

Network Camera Firmware Version: V5.4.0

Release Note(Internal)

(2016-04-20)

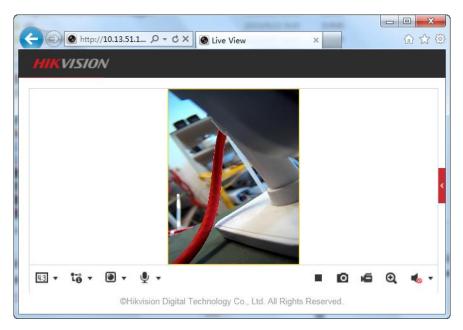
	Firmware Version:	V5.4.0
	SDK Version:	V5.1.6.21 build20160401
	Play Library (PlayCtrl.dll)	V7.3.0.74
	Encapsulation Library (SystemTransform.dll)	V2.5.1.7
Firmware	RTSP Communication Library (StreamTransClient.dll)	V1.1.3.4
Basic Information	Voice intercom library (AudioIntercom.dll)	V1.3.0.3
	Smart configuration library	V3.3.9.6
	iVMS-4200	Version 4200 V2.04.06.11
	1 1 11/13-4200	build20160405
	IE Client version	V3.0.6.1 build160304

Hikvision Firmware V5.4.0 Features

*for all IPC platforms

- 1. New Features
- Support ONVIF2.6 with ONVIF Storage configuration.
- The live view image would auto adjust the rotate mode.





• Support Online Users: the IP addresses of all online users would be shown in System-> User

Management->Online Users.



- Support 29 languages in web browser: Traditional Chinese, English, Russian, Turkish, Japanese,
 Korean, Thai, Vietnamese, Estonian, Bulgarian, Hungarian, Czech, Slovak, French, Italian, German,
 Spanish, Portuguese, Polish, Greek, Dutch, Romanian, Finnish, Norwegian, Danish, Swedish,
 Croatian, Serbian, Slovenian;
- <u>In Web browser Configuration->Local->Record File Settings/Picture and Clip Settings, "Open"</u> button is added to open the folders for saving record or snapshots.

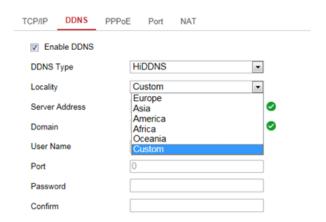
2. Improved Features

Support domain access to Hik-connect.



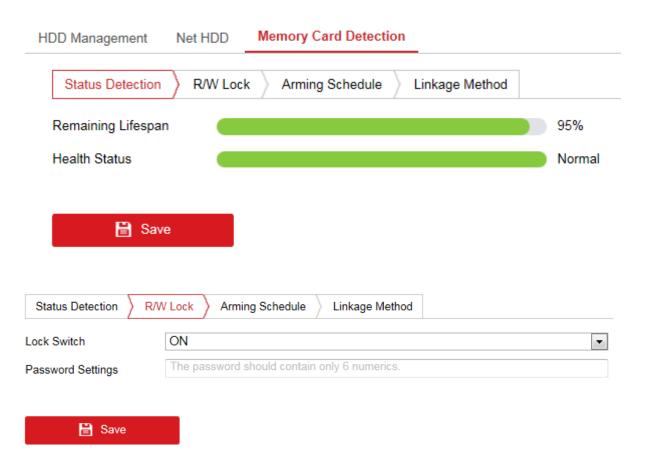
Locality and Domain available in HiDDNS configuration;





• For Hikvision microSD card only, Memory Card Detection is available to show SD card health status and Remaining Lifespan. R/W Lock is also available for Hikvision SD card. Customer is able to set their own password(6-bit number) for their Hikvision SD card and defaulting the camera would not restore the password.

Waring: The SD card password cannot be recovered.



Notice: 1. The old SD card password is needed to reset new SD card password.

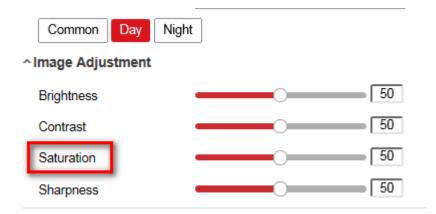
- 2. The R/W Lock interface can be configured when SD card is online by administer account only.
- Support softAP(cannot be used with WiFi simultaneously).
- Support TLS encryption for Email configuration and STARTTLS option is available.



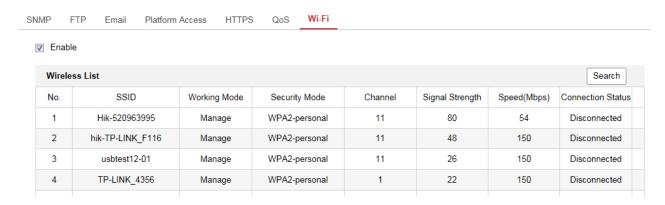
SNMP	FTP	Email	Platform Access	HTTPS	QoS
Sende	r				
Sende	r's Addres	ss			
SMTP	Server				
SMTP	Port		25		
E-mail	Encryptic	on	TLS		•
En	able STA	RTTLS			
Att	ached Im	age			
Interva	ıl		2		▽ S
■ Au	thenticati	on			

In Scheduled Image Settings, Saturation can be configured in Day/Night individually.

Scheduled Day/Night switch start time and end time can be on different days.



Wi-Fi configuration user interface has been improved. Wi-Fi can be enabled or disabled. 64-bit
 password is supported in Web Component.



• In FTP configuration, captured images can be categorized. Picture Filing Interval ranges from 1~30 days and the prefix of images can be customized.



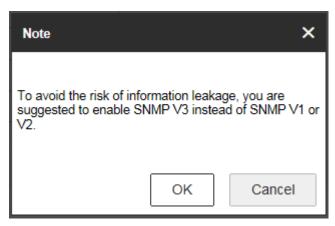
SNMP FTP Email	HTTPS QoS 802.1x		
Server Address	10.18.5.31		
Port	21		
User Name	target	Anonymous	
Password	•••••		
Confirm	•••••		
Directory Structure	Save in the parent directory	•	
Parent Directory	Use Device Name	•	
Picture Filing Interval	1	▼ Day(s)	
Picture Name	Custom Prefix	▼ Custom Name here	⊘
	Upload Picture		
	Test		

- The Day/Night switch by alarm strategy has been changed. As soon as the alarm is received,

 Day/Night switch process would start.
- Day/Night switch schedule is changed from 7:00~18:00 to 6:00~18:00.
- The minimum capture interval is changed to 1000ms.
- Bug solved: When input volume is set as 0, there would be no sound in live view.
- IP conflict would be detected within 5s.
- Default bitrate changed for ease of memorization:

- 3. Security Mechanism Improvement
- Anonymous access is banned to improve security level.
- In SNMP v1 and v2, a warning is added to encourage users to adopt SNMP V3, which is a safer standard to protect information.





SSH is forbidden to improve security.

*for 2XX0 Network Cameras (V5.4.0 build160401)

- New models with motorized lens: DS-2CD2610F-IZ(S), DS-2CD2620F-IZ(S), DS-2CD2710F-IZ(S), DS-2CD2710F-IZ(S)
- IR illumination configurable. In smart IR manual mode, IR distance is configurable.
- Chinese OSD is no longer supported in multi-language firmware.
- Dual-VCA is banned on 2MP models to improve system stability.

Leftover problem:

- When frame rate is set as 1fps in H.264 algorithm, occasionally the OSD time is not punctual in live view on client software. For example, the OSD is supposed to change every 1s, but occasionally OSD change interval would be 0.5s, then 1.5s. In live view on web component and in the recorded video from client software, the OSD is normal.
- When 2XX0 camera is connect to Wi-Fi for a long time, the delay is to severe that live view become impossible. The reason might be network issue or limitation of system performance.

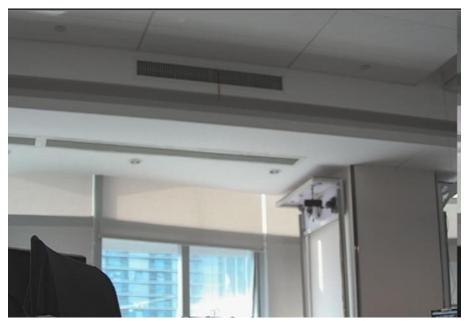
*for 2XX2WD, 2X52 Network Cameras (V5.4.0 build160401)

- 16 presets available for PT dome 2FX2 models.
- Expert mode in DNR is available.
- The sub stream resolution of 2X12WD and 2X52 is changed to CIF and 640*360 to be the same with 2MP and 4MP models.
- Lens shadow correction available for 2X22FWD models



Leftover problem:

- For 2FXX models, tilting upward may be not smoothly due to the structure of gear. Currently there is no solution to avoid the problem.
- When H.264+ is applied, operations on changing resolution, rotate, WDR and Mirror may cause the screen to turn green for a while.
- In manual white balance configuration, adjusting R parameter may lead to flash in screen.
- For 1.3MP, 4MP, 5MP models, the option of 1/100000s in shutter is actually not working. The sensors don't support 1/100000s.
- For 4MP or 5MP models in H.264+ mode and 4MP resolution, when Mirror is turned on/off and the max bit rate is greater than 6MP, the image may be abnormal for several seconds.
- For 4MP or 5MP models in H.264+ mode, when changing the sub stream resolution, or live view in both main stream and sub stream, the image may be abnormal for several seconds.
- When setting the sub stream frame rate as 25/30 fps in 5MP resolution in web browser, the frame rate would show as 20fps, while the actual frame rate is 15fps. When Capture Mode is off and sub stream frame rate is set as 25/30fps, saving would lead to error information of device error, and the frame rate would be 15fps.
- For R6 models, OSD may disappear occasionally. This problem will be solved in V5.5.0.
- Currently the image of 4MP model is clearer than 5MP model.
- In BNC output, the resolution is 704*574. For the screens that don't support this resolution, the image would be abnormal in the right side.





*for 4XX2, 4X24F Network Cameras (V5.4.0 build160419)

New Features

Newly added the ZF5 lens for DS-2CD4332FWD.

Optimizations

Remove the Day & Night switch sensitivity for the devices with photo resistances.

Leftover Problems

- The Weekly/ Monthly /Annual Report of counting statistics in the widget are slightly inaccurate. Because the counting statistics after calibrating time will be filtered if the calibration period is more than two days.
- For DS-2CD4X12FWD, The pictures of live view will be slightly yellow when enabling WDR in the bright scene.
- It has the same brightness for DS-2CD4012F-A when the exposure times are 1/10000 and 1/100000 in the PAL.
- <u>In the 1920*1080@25fps, the distortion of image is more serious when enabling the lens</u>
 distortion correction for DS-2CD4012F-A.
- In the 1920*1080@30fps, it will appear a frame green screen occasionally while live view when enabling the lens distortion correction and WDR simultaneously for DS-2CD4332FWD-IZHS.
- For DS-2CD4212FWD-IZS (8-32mm), it will appear the color edge on the left and right sides of the upper part of pictures when enabling the lens distortion correction and adjusting to the T-end.
- For all R1 platform devices, it will upgrade more slowly if enable more functions
 simultaneously include Smart264, VCA, Face Detection, Motion Detection, Defocus Detection,
 Intrusion Detection, Line Crossing Detection.

*for 4X24FWD, 4X26FWD Network Cameras (V5.4.0 build160414)

New Features

- Newly added the ZF5 (2.8-12mm) lens for DS-2CD4A24FWD.
- DS-2CD4A26FWD & DS-2CD4826FWD newly support the ZF2-D (8-32mm) lens.

Optimizations



- Remove the Day & Night switch sensitivity for the devices with photo resistances.
- IDS-2CD6124FWD/C & IDS-2CD6412FWD/C remove the function of setting the statistical cycle.

Leftover Problems

- For DS-2CD6626B/E, the peripheral configuration function cannot control the fill-in lights. It cannot realize Day & Night Switch automatically in the Auto-Switch mode.
- <u>It will appear the alarm of Unattended Baggage Detection or Object Removal Detection when</u>
 putting an object in the drawn area.
- It needs approx. 2 minutes to search the pictures when the total number of pictures is more than 4000.
- <u>It will appear redundant parts in the up and down for the SDI & HDMI output image when</u> enabling distortion correction.



*for 4XX5 Network Cameras (V5.4.0 build160421)

New Features

• The default capture resolutions of DS-2CD4X85F & DS-2CD4XC5F are main stream and DS-2CD4X65 is sub stream.

Optimizations

- Control the time in the 5s when opening/closing the WDR or switching the resolution for all R4 platform devices.
- Solve the issue that the local output cannot be closed in the previous version for all R4 platform devices..
- Solve the issue that R4 4K cameras cannot live view in the 4096*2160 resolution with sub



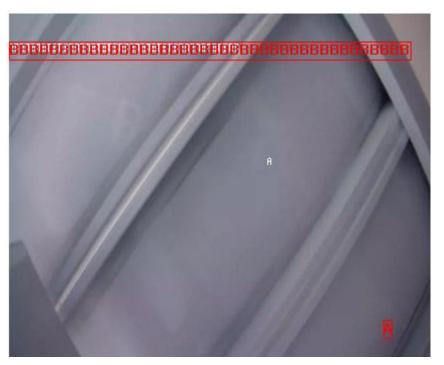
stream when enabling the H.264+.

• The Max Bitrate of DS-2CD4X65 is modified from 24fps to 20fps in the 3012*2048 resolution.

Solve the issue that sub stream cannot live view when enabling the FTP capture in the 3012*2048 resolution.

Leftover Problems

- For R4 6MP devices, the widget cannot access the stream when switching the resolution from 3072*2048 to 2560*2048. The issue can be solved by reopening the web page.
- For the devices with 2048*1536 resolution or above, the bottom-right OSD will be moved to the top-left when the spacing between two lines OSD is too wide.





- For the R4 platform devices with 2048*1536 resolution or above, it will not display the Enter/Leave information when enabling counting. It will turn to be normal if closing the OSD.
- It will appear the phenomenon of losing videos saved in the SD card for 4-24s when the



Bitrate Type is constant and Max. Bitrate is 8M.

- For DS-2CD4x85, DS-2CD4xC5, if the exposure time is set to 1s, it will appear the phenomenon of living view failed with sub-stream or third-stream occasionally when the resolution of main stream is 3840*2160 or 4096*2160.
- For DS-2CD4A85F-IZHS with the resolution of 3840*2160, the noise will be obvious in the scene with lights.
- For the devices with WDR, it will appear no stream phenomenon when enabling HLC, Slow shutter and High frame simultaneously. The HLC function will be invalid if set up the high frame.
- For DS-2CD4x65 in NTSC with resolution of 3072*1728, the sub stream will live view unsuccessfully with 4CIF, 20fps. The issue can be solved by decreasing the frame of sub stream to 4fps.

*for 4-line Lite Series/DS-2CD4A24FWD (4.7~94mm) Network Cameras

- Support 16Mbps maximum bit rate.
- The information for H.264+ is improved for better understanding.

Compatibility Update

- HIKCGI version: V2.0;
- ISAPI version: V2.4;
- PSIA version: V1.1, official test version: V2.0.2;
- ONVIF version: V2.4, official test tool version: V14.06;
- NUUO:
 - 1. Version: V6.2.0.6, drive version: V4.10;
 - 2. Protocol: HIKCGI

Milestone:

- 1. Milestone Enterprise 8.1a(10.0a), Milestone drive version (Driver 8.3), test HIKCGI
- 2. Milestone software version (Milestone Corporate 10.0a), Milestone drive version (Driver 8.3), test HIKCGI

Avigilon:

- 1. Control Center: V5.6.2.18;
- 2. Test ONVIF.



• Excaqvision:

1. Version: 7.2.3

2. Protocol: HIKCGI, ONVIF

NAS(Only test for Brainaire):

DS-A2016R, DS-A1016RS V2.2.0-7

Customer Impact and Recommended Action

This update refers to function/compatibility improvement and will take effect automatically after the Date of Change. We are very sorry for any inconvenience of use-habit changes caused by this action. For any questions and request for this firmware, please contact our local technical support team.

Remarks:

- Hikvision reserves the right to change, alter or withdraw the above notification without prior notice.
- Product design and specifications are subject to change without prior notice.
- The Hikvision firmware may contain defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.
- Hikvision is not liable for any typing or printing errors.

Hikvision Digital Technology CO., Ltd.

No. 555 Qianmo Road, Binjiang District, Hangzhou 310051, China

Tel: +86-571-8807-5998 FAX: +86-571-8993-5635

Email: overseabusiness@hikvision.com



Supported Product List (2XX2)		
Product Category	Model Number	Product Description
Mini IR Bullet	DS-2CD2022WD-I	2MP, IR, WDR
Mini IR Bullet	DS-2CD2042WD-I	4MP, IR, WDR
Mini IR Bullet	DS-2CD2052-I	5MP, IR
IR Fixed Dome	DS-2CD2122FWD-I(W)(S)	2MP, IR, Wi-Fi, WDR
IR Fixed Dome	DS-2CD2142FWD-I(W)(S)	4MP, IR, Wi-Fi, WDR
IR Fixed Dome	DS-2CD2152F-I(W)(S)	5MP, IR, Wi-Fi
EXIR Turret	DS-2CD2322WD-I	2MP, IR, WDR
EXIR Turret	DS-2CD2342WD-I	4MP, IR, WDR
EXIR Turret	DS-2CD2352(D)-I	5MP, IR
IR Mini Dome	DS-2CD2522FWD-(I)(W)(S)	2MP, IR, WDR, Wi-Fi/Audio/Alarm optional
IR Mini Dome	DS-2CD2542FWD-I(W)	4MP, IR, WDR, Wi-Fi optional
IR Mini Dome	DS-2CD2552FWD-I(W)	5MP, IR, Wi-Fi optional
VF IR Bullet	DS-2CD2622FWD-I(Z)(S)	2MP, VF lens, IR, Audio/Alarm optional
VF IR Bullet	DS-2CD2642FWD-I(Z)(S)	4MP, VF lens, IR, Audio/Alarm optional
VF IR Bullet	DS-2CD2652F(D)-I(Z)(S)	5MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2722FWD-I(Z)(S)	2MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2742FWD-I(Z)(S)	4MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2752F-I(Z)(S)	5MP, VF lens, IR, Audio/Alarm optional
EXIR Bullet	DS-2CD2T22WD-I3/I5/I8	2MP, IR, WDR
EXIR Bullet	DS-2CD2T42WD-I3/I5/I8	4MP, IR, WDR
EXIR Bullet	DS-2CD2T52-I3/I5/I8	5MP, IR
PT Dome	DS-2CD2F12FWD-I(W)(S)Z	1.3MP, IR, WDR, PT, VF lens



PT Dome	DS-2CD2F22FWD-I(W)(S)	2MP, IR, WDR, PT, WiFi/Audio/Alarm optional
PT Dome	DS-2CD2F42FWD-I(W)(S)	4MP, IR, WDR, PT, WiFi/Audio/Alarm optional
PT Dome	DS-2CD2F52F-I(W)(S)	5MP, IR, PT, WiFi/Audio/Alarm optional

Supported Product List (XXX0)		
Product Category	Model Number	Product Description
Mini IR Bullet	DS-2CD2010-I	1.3MP, IR
Mini IR Bullet	DS-2CD2010F-I(W)	1.3MP, IR, Wi-Fi
Mini IR Bullet	DS-2CD2020-I	2MP, IR
Mini IR Bullet	DS-2CD2020F-I(W)	2MP, IR, Wi-Fi
IR Fixed Dome	DS-2CD2110F-I(W)(S)	1.3MP, IR
IR Fixed Dome	DS-2CD2120F-I(W)(S)	2MP, IR
IR Cube	DS-2CD2410F-I(W)	1MP, IR, Wi-Fi optional
IR Cube	DS-2CD2420F-I(W)	2MP, IR, Wi-Fi optional
Mini Dome	DS-2CD2510F	1.3MP
Mini Dome	DS-2CD2520F	2MP
VF IR Bullet	DS-2CD2610F-I(Z)(S)	1.3MP, VF lens, IR, Audio/Alarm optional
VF IR Bullet	DS-2CD2620F-I(Z)(S)	2MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2710F-I(Z)(S)	1.3MP, VF lens, IR, Audio/Alarm optional
VF IR Dome	DS-2CD2720F-I(Z)(S)	2MP, VF lens, IR, Audio/Alarm optional
Box Camera	DS-2CD2810F	1.3MP, box camera
Box Camera	DS-2CD2820F	2MP, box camera
EXIR Bullet	DS-2CD2T10-I3/I5/I8	1.3MP, EXIR Bullet
EXIR Bullet	DS-2CD2T20-I3/I5/I8	2MP, EXIR Bullet
IR Mini PT	DS-2CD2Q10FD-IW	1MP, Wi-Fi
Pinhole	DS-2CD2D14WD	1MP
Alarm Cube	DS-2CD2C10F-IW	1MP, Wi-Fi
IR Dome	DS-2CD6510-I(O)	1.3MP, IR, Audio/Alarm optional



	Supported Product	List (4XX2, 4XX4)
Product Category	Model Number	Product Description
Box Camera	DS-2CD4012F-(A)(P)	1.3MP, 60fps, ABF optional, Wi-Fi optional
Box Camera	DS-2CD4012FWD-(A)(P)	1.3MP, WDR, ABF optional, Wi-Fi optional
Box Camera	DS-2CD4024F-(A)(P)	2MP, ABF optional, Wi-Fi optional
Box Camera	DS-2CD4032FWD-(A)(P)	3MP, WDR, ABF optional, Wi-Fi optional
IR Indoor Dome	DS-2CD4112F-I(Z)	1.3MP, 60fps, Motorized VF lens optional
IR Indoor Dome	DS-2CD4112FWD-I(Z)	1.3MP, WDR, Motorized VF lens optional
IR Indoor Dome	DS-2CD4124F-I(Z)	1.3MP, Motorized VF lens optional
IR Indoor Dome	DS-2CD4132FWD-I(Z)	1.3MP, WDR, Motorized VF lens optional
IR Bullet	DS-2CD4212F-I(Z)(S)(H)	1.3MP, Motorized VF lens optional, Heater optional
IR Bullet	DS-2CD4212FWD-I(Z)(S)(H)	1.3MP, WDR, Motorized VF lens optional, Heater optional
IR Bullet	DS-2CD4224F-I(Z)(S)(H)	2MP, Motorized VF lens optional, Heater optional
IR Bullet	DS-2CD4232FWD-I(Z)(S)(H)	3MP, WDR, Motorized VF lens optional, Heater optional
IR Outdoor Dome	DS-2CD4312F-I(Z)(S)(H)	1.3MP, Motorized VF lens optional, Heater optional
IR Outdoor Dome	DS-2CD4312FWD-I(Z)(S)(H)	1.3MP, WDR, Motorized VF lens optional, Heater optional
PTZ Outdoor Dome	DS-2CD4312F-PTZ	1.3MP, PTZ outdoor dome
IR Outdoor Dome	DS-2CD4324F-I(Z)(S)(H)	2MP, Motorized VF lens optional, Heater optional
PTZ Outdoor Dome	DS-2CD4324F-PTZ	2MP, PTZ outdoor dome
IR Outdoor Dome	DS-2CD4332FWD-I(Z)(S)(H)	3MP, WDR, Motorized VF lens optional, Heater optional
PTZ Outdoor Dome	DS-2CD4332FWD-PTZ	3MP, PTZ outdoor dome
Covert Camera	DS-2CD6412FWD	1.3MP, WDR



Supported Product List (XX26, XX24FWD)		
Product Category	Model Number	Product Description
Box Camera	DS-2CD4026FWD-(A)(P)	Darkfighter, 120dB
Indoor Dome	DS-2CD4126FWD-IZ	Darkfighter, 120dB
Outdoor Dome	DS-2CD4526FWD-IZ(H)	Darkfighter, 120dB
Outdoor Bullet	DS-2CD4626FWD-IZ(H)	Darkfighter, 120dB
Outdoor Bullet	DS-2CD4A26FWD-IZ(H)(S)	Darkfighter, 120dB
Box Camera	DS-2CD6026FHWD-(A)(P)	2MP, 60fps, Darkfighter, ABF optional
ntelligent Camera	iDS-2CD6024FWD/(B/F)	2MP, Intelligent
ntelligent Camera	iDS-2CD6124FWD-IZ/(H/C/B/F)	2MP, Intelligent
Outdoor Bullet	DS-2CD6226FWD-IZ(H)(S)	Darkfighter, 2MP
ntelligent Camera	iDS-2CD6412FWD/C	People Counting

Supported Product List (4XX5)		
Product Category	Model Number	Product Description
Box Camera	DS-2CD4025FWD-(A)(P)	Lightfighter, 2MP, WDR
Box Camera	DS-2CD4035F-(A)(P)	ЗМР
Box Camera	DS-2CD4035FWD-(A)(P)	3MP, WDR
Box Camera	DS-2CD4065F-(A)(P)	6MP
Box Camera	DS-2CD4085F-(A)(P)	8MP
Box Camera	DS-2CD40C5F-(A)(P)	12MP
Indoor Dome	DS-2CD4125FWD-IZ	Lightfighter, 2MP, WDR
Indoor Dome	DS-2CD4135F-IZ	ЗМР
Indoor Dome	DS-2CD4135FWD-IZ	3MP, WDR
Indoor Dome	DS-2CD4165F-IZ	6MP
Indoor Dome	DS-2CD4185F-IZ	8MP
Indoor Dome	DS-2CD41C5F-IZ	12MP
Outdoor Dome	DS-2CD4525FWD-IZ(H)	Lightfighter, 2MP, WDR
Outdoor Dome	DS-2CD4535F-IZ(H)	3МР



Outdoor Dome	DS-2CD4535FWD-IZ(H)	3MP, WDR
Outdoor Dome	DS-2CD4565F-IZ(H)	6MP
Outdoor Dome	DS-2CD4585F-IZ(H)	8MP
Outdoor Dome	DS-2CD45C5F-IZ(H)	12MP
Outdoor Bullet	DS-2CD4625FWD-IZ(H)(S)	Lightfighter, 2MP, WDR
Outdoor Bullet	DS-2CD4635F-IZ(H)(S)	ЗМР
Outdoor Bullet	DS-2CD4635FWD-IZ(H)(S)	3MP, WDR
Outdoor Bullet	DS-2CD4665F-IZ(H)(S)	6MP
Outdoor Bullet	DS-2CD4685F-IZ(H)(S)	8MP
Outdoor Bullet	DS-2CD46C5F-IZ(H)(S)	12MP
IR Bullet	DS-2CD4A25FWD-IZ(S)	Lightfighter, 2MP, WDR
IR Bullet	DS-2CD4A35F-IZ(S)	ЗМР
IR Bullet	DS-2CD4A35FWD-IZ(S)	3MP, WDR
IR Bullet	DS-2CD4A65F-IZ(S)	6MP
IR Bullet	DS-2CD4A85F-IZ(S)	8MP
IR Bullet	DS-2CD4AC5F-IZ(S)	12MP

Supported Product List (4-line Lite Series, 20x model)		
roduct Category	Model Number	Product Description
Outdoor Bullet	DS-2CD4A26EFWD-IZ(H)(S)	Lite Series, 2MP, VF, WDR
Box Camera	DS-2CD4026EFWD	Lite Series, 2MP, VF, WDR
Indoor Dome	DS-2CD4126EFWD-IZ(H)(S)	Lite Series, 2MP, VF, WDR
Outdoor Bullet	DS-2CD4B16FWD-IZ(S)	Darkfighter Lite, 1.3MP, VF lens
Outdoor Bullet	DS-2CD4B26FWD-IZ(S)	Darkfighter Lite, 2MP, VF lens
Outdoor Dome	DS-2CD4D16FWD-IZ(S)	Darkfighter Lite, 1.3MP, VF lens
Outdoor Dome	DS-2CD4D26FWD-IZ(S)	Darkfighter Lite, 2MP, VF lens
Outdoor Bullet	DS-2CD4A24FWD-IZ(H)(S)(B)	20x lens, 2MP, heater