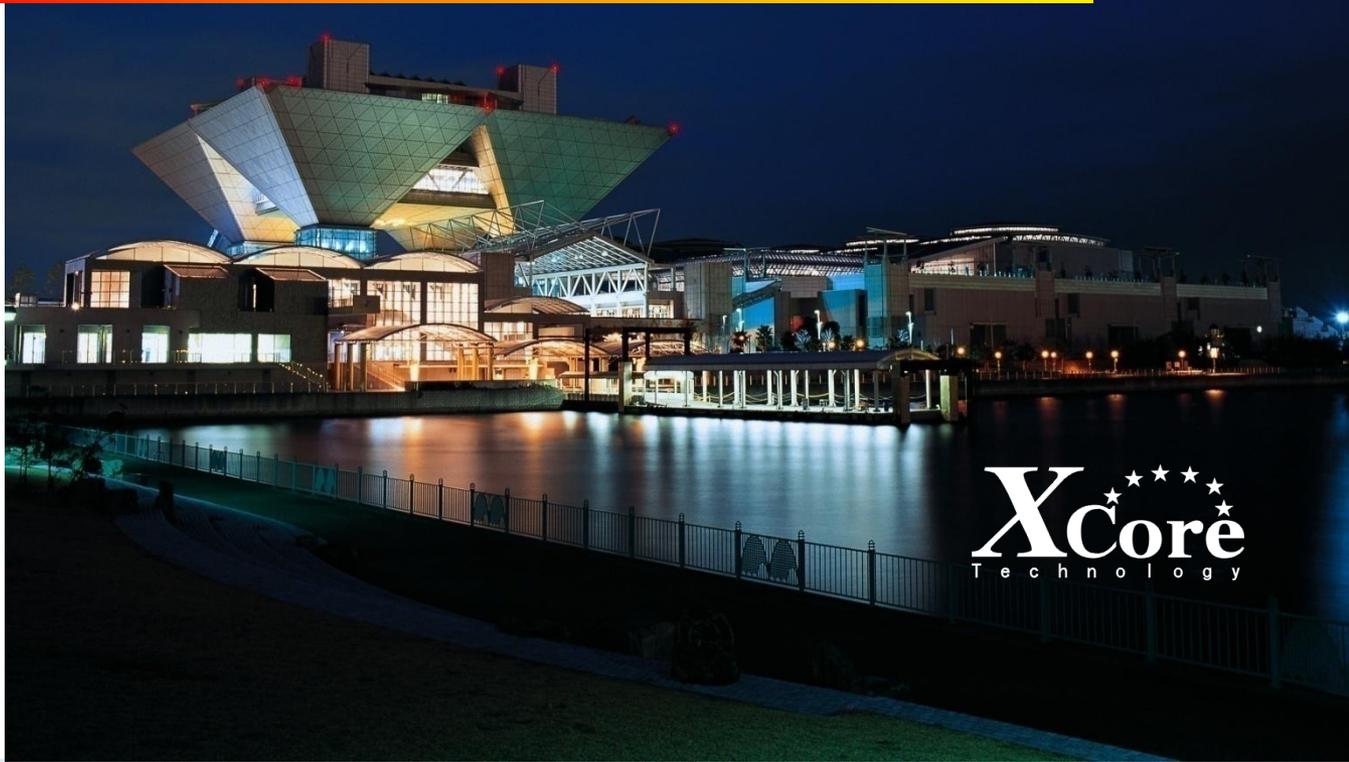NDAA Compliant

Dual Light Night Vision Smart Network Camera

XCore Technology

Fine quality made in Taiwan

Features

- 2MP/5MP/8MP SONY Starvis CMOS sensor + Novatek (Taiwan) chip.
- Support H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI compression format.
- Support 120dB WDR (Wide Dynamic Range), 3DNR (3D Noise Reduction), BLC (Backlight Compensation), AWB (Auto White Balance).
- Support multi-stream transmission, each stream can be individually set and adjusted.
- Support automatic adaptation of network bandwidth.
- Support standard ONVIF protocol.
- Support motion detection, image mask, automatic sending email and photo shooting when triggered.
- Fixed lens model with built-in microphone; optional 2.8mm/3.6mm/6mm lens.
- Vari-Focal lens model with built-in microphone; optional Audio I/O, Alarm I/O.
- Support OSD location setting to avoid blocking the screen.
- Built-in dual light (mixing warm light and IR LED), automatically fill light when the scene light is insufficient.
- Support RJ45 10/100M, built-in POE IEEE 802.3af network power supply.
- Support mobile monitoring (iPhone / iPad / Android / Android Pad).
- Support various browsers (IE8~11 / Chrome / Firefox / Safari) and client software (VMS) for Mac & Windows.

Highlights

Novatek (Taiwan) chip

Smart Detection:

Intrusion Detection | **Line Crossing Detection** | **Loiter Detection** | **People Gathering**

Field of View (FOV):

- Fixed 2.8mm Lens: 96°(H); 52°(V); 114°(D)
- Fixed 3.6mm Lens: 84°(H); 48°(V); 97°(D)
- Fixed 6.0mm Lens: 53°(H); 30°(V); 60°(D)
- Vari−Focal 2.7~13.5mm Lens: 108°~30°(H); 56°~17°(V); 130°~34°(D)

Full Color Performance

IR Performance

Product Types & Models

XCore Technology
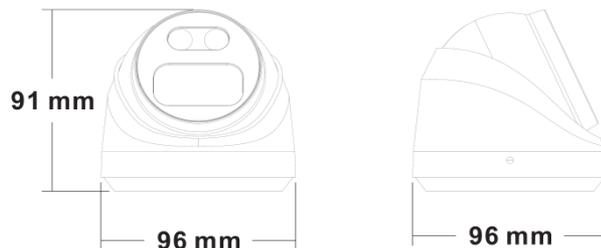
Fixed Dome Camera (25M)
- 2MP Model No.: NFC2D2H
- 5MP Model No.: NFC5D2H
- 8MP Model No.: NFC8D2H

91 mm
96 mm
96 mm

Fixed Bullet Camera (25M)
- 2MP Model No.: NFC2B3H
- 5MP Model No.: NFC5B3H
- 8MP Model No.: NFC8B3H

70.07
67.50
169.49
84.32

Product Types & Models

XCore Technology
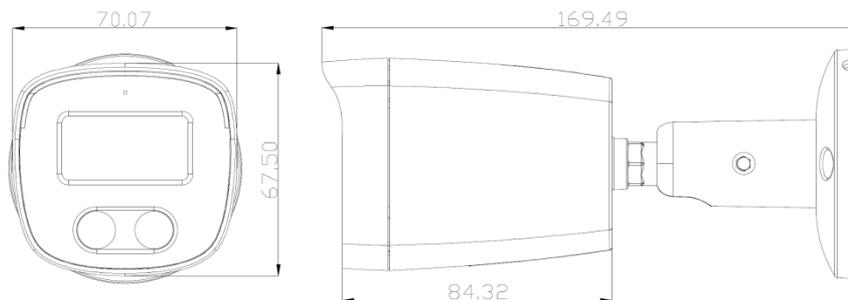
Motorized Vari-Focal Dome Camera (30M)
- 2MP Model No.: NFCA2D4H
- 5MP Model No.: NFCA5D4H
- 8MP Model No.: NFCA8D4H

∅ 115

113

∅85

Product Types & Models

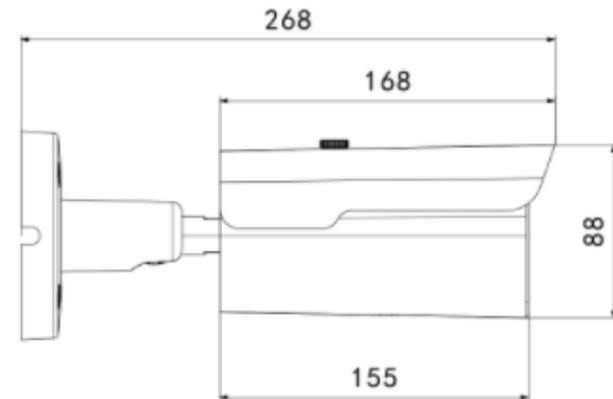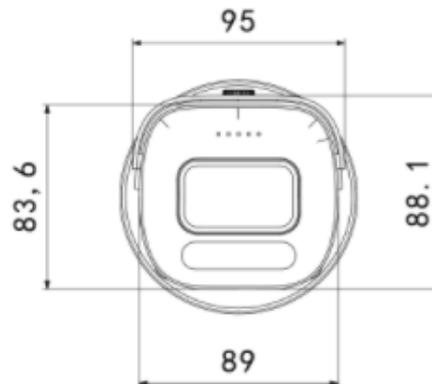**XCore** Technology
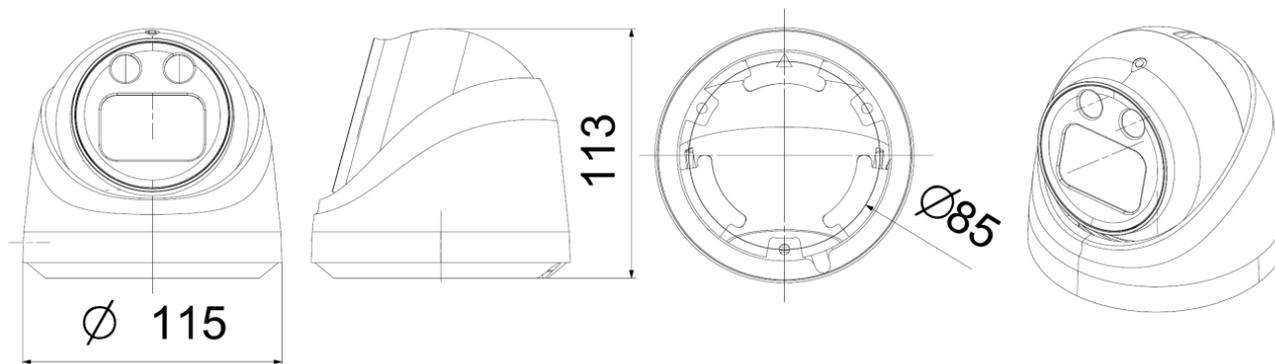
Motorized Vari-Focal Long Range Bullet Camera (40M)

- 2MP Model No.: NFCA2R2H
- 5MP Model No.: NFCA5R2H
- 8MP Model No.: NFCA8R2H
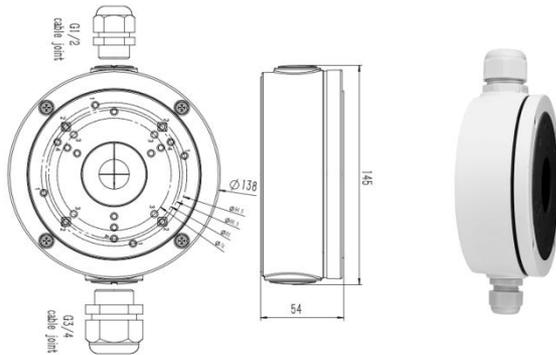
Optional Junction Box

- Model No.: XPB2J

Specifications (Fixed Lens)

XCore Technology

	2MP	NFC2D2H	NFC2B3H
Model No.		NFC2D2H	NFC2B3H
CMOS Image Sensor		1/2.9" 2MP SONY IMX307 Starvis Back Illuminated CMOS Sensor + Novatek NT98561 Chip	
Effective Pixels (HxV)		1945x1097	
Compression Format		H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard		NTSC / PAL	
Elec. Shutter Speed		1/3~1/100,000s	
Minimum Illumination		0.001 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio		≥ 60 dB	
System Scan		Progressive	
Video Output		Network	
Hardware Reset Button		NIL	
Lens Furnished		2MP HD Board Lens Fixed Focal 3.6mm (Optional 2.8mm / 6mm)	
LED		Warm Light LED 4000K*1 & IR Array LED 850nm*1	
Projection Distance		25M	
LED Status		Auto Control	
LED Mode		Smart / Manual / Scheduled	
Ethernet		1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol		TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version		ONVIF 19.12 (Profile S/T)	
P2P		Support	
Power Supply		DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	
Browser		IE8~11 / Chrome / Firefox / Safari	

Specifications (Fixed Lens)

XCore Technology

2MP	NFC2D2H	NFC2B3H
Model No.	NFC2D2H	NFC2B3H
Main Stream-1	1920x1080@30fps	
Main Stream-2	1280x720@30fps	
Main Stream-3	720x480@30fps	
Sub-Stream-1	720x480@30fps	
Sub-Stream-2	NIL	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB	
Memory Card Slot	NIL	
Microphone	Built-in	
Audio I/O	NIL	
Alarm I/O	NIL	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10℃ to 50℃ (14°F to 122°F) / Humidity: 95% Non-condensing	
Dimensions / Weight	96(D) x 91(H)mm / 600g	70(W) x 67.5(H) x 169(L)mm / 600g

Specifications (Fixed Lens)

XCore Technology

5MP

Model No.	NFC5D2H	NFC5B3H
CMOS Image Sensor	1/2.8" 5MP SONY IMX335 Starvis Back Illuminated CMOS Sensor + Novatek NT98566 Chip	
Effective Pixels (HxV)	2616x1964	
Compression Format	H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard	NTSC / PAL	
Elec. Shutter Speed	1/3~1/100,000s	
Minimum Illumination	0.006 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio	≥ 60 dB	
System Scan	Progressive	
Video Output	Network	
Hardware Reset Button	NIL	
Lens Furnished	5MP HD Board Lens Fixed Focal 3.6mm (Optional 2.8mm / 6mm)	
LED	Warm Light LED 4000K*1 & IR Array LED 850nm*1	
Projection Distance	25M	
LED Status	Auto Control	
LED Mode	Smart / Manual / Scheduled	
Ethernet	1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol	TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version	ONVIF 19.12 (Profile S/T)	
P2P	Support	
Power Supply	DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	
Browser	IE8~11 / Chrome / Firefox / Safari	

Specifications (Fixed Lens)

XCore Technology

5MP

Model No.	NFC5D2H	NFC5B3H
Main Stream-1	2592x1944@30fps	
Main Stream-2	2560x1440@30fps	
Main Stream-3	1920x1080@30fps / 1280x720@30fps	
Sub-Stream-1	1280x720@30fps	
Sub-Stream-2	720x480@30fp	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB	
Memory Card Slot	NIL	
Microphone	Built-in	
Audio I/O	NIL	
Alarm I/O	NIL	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10℃ to 50℃ (14°F to 122°F) / Humidity: 95% Non-condensing	
Dimensions / Weight	96(D) x 91(H)mm / 600g	70(W) x 67.5(H) x 169(L)mm / 600g

Specifications (Fixed Lens)

8MP

Model No.	NFC**8D2**H	NFC**8B3**H
CMOS Image Sensor	1/2.8" 8MP SONY IMX415 Starvis Back Illuminated CMOS Sensor + Novatek NT98560 Chip	
Effective Pixels (HxV)	3864x2192	
Compression Format	H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard	NTSC / PAL	
Elec. Shutter Speed	1/3~1/100,000s	
Minimum Illumination	0.02 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio	≥ 60 dB	
System Scan	Progressive	
Video Output	Network	
Hardware Reset Button	NIL	
Lens Furnished	8MP HD Board Lens Fixed Focal 3.6mm (Optional 2.8mm / 6mm)	
LED	Warm Light LED 4000K*1 & IR Array LED 850nm*1	
Projection Distance	25M	
LED Status	Auto Control	
LED Mode	Smart / Manual / Scheduled	
Ethernet	1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol	TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version	ONVIF 19.12 (Profile S/T)	
P2P	Support	
Power Supply	DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	
Browser	IE8~11 / Chrome / Firefox / Safari	

Specifications (Fixed Lens)

XCore Technology

Model No.	NFC**8D2**H	NFC**8B3**H
8MP		
Main Stream-1	3840x2160@20fps	
Main Stream-2	2560x1440@20fps	
Main Stream-3	1920x1080@20fps / 1280x720@20fps	
Sub-Stream-1	1280x720@20fps	
Sub-Stream-2	720x480@20fp	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB	
Memory Card Slot	NIL	
Microphone	Built-in	
Audio I/O	NIL	
Alarm I/O	NIL	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10℃ to 50℃ (14℉ to 122℉) / Humidity: 95% Non-condensing	
Dimensions / Weight	96(D) x 91(H)mm / 600g	70(W) x 67.5(H) x 169(L)mm / 600g

Specifications (V.F. Lens)

XCore Technology

2MP

Model No.	NFCA2D4H	NFCA2R2H
CMOS Image Sensor	1/2.9" 2MP SONY IMX307 Starvis Back Illuminated CMOS Sensor + Novatek NT98561 Chip	
Effective Pixels (HxV)	1945x1097	
Compression Format	H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard	NTSC / PAL	
Elec. Shutter Speed	1/3~1/100,000s	
Minimum Illumination	0.001 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio	≥ 60 dB	
System Scan	Progressive	
Video Output	Network	
Hardware Reset Button	NIL	
Lens Furnished	2MP HD Motorized Vari-Focal Auto Focus 2.7~13.5mm @ F1.6~F3.3	
LED / Projection Distance	Warm Light LED 4000K*1 & IR Array LED 850nm*1 / 25M	Warm Light LED 4000K*2 & IR Array LED 850nm*2 / 25M
LED Status	Auto Control	
LED Mode	Smart / Manual / Scheduled	
Ethernet	1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol	TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version	ONVIF 19.12 (Profile S/T)	
P2P	Support	
Power Supply	DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	DC12V±10%, 950mA; Built-in POE, Support IEEE 802.3af
Browser	IE8~11 / Chrome / Firefox / Safari	

Specifications (V.F. Lens)

XCore Technology

2MP

	NFCA2D4H	NFCA2R2H
Model No.	NFCA2D4H	NFCA2R2H
Main Stream-1	1920x1080@30fps	
Main Stream-2	1280x720@30fps	
Main Stream-3	720x480@30fps	
Sub-Stream-1	720x480@30fps	
Sub-Stream-2	NIL	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB / SD Card	NVR / VMS / WEB / SD Card (Optional)
Memory Card Slot	Internal (Support max. 1TB)	Optional Internal (Support max. 512GB)
Microphone	Built-in (w/o Audio I/O)	
Audio I/O	Optional 1CH / 1CH (w/o Microphone)	
Alarm I/O	Optional 1CH / 1CH	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10℃ to 50℃ (14°F to 122°F) / Humidity: 95% Non-condensing	
Dimensions / Weight	115(D) x 113(H)mm / 800g	95(W) x 88(H) x 268(L)mm / 1,500g

Specifications (V.F. Lens)

XCore Technology

Model No.	NFCA5D4H	NFCA5R2H
CMOS Image Sensor	1/2.8" 5MP SONY IMX335 Starvis Back Illuminated CMOS Sensor + Novatek NT98566 Chip	
Effective Pixels (HxV)	3864x2192	
Compression Format	H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard	NTSC / PAL	
Elec. Shutter Speed	1/3~1/100,000s	
Minimum Illumination	0.006 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio	≥ 60 dB	
System Scan	Progressive	
Video Output	Network	
Hardware Reset Button	NIL	
Lens Furnished	5MP HD Motorized Vari-Focal Auto Focus 2.7~13.5mm @ F1.6~F3.3	
LED / Projection Distance	Warm Light LED 4000K*1 & IR Array LED 850nm*1 / 25M	Warm Light LED 4000K*2 & IR Array LED 850nm*2 / 25M
LED Status	Auto Control	
LED Mode	Smart / Manual / Scheduled	
Ethernet	1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol	TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version	ONVIF 19.12 (Profile S/T)	
P2P	Support	
Power Supply	DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	DC12V±10%, 950mA; Built-in POE, Support IEEE 802.3af
Browser	IE8~11 / Chrome / Firefox / Safari	

Specifications (V.F. Lens)

XCore Technology

5MP

Model No.	NFCA5D4H	NFCA5R2H
Main Stream-1	2592x1944@30fps	
Main Stream-2	2560x1440@30fps	
Main Stream-3	1920x1080@30fps / 1280x720@30fps	
Sub-Stream-1	1280x720@30fps	
Sub-Stream-2	720x480@30fp	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB / SD Card	NVR / VMS / WEB / SD Card (Optional)
Memory Card Slot	Internal (Support max. 1TB)	Optional Internal (Support max. 512GB)
Microphone	Built-in (w/o Audio I/O)	
Audio I/O	Optional 1CH / 1CH (w/o Microphone)	
Alarm I/O	Optional 1CH / 1CH	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10℃ to 50℃ (14℉ to 122℉) / Humidity: 95% Non-condensing	
Dimensions / Weight	115(D) x 113(H)mm / 800g	95(W) x 88(H) x 268(L)mm / 1,500g

Specifications (V.F. Lens)

XCore Technology

8MP

Model No.	NFCA8D4H	NFCA8R2H
CMOS Image Sensor	1/2.8" 8MP SONY IMX415 Starvis Back Illuminated CMOS Sensor + Novatek NT98560 Chip	
Effective Pixels (HxV)	3864x2192	
Compression Format	H.264 / H.264+ / H.265 / H.265+ / JPEG / AVI	
Video Format Standard	NTSC / PAL	
Elec. Shutter Speed	1/3~1/100,000s	
Minimum Illumination	0.02 LUX @ F1.6 (AGC ON) / 0 LUX @ IR / 0 LUX @ Warm Light	
S/N Ratio	≥ 60 dB	
System Scan	Progressive	
Video Output	Network	
Hardware Reset Button	NIL	
Lens Furnished	8MP HD Motorized Vari-Focal Auto Focus 2.7~13.5mm @ F1.6~F3.3	
LED / Projection Distance	Warm Light LED 4000K*1 & IR Array LED 850nm*1 / 25M	Warm Light LED 4000K*2 & IR Array LED 850nm*2 / 25M
LED Status	Auto Control	
LED Mode	Smart / Manual / Scheduled	
Ethernet	1*RJ-45 10/ Auto Adaptive (Built-in 6KV Anti-Static Protection)	
Network Protocol	TCP/IP; IPv4/v6; ICMP; HTTP; HTTPS; FTP; DHCP; DNS; DDNS; RTP; RTSP; RTCP; PPPoE; NTP; SMTP; UDP; Qos; 802.1x	
ONVIF Version	ONVIF 19.12 (Profile S/T)	
P2P	Support	
Power Supply	DC12V±10%, 700mA; Built-in POE, Support IEEE 802.3af	DC12V±10%, 950mA; Built-in POE, Support IEEE 802.3af
Browser	IE8~11 / Chrome / Firefox / Safari	

Specifications (V.F. Lens)

8MP

Model No.	NFCA8D4H	NFCA8R2H
Main Stream-1	3840x2160@20fps	
Main Stream-2	2560x1440@20fps	
Main Stream-3	1920x1080@20fps / 1280x720@20fps	
Sub-Stream-1	1280x720@20fps	
Sub-Stream-2	720x480@20fp	
Mobile Devices	iPhone / iPad / Android / Android Pad	
Smart Detection	Base on Humanoid & Vehicle: Intrusion Detection / Line Cross Detection Based on Humanoid: Motion Detection / Loiter Detection / People Gather Detection / Enter Area	
Day & Night	Full Color; B/W (IR-cut)	
Image Configuration	Saturation/Brightness/Contrast/Sharpness/Mirror/3DNR/ White Balance/Anti-Flicker/HLC/Video Tampering	
ROI (Region of Interest)	Support	
Wide	120dB	
Image Mask	3 Rectangular Areas	
Video Record	NVR / VMS / WEB / SD Card	NVR / VMS / WEB / SD Card (Optional)
Memory Card Slot	Internal (Support max. 1TB)	Optional Internal (Support max. 512GB)
Microphone	Built-in (w/o Audio I/O)	
Audio I/O	Optional 1CH / 1CH (w/o Microphone)	
Alarm I/O	Optional 1CH / 1CH	
Housing Material	Metal IP67 Weatherproof	
Operating Environment	Temperature: -10°C to 50°C (14°F to 122°F) / Humidity: 95% Non-condensing	
Dimensions / Weight	115(D) x 113(H)mm / 800g	95(W) x 88(H) x 268(L)mm / 1,500g

Light Settings

|	
Day and Night Switch	Auto ⌄
Sensitivity	3 ⌄
Fill Light Mode	IR Mode ⌄
Brightness Adjustment	Manual ⌄
Light Brightness	▬▬▬▬▬▬▬ 100

- Day and Night Switch: Auto
- Sensitivity: 0~7 adjustable (Default: 3), the smaller the value, the darker it will switch to B&W image.
- Fill Light Mode:
    ◦ IR Mode: Auto turn on IR LED (Switch to B&W image).
    ◦ Warm Light Mode: Auto turn on warm light LED (Switch to color image).
    ◦ Intelligent Mode: Auto turn on IR LED and auto switch to warm light LED when humanoid / vehicles are detected.
- Light Brightness: Auto / Manual: The larger the value, the brighter the light.

Day and Night Switch	Day ⌄

- Day and Night Switch: Day (LED stays OFF and image stays in color, there are no other settings available)

Day and Night Switch	Night ⌄
Sensitivity	3 ⌄
Fill Light Mode	IR Mode
Light Brightness	▬▬▬▬▬▬▬ 100

- Day and Night Switch: Night (LED stays ON)
- Fill Light Mode:
    ◦ IR Mode: IR LED ON (Stays in B&W image).
    ◦ Warm Light Mode: Warm light LED ON (Stays in color image).
    ◦ Intelligent Mode: IR LED ON and auto switch to warm light LED when humanoid / vehicles are detected.
- Light Brightness: The larger the value, the brighter the light.

Day and Night Switch	Scheduled Switch ⌄		
Dawn Time	06 ⌄	:	30 ⌄
Dark Time	18 ⌄	:	00 ⌄

- Day and Night Switch: Scheduled Switch
- Scheduled Dawn Time to turn off LED
- Scheduled Dark Time to turn on LED
- Fill Light Mode: IR Mode / Warm Light Mode / Intelligent Mode (Active in Dark Time).
- Light Brightness: The larger the value, the brighter the light.

Infrastructure

Network Cameras

Switch HUB (POE)

Modem (WAN)

Mobile Devices

PC Client (VMS)

NVR
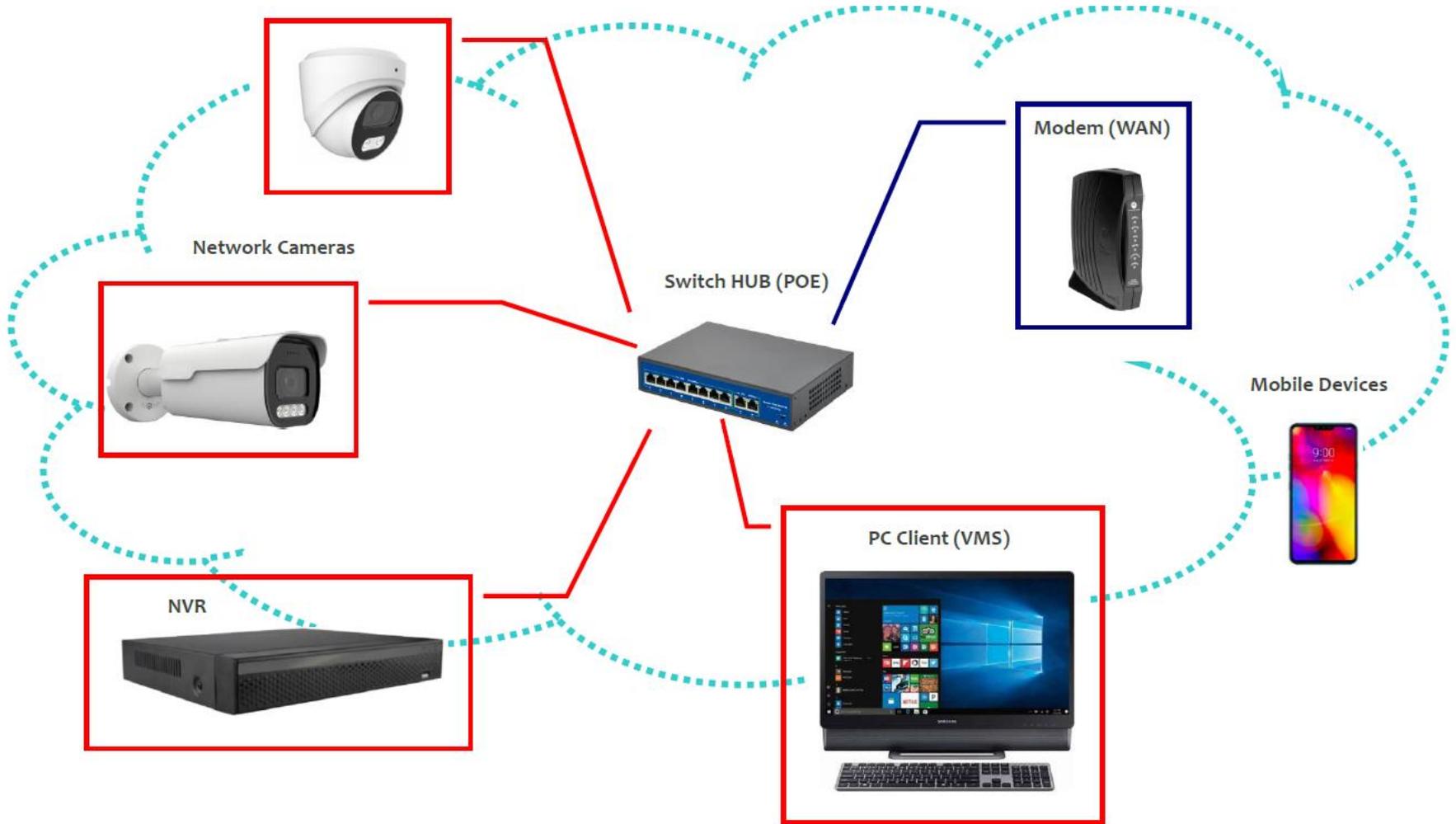
‣ Slight specification variations may occur due to product enhancement to optimize functionality.

Thank You!