1273ZJ-160
Outdoor wall mount

