SONY

Network Surveillance Products

Full Line and Accessory Guide

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See everything, miss nothing. With extraordinary 4K technology.

What is 4K?

Sony's 4K camera allows you to see everything and miss nothing. Quite simply, 4K means image resolution that is four times higher than full HD. That means much greater detail and better clarity than what you can see on current HDTVs.

Simulated image

Why 4K?

Because of the exceptional detail provided by 4K technology, security professionals can increase wide area surveillance, yet still capture, magnify, and examine the smallest parts of a scene.

This makes 4K cameras ideal for critical security applications like city surveillance, transportation, parking lots, and campuses.

Why Sony?

As a leader in sensor technology and image processing, Sony has developed several unique technologies to address existing high megapixel imaging challenges, even enhance operation flow and efficiencies. One of the important capabilities required for outdoor installations is sensitivity.

On top of that, as the resolution increases, the handling of the larger size of image data and storage needs to be addressed as well.

Sony offers two 4K network cameras, SNC-VM772R and SNC-VB770, that address sensitivity, storage and bandwidth challenges and concerns.

Sony Naming Conventions

EB640

VM641

VM772R

WR602C

SNC - X X 0 0 0 X

1	2	3	4	5	6
Letter Series Name	Letter Format Factor	Digit Generation	Digit Resolution	Digit Detailed Factor	Letter Detailed Factor

Series Name		Form Factor		Generation		Resolution		Detailed Factor		Detailed Factor	
WDR+ PTZ	W	Box	B	Gen 6	6	HD	0	Indoor	0	IR illuminator	R
Added Features	V	Minidome	M	Gen 7	7	FHD	3	Indoor Vandal	1	Harden use	H
Entry Level	E	PTZ	P	Gen X	X	Exmor R FHD	4	Outdoor	2	Wireless	W
eXtreme Value	X	Rapid	R			5M~	6	Half inch	5	Basic	B
Compact	C					~ 4K	7	Train Normal	6	Dual Light	D
Hemispherical	H							Train Wide	7	Cold Weather	C

Transportation

City Surveillance

Critical Infrastructure

Education

4K Surveillance Benefits

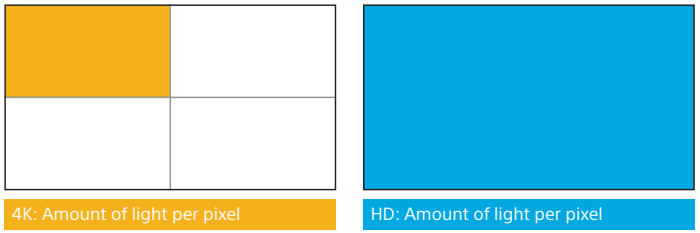
Industry Challenges

Sony has developed several unique technologies to address existing high megapixel imaging challenges and even enhance operation flow and efficiencies.

One of the important capabilities required for outdoor installations is sensitivity. As the resolution increases, the handling of the larger-size image data and storage needs to be addressed as well.

Light Sensitivity

Generally, the larger the cell or sensor size to capture light, the more sensitive it is.

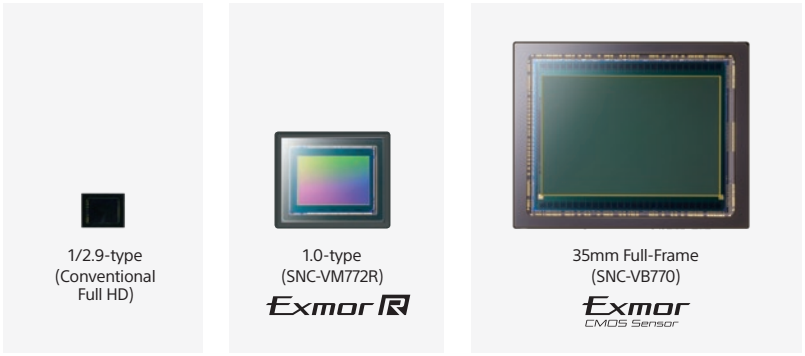


4K: Amount of light per pixel

HD: Amount of light per pixel

As the imaging sensor size becomes larger, so does the cell size.

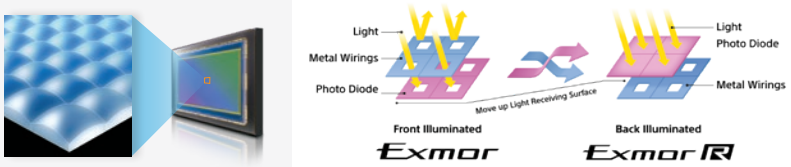
Relative Sensor Size Comparison



However, with innovative sensor design and manufacturing, such as using "on chip" lenses that the Exmor Sensor uses, or moving the sensing layer to the top of the imaging sensor as in Exmor R, greater sensitivity is achieved.

Gapless On-Chip Lens

Suppress the gap of on-chip



Light Sensitivity

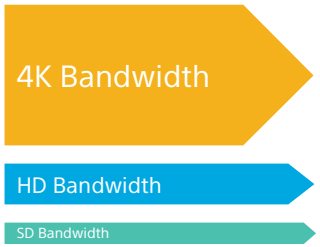
On the SNC-VM772R, there's a built-in infrared light source for nighttime shooting. This camera also has an industry-leading 2.9x zoom lens that is well matched to the image sensor.

With over 16x sensitivity to see color in low light compared to the SNC-VM772R, the SNC-VB770 does not offer near IR capability.

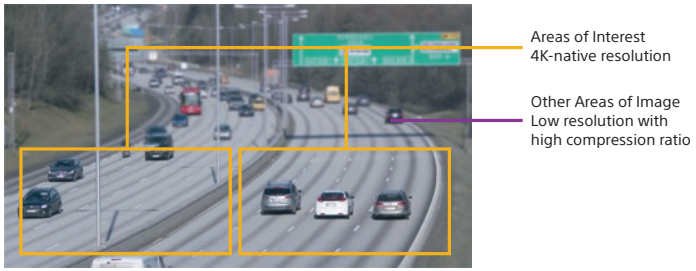
All of these advancements improve light sensitivity and provide better image quality in 4K.

Storage and Bandwidth Consumption

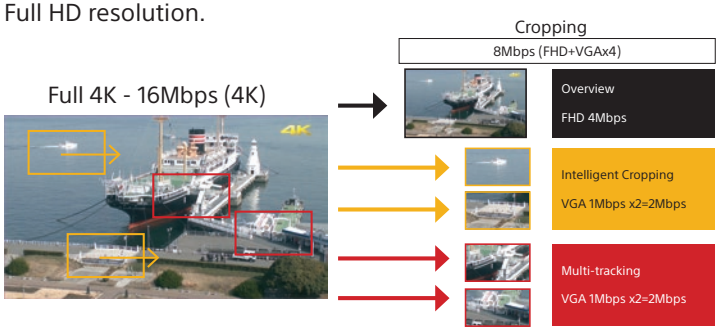
When resolution goes up, bandwidth consumption also increases. This makes deploying 4K cameras appear to be more expensive than deploying HD cameras. However it does not have to be the case.



Sony's Intelligent Coding uses H.264 dynamic and static region of interest coding techniques. This allows you to choose critical areas where resolution detail needs to be sharpest. In addition, dynamic region of interest automatically detects and tracks motion and applies lower compression to achieve clearer images.



For additional system efficiencies, the the SNC-VM772R and SNC-VB770 utilize Intelligent Cropping and Multi-Tracking, so that you may select portions of the image (or regions of interest—ROI) that you want to see in 4K—up to four areas simultaneously with a 4K-native resolution, while viewing the overall image in Full HD resolution.



This results in lower bandwidth consumption by reducing the amount of video transmitted in 4K resolution.

Function to Improve Picture Quality

The 4K camera also provides a wide selection of settings for optimal picture quality. For instance, the Intelligent Scene Capture function automatically adjusts and adapts the picture's brightness and color, depending on the time of day, weather, and lighting conditions to achieve the best picture quality.

Beyond 4K

Sony's SNC-VM772R 4K camera also comes with a 20 megapixel sensor, and the SNC-VB770 4K camera uses a 12 megapixel sensor which includes the Evidence Shot feature. This feature can produce resolution beyond 4K and is ideal for the collection and analysis of high-quality forensic evidence in situations like city surveillance, parking lots, and garages.

Full HD 4K 20 megapixels

A heightened sense of security

Sony 4K delivers maximum returns on your investment in video security and surveillance – in cities, public spaces, airports, roads and railways. Class-leading picture quality is teamed with powerful analytics and smart setup, allowing an exciting range of video monitoring applications. You'll clearly see the difference that Sony 4K delivers in any environment, with dramatically increased efficiency and lower operational costs compared with conventional video security solutions.

SNC-VB770

Ultra High Sensitivity 4K Network Camera with 35 mm Full-frame Exmor™ CMOS Sensor
Thanks to ultra-high sensitivity of expandable ISO 409600, the SNC-VB770 4K network camera features top levels of minimum illumination of less than 0.004 lx - to capture exceptionally detailed 4K/30 fps colour video, even at night and in similar extreme lighting environments.

SNC-VM772R

With four times the resolution of Full HD, Sony's outdoor 4K network security camera brings industry-leading clarity and sensitivity to critical video monitoring and surveillance applications.

Specifications

Model Name	SNC-VB770	SNC-VM772R
Video Compression Format	H.264 (High/Main Profile), JPEG H.264 (B-picture) is supported for 3840 x 2160 and 2880 x 2160 resolution.	H.264 (High/Main Profile), JPEG H.264 (B-picture) is supported for 3840 x 2160 and 2880 x 2160 resolution.
Multi Streaming Capability	■ (5)	■ (5)
Maximum Resolution	4240 x 2832	5472 x 3648
IR Illuminator	–	■
Ingress Protection	–	IP66
Vandal Resistance	–	IK10
Horizontal Viewing Angle	Depends on the lens	70.7° to 27.5° (16:9 aspect ratio) 76.6° to 29.8° (3:2 aspect ratio)
Zoom Ratio	Optical zoom: Depends on the lens Clear Image Zoom 2.0x Digital zoom 2.0x	Optical zoom 2.9x Clear Image Zoom 2.0x Digital zoom 2.0x
Focal Length	Depends on the lens	f = 8.8 mm to 25.7 mm
Lens	E-mount FE lens (option)	Built-in zoom lens
Image Sensor	35mm full frame Exmor CMOS sensor	1.0-type progressive scan Exmor R CMOS sensor
WDR/ Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 100 dB with View-DR Technology	Equivalent to 90 dB with View-DR Technology
Minimum Illumination (30 IRE)	0.004 lx (F1.4, 1/30 s, ISO409,600)	Color: 0.06 lx (F1.8, 1/30 s) B/W: 0 lx (IR LED On, F1.8, 1/30 s)
Maximum Frame Rate	H264: 30 fps (3840 x 2160)/30 fps (1920 x 1080) JPEG: 2.5 fps (4240 x 2832)	H264: 30 fps (3840 x 2160)/10 fps (1920 x 1080) JPEG: 2.5 fps (5472 x 3648)
Day/Night	–	True D/N
Noise Reduction	XDNR	XDNR
Image Stabilizer	–	Optical
Intelligent Scene Capture	■	■
Intelligent Cropping	(Mode) Dynamic/Static (Number) 2 (1920 x 1080), 4 (640 x 480)	(Mode) Dynamic/Static (Number) 2 (1920 x 1080), 4 (640 x 480)
Intelligent Coding	(Mode) Auto/Manual (Number) Up to 8 (up to 4 for Auto mode)	(Mode) Auto/Manual (Number) Up to 8 (up to 4 for Auto mode)
Edge Storage	■ / SD x1	■ / SD x1
ONVIF Conformance	Profile S	Profile S
Power Requirements	12V DC/ 24V AC/ PoE **	12V DC/ 24V AC/ PoE **
Operating Temperature	-5°C to +50°C (23°F to 122°F)	-40°C to +50°C (-40°F to +122°F)
Dimensions	104 mm x 84.6 mm x 118 mm (4 1/8 inches x 3 3/8 inches x 4 3/4") (without lens)	ø190 x 146.7 mm (ø7 1/2 inches x 5 7/8")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Fixed Network Cameras

Series Name	V Series					
Model Name	SNC-VB642D	SNC-VB632D	SNC-VB640	SNC-VB635	SNC-VB630	SNC-VB600
						
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG					
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1280 x 1024
IR Illuminator / White-light LED Illuminator	■ / ■	■ / ■	– / –	– / –	– / –	– / –
Built-in Speaker and Microphone	–	–	–	–	–	–
Environmental protection	IP66 / IK08	IP66 / IK08	–	–	–	–
Horizontal Viewing Angle	105.3° to 35.6°	105.3° to 35.6°	114.2° to 40.0°	–	114.2° to 40.0°	100.0° to 35.7°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	2.9x optical zoom 4x digital zoom 11.6x total zoom	–	2.9x optical zoom 4x digital zoom 11.6x total zoom	2.9x optical zoom 4x digital zoom 11.6x total zoom
Focal Length	f = 3.0 mm to 9.0 mm	f = 3.0 mm to 9.0 mm	f = 2.8 mm to 8.0 mm	–	f = 2.8 mm to 8.0 mm	f = 2.8 mm to 8.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	CS-mount varifocal lens	C/CS mount lens (not included)	CS mount varifocal lens	CS mount varifocal lens
Image Sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/1.9-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.006 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0 lx (IR illuminator On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.006 lx, B/W: 0.005 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.02 lx, B/W: 0.01 lx (F1.4, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Edge storage	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1
Analog Video/Monitor Output	■	■	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S	Profile S
Power Requirements	12V DC/ 24V AC/ PoE / PoE+ **	12V DC/ 24V AC/ PoE / PoE+ **	12V DC/ 24V AC/ PoE **	12V DC/ 24V AC/ PoE **	12V DC/ 24V AC/ PoE **	12V DC/ 24V AC/ PoE **
Operating Temperature	-40°C to +60°C (-40°F to +140°F) *	-40°C to +60°C (-40°F to +140°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +60°C (14°F to 140°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *
Dimensions	93 × 93 × 180.9 mm (3 3/4 x 3 3/4 x 7 1/8") ø140 x 313.4 mm (ø5 5/8 x 12 3/8") including arm	ø140 x 313.4 mm (ø5 5/8 x 12 3/8") including arm	72 x 63 x 145 mm (2 7/8 x 2 1/2 x 5 3/4") without lens 72 x 63 x 199 mm (2 7/8 x 2 1/2 x 7 7/8") with lens	Approx. 79 x 74 x 145 mm (3 1/8 x 3 x 5 3/4") without lens	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8") with lens	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8") with lens

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Fixed Network Cameras

Series Name	E Series				
Model Name	SNC-EB642R	SNC-EB632R	SNC-EB602R	SNC-EB640	SNC-EB630
					
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG				
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1920 x 1080	1280 x 1024	1920 x 1080	1920 x 1080
IR Illuminator / White-light LED Illuminator	■ / –	■ / –	■ / –	– / –	– / –
Built-in Speaker and Microphone	–	–	–	–	–
Ingress Protection	IP66 / IK08	IP66 / –	IP66 / –	– / –	– / –
Horizontal Viewing Angle	105.3° to 35.6°	105.3° to 35.6°	92.9° to 31.8°	114.2° to 40.0°	114.2° to 40.0°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	2.9x optical zoom 4x digital zoom 11.6x total zoom	2.9x optical zoom 4x digital zoom 11.6x total zoom
Focal Length	f = 3.0 mm to 9.0 mm	f = 3.0 mm to 9.0 mm	f = 3.0 mm to 9.0 mm	f = 2.8 mm to 8.0 mm	f = 2.8 mm to 8.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens	CS-mount varifocal lens	CS mount varifocal lens
Image Sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.006 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE OFF, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.006 lx, B/W: 0.005 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 60 fps *	Up to 30 fps *	Up to 30 fps *	Up to 60 fps *	Up to 30 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic	Electronic
Edge Storage	■ / SD x 1	– / –	– / –	■ / SD x 1	– / –
Analog Video/Monitor Output	■	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S
Power Requirements	PoE **	PoE **	PoE **	PoE **	PoE **
Operating Temperature	-30°C to +50°C (14°F to 122°F) *	-30°C to +50°C (-22°F to +122°F) *	-30°C to +50°C (-22°F to +122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *
Dimensions	93 × 93 × 180.9 mm (3 3/4 x 3 3/4 x 7 1/8") ø140 x 313.4 mm (ø5 5/8 x 12 3/8") including arm	93 × 93 × 160.9 mm (3 3/4 x 3 3/4 x 6 3/8")	93 × 93 × 160.9 mm (3 3/4 x 3 3/4 x 6 3/8")	72 x 63 x 145 mm (2 7/8 x 2 1/2 x 5 3/4") without lens 72 x 63 x 199 mm (2 7/8 x 2 1/2 x 7 7/8") with lens	72 x 63 x 199 mm (2 7/8 x 2 1/2 x 7 7/8") with lens

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Fixed Network Cameras

Series Name	E Series			C Series	X Series
Model Name	SNC-EB600	SNC-EB630B	SNC-EB600B	SNC-CX600	SNC-CH110
					
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG				H.264/MPEG-4/JPEG
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)	■ (2)
Maximum Resolution	1280 x 1024	1920 x 1080	1280 x 1024	1280 x 720	1280 x 960
IR Illuminator / White-light LED Illuminator	– / –	– / –	– / –	– / ■	– / –
Built-in Speaker and Microphone	–	–	–	■	–
Environmental protection	– / –	– / –	– / –	– / –	– / –
Horizontal Viewing Angle	92.5° to 35.7°	114.2° to 40.0°	92.5° to 35.7°	120°	80.7°
Zoom Ratio	2.7x optical zoom 4x digital zoom 10.8x total zoom	2.9x optical zoom 4x digital zoom 11.6x total zoom	2.7x optical zoom 4x digital zoom 10.8x total zoom	–	–
Focal Length	f = 3.0 mm to 8.0 mm	f = 2.8 mm to 8.0 mm	f = 3.0 mm to 8.0 mm	f = 1.83 mm	f = 2.3 mm
Lens	CS mount varifocal lens	CS mount varifocal lens	CS mount varifocal lens	Fixed lens	Built-in fixed focal lens
Image Sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/4-type progressive scan Exmor CMOS sensor	1/3.8-type progressive scan CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR LT / Visibility Enhancer (VE)	View-DR LT-C / Visibility Enhancer (VE)	– / –
Dynamic Range	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	More than 60 dB	–
Minimum Illumination (30 IRE)	Color: 0.03 lx, B/W: 0.02 lx (F1.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.3 lx, B/W: 0.3 lx (F2.0, VE Off, AGC MAX, 1/30 s, 30 fps)	Color: 2.7 lx (AGC 30 dB)
Maximum Frame Rate	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *
Day/Night	True D/N	Electronic D/N	Electronic D/N	–	Electronic D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR	■
Image Stabilizer	Electronic	Electronic	Electronic	Electronic	–
Edge Storage	– / –	– / –	– / –	■ / micro SD card	– / –
Analog Video/Monitor Output	■	■	■	–	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	■
Power Requirements	PoE **	PoE **	PoE **	PoE **	PoE **
Operating Temperature	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	0°C to +50°C (32°F to 122°F) *	0°C to +50°C (32°F to 122°F) *
Dimensions	72 x 63 x 188 mm (2 7/8 x 2 1/2 x 7 1/2") with lens	72 x 63 x 199 mm (2 7/8 x 2 1/2 x 7 7/8") with lens	72 x 63 x 188 mm (2 7/8 x 2 1/2 x 7 1/2") with lens	Approx. 61 x 95 x 41 mm (2 13/32 x 3 3/4 x 1 5/8")	ø44 x 93 mm (ø1 3/4 x 3 3/4")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Mini Dome Network Cameras

Series Name	V Series			
Model Name	SNC-VM642R	SNC-VM632R	SNC-VM602R	SNC-VM641
				
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG			
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1920 x 1080	1280 x 1024	1920 x 1080
IR Illuminator	■	■	■	–
Built-in Speaker and Microphone	–	–	–	–
Environmental protection	IP66 / IK10	IP66 / IK10	IP66 / IK10	– / IK10
Horizontal Viewing Angle	105.3° to 35.6°	105.3° to 35.6°	92.9° to 31.8°	105.3° to 35.6°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom
Focal Length	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens
360˚ Hemispheric/ 180˚ Panoramic View Modes	–	–	–	–
Image Sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor R CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.006 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC ON, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.006 lx, B/W: 0.005 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic
Edge Storage	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1
Analog Video/Monitor Output	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S
Power Requirements	12V DC / 24V AC/ PoE / PoE+ **	12V DC / 24V AC/ PoE / PoE+ **	12V DC / 24V AC/ PoE / PoE+ **	12V DC / 24V AC/ PoE / PoE+ **
Operating Temperature	-40°C to +60°C (-40°F to +140°F) *	-40°C to +60°C (-40°F to 140°F) *, ***	-40°C to +60°C (-40°F to 140°F) *, ***	-10°C to +50°C (14°F to 122°F) *
Dimensions	ø166 x 128 mm (ø6 5/8 x 5 1/8")	ø166 x 128 mm (ø6 5/8 x 5 1/8")	ø166 x 128 mm (ø6 5/8 x 5 1/8")	ø148 x 108 mm (ø5 7/8 x 4 3/8")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended
*** If the camera is installed in high-temperature environments and subjected to direct sunlight, it is highly recommended to use the optional SNCA-WP602 Weather Protector.

Mini Dome Network Cameras

Series Name	V Series			
Model Name	SNC-VM631	SNC-VM601	SNC-VM630	SNC-VM600
				
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG			
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1280 x 1024	1920 x 1080	1280 x 1024
IR Illuminator	–	–	–	–
Built-in Speaker and Microphone	–	–	–	–
Environmental protection	– / IK10	– / IK10	–	–
Horizontal Viewing Angle	105.3° to 35.6°	92.9° to 31.8°	105.3° to 35.6°	92.9° to 31.8°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom
Focal Length	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens
360˚ Hemispheric/ 180˚ Panoramic View Modes	–	–	–	–
Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor
WDR/Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic
Edge Storage	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1
Analog Video/Monitor Output	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S
Power Requirements	12V DC / 24V AC / PoE **	12V DC / 24V AC / PoE **	12V DC / 24V AC / PoE **	12V DC / 24V AC / PoE **
Operating Temperature	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *
Dimensions	ø148 x 109 mm (ø5 7/8 x 4 3/8")	ø148 x 109 mm (ø5 7/8 x 4 3/8")	ø148 x 109 mm (ø5 7/8 x 4 3/8")	ø148 x 109 mm (ø5 7/8 x 4 3/8")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Mini Dome Network Cameras

Series Name	E Series			
Model Name	SNC-EM642R	SNC-EM632RC	SNC-EM602RC	SNC-EM641
				
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG			
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1920 x 1080	1280 x 1024	1920 x 1080
IR Illuminator	■	■	■	–
Built-in Speaker and Microphone	–	–	–	–
Environmental protection	IP66 / IK10	IP66 / IK10	IP66 / IK10	– / IK10
Horizontal Viewing Angle	105.3° to 35.6°	105.3° to 35.6°	92.9° to 31.8°	105.3° to 35.6°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom
Focal Length	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens
360˚ Hemispheric/ 180˚ Panoramic View Modes	–	–	–	–
Image Sensor	1/2.8-type progressive scan Exmor R CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor R CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.006 lx, B/W: 0 lx (IR LED On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0 lx (IR illuminator On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0 lx (IR illuminator On) (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.006 lx, B/W: 0.005 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 60 fps *	Up to 30 fps *	Up to 30 fps *	Up to 60 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic
Edge Storage	■ / SD x 1	– / –	– / –	■ / SD x 1
Analog Video/Monitor Output	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S
Power Requirements	PoE **	PoE **	PoE **	PoE **
Operating Temperature	-40°C to +50°C (-40°F to +122°F) (PoE+) *, *** -30°C to +50°C (-22°F to +122°F) (PoE) *, ***	-40°C to +50°C (-40°F to 122°F) (PoE+) *, *** -30°C to +50°C (-22°F to 122°F) (PoE) *, ***	-40°C to +50°C (-40°F to 122°F) (PoE+) *, *** -30°C to +50°C (-22°F to 122°F) (PoE) *, ***	-10°C to +50°C (14°F to 122°F) *
Dimensions	ø166 x 128 mm (ø6 5/8 x 5 1/8")	ø166 x 129 mm (ø6 5/8 x 5 1/8")	ø166 x 129 mm (ø6 5/8 x 5 1/8")	ø148 x 108 mm (ø5 7/8 x 4 3/8")

■ Available – Not available

* Please refer to the website specifications area

** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

*** If the camera is installed in high-temperature environments and subjected to direct sunlight, it is highly recommended to use the optional SNCA-WP602 Weather Protector.

Mini Dome Network Cameras

Series Name	E Series			
Model Name	SNC-EM631	SNC-EM601	SNC-EM630	SNC-EM600
				
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG			
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)
Maximum Resolution	1920 x 1080	1280 x 1024	1920 x 1080	1280 x 1024
IR Illuminator	–	–	–	–
Built-in Speaker and Microphone	–	–	–	–
Environmental protection	– / IK10	– / IK10	– / –	– / –
Horizontal Viewing Angle	105.3° to 35.6°	92.9° to 31.8°	105.3° to 35.6°	92.9° to 31.8°
Zoom Ratio	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom	3x optical zoom 4x digital zoom 12x total zoom
Focal Length	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm	f=3.0 mm to 9.0 mm
Lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens	Built-in varifocal lens
360˚ Hemispheric/ 180˚ Panoramic View Modes	–	–	–	–
Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 130 dB with View-DR technology
Minimum Illumination (30 IRE)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.06 lx, B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.03 lx, B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Maximum Frame Rate	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR
Image Stabilizer	Electronic	Electronic	Electronic	Electronic
Edge Storage	– / –	– / –	– / –	– / –
Analog Video/Monitor Output	■	■	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S
Power Requirements	PoE **	PoE **	PoE **	PoE **
Operating Temperature	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *	-10°C to +50°C (14°F to 122°F) *
Dimensions	ø148 x 108 mm (ø5 7/8 x 4 3/8")	ø148 x 108 mm (ø5 7/8 x 4 3/8")	ø148 x 108 mm (ø5 7/8 x 4 3/8")	ø148 x 108 mm (ø5 7/8 x 4 3/8")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Mini Dome Network Cameras

Series Name	X Series				H Series	X Series	
Model Name	SNC-XM631	SNC-XM632	SNC-XM636	SNC-XM637	SNC-HMX70 Not available in KR	SNC-DH110T	SNC-DH110
							
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG				H.264 (High/Main/ Baseline Profile)/JPEG	H.264/MPEG-4/JPEG	
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)	■ (3)	■ (2)	■ (2)
Maximum Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	2640 x 2640	1280 x 960	1280 x 960
IR Illuminator	–	–	–	–	–	–	–
Built-in Speaker and Microphone	–	■ (built-in microphone)	■ (built-in microphone)	■ (built-in microphone)	■ (built-in microphone)	–	–
Environmental protection	– / IK10	IP66 / IK10	IP66 / IK10	IP66 / IK10	– / IK06	– / IK10	– / –
Horizontal Viewing Angle	113°	113°	83°	113°	360°	79°	80.7°
Zoom Ratio	4x digital zoom	4x digital zoom	4x digital zoom	4x digital zoom	Digital zoom (depend on operating mode)	–	–
Focal Length	f = 2.8 mm	f = 2.8 mm	f = 3.8 mm	f = 2.8 mm	f = 1.6 mm	f = 2.34 mm	f = 2.34 mm
Lens	Fixed lens	Fixed lens	Fixed lens	Fixed lens	Fixed lens	Built-in fixed focal lens	Built-in fixed focal lens
360˚ Hemispheric/ 180˚ Panoramic View Modes	–	–	–	–	Yes	–	–
Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/2.9-type progressive scan Exmor CMOS sensor	1/2.3" CMOS sensor	1/3.8-type progressive scan CMOS sensor	1/3.8-type progressive scan CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	■ / ■	–	–
Dynamic Range	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	Equivalent to 90 dB with View-DR technology	92dB	–	–
Minimum Illumination (30 IRE)	Color: 0.18 lx, B/W: 0.18 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.18 lx, B/W: 0.18 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.3 lx, B/W: 0.3 lx (F2.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.18 lx, B/W: 0.18 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color 0.55 lx, B/W 0.18 lx	Color: 3.0 lx (AGC 30 dB)	Color: 2.7 lx (AGC 30 dB)
Maximum Frame Rate	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	30 fps in 360 mode, 12.5 fps dewarped in camera	3Up to 30 fps *	Up to 30 fps *
Day/Night	Electronic D/N	Electronic D/N	Electronic D/N	Electronic D/N	True D/N	Electronic D/N	Electronic D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR	Intelligent Dynamic Noise Reduction	■	■
Image Stabilizer	Electronic	Electronic	Electronic	Electronic	–	–	–
Edge Storage	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1	– / –	– / –
Analog Video/Monitor Output	–	–	–	–	–	■	■
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	Essential Video Analytics	DEPA	DEPA
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S	■	■
Power Requirements	PoE **	PoE **	PoE **	PoE **	PoE **	PoE **	PoE **
Operating Temperature	-10°C to +50°C * (14°F to +122°F)	-30°C to +50°C (-22°F to +122°F) *	-30°C to +50°C (-22°F to +122°F) *	-30°C to +50°C (-22°F to +122°F) *	-20°C to +40°C (-4°F to 104°F) *	0°C to +50°C (32°F to 122°F) *	0°C to +50°C (32°F to 122°F) *
Dimensions	ø104.5 x 56.5 mm (ø4 1/8 x 2 1/4")	Approx. ø114 x 47 mm (ø4 1/2 x 1 7/8")	Approx. ø114 x 47 mm (ø4 1/2 x 1 7/8")	Approx. ø114 x 47 mm (ø4 1/2 x 1 7/8")	158mm (6.22") dia. 34mm (1.34") flush mount height / 68mm (2.68") total height.	ø106 x 56.5 mm (ø4 1/4 x 2 1/4")	ø106 x 50.5 mm (ø4 1/4 x 2")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

Rapid Dome and PTZ Network Cameras

P/T/Z: Pan/Tilt/Zoom

Series Name	W Series				E Series	
Model Name	SNC-WR632C	SNC-WR602C	SNC-WR630	SNC-WR600	SNC-ER585 Available in EU/NA, but not in AP	SNC-ER585H
						
Video Compression Format	H.264 (High/Main/Baseline Profile)/JPEG				H.264/MPEG-4/JPEG	
Multi Streaming Capability	■ (3)	■ (3)	■ (3)	■ (3)	■ (2)	■ (2)
Maximum Resolution	1920 x 1080	1280 x 720	1920 x 1080	1280 x 720	1920 x 1080	1920 x 1080
Environmental protection	IP66 / IK10	IP66 / IK10	– / –	– / –	IP66 / IK10	IP66 / IK10
Horizontal Viewing Angle	63.7° to 2.3°	58.3° to 2.1°	63.7° to 2.3°	58.3° to 2.1°	59.5° to 2.1°	59.5° to 2.1°
Zoom Ratio	30x optical zoom 12x digital zoom 360x total zoom	30x optical zoom 12x digital zoom 360x total zoom	30x optical zoom 12x digital zoom 360x total zoom	30x optical zoom 12x digital zoom 360x total zoom	30x optical zoom 12x digital zoom 360x total zoom	30x optical zoom 12x digital zoom 360x total zoom
Focal Length	f = 4.3 mm to 129.0 mm	f = 4.3 mm to 129.0 mm	f = 4.3 mm to 129.0 mm	f = 4.3 mm to 129.0 mm	f = 4.3 mm to 129.0 mm	f = 4.3 mm to 129.0 mm
Lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens
Image Sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor
WDR / Tone correction	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	View-DR / Visibility Enhancer (VE)	DynaView™ (*1) / –	DynaView™ (*1) / –
Dynamic Range	Equivalent to 130 dB with View-DR technology (30 fps)	Equivalent to 130 dB with View-DR technology (30 fps)	Equivalent to 130 dB with View-DR technology (30 fps)	Equivalent to 130 dB with View-DR technology (30 fps)	86 dB (theoretical) with DynaView technology	86 dB (theoretical) with DynaView technology
Minimum Illumination (30 IRE)	Color: 0.24 lx, B/W: 0.018 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.12 lx, B/W: 0.009 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 1.0 lx, B/W: 0.1 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 0.4 lx, B/W: 0.01 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)	Color: 1.2 lx, B/W: 0.18 lx (F1.6, AGC On, 1/30 s)	Color: 1.2 lx, B/W: 0.18 lx (F1.6, AGC On, 1/30 s)
Maximum Frame Rate	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 60 fps *	Up to 30 fps *	Up to 30 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N	True D/N	True D/N
Noise Reduction	XDNR	XDNR	XDNR	XDNR	■	■
Image Stabilizer	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Defog Image Processing	■	■	■	■	–	–
Edge Storage	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD card x1	■ / SD/SDHC card x1	■ / SD/SDHC card x1
Analog Video/Monitor Output	■	■	■	■	–	–
"Rapid Dome" or "PTZ"	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome
Pan/Tilt Angle (Powered)	360° endless rotation/220°	360° endless rotation/220°	360° endless rotation/220°	360° endless rotation/220°	360° endless rotation/210°	360° endless rotation/210°
Pan Speed	700°/s (max.)	700°/s (max.)	700°/s (max.)	700°/s (max.)	300°/s (max.)	300°/s (max.)
Analytics Architecture	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA Advanced	DEPA	DEPA
ONVIF Conformance	Profile S	Profile S	Profile S	Profile S	Profile S	Profile S
Power Requirements	HPoE+ (*2), AC 24 V **	HPoE+ (*2), AC 24 V **	12V DC / 24V AC/ PoE+ **	12V DC / 24V AC/ PoE+ **	AC 24 V	AC 24 V
Operating Temperature	AC 24 V: -40°C to +50°C (-40°F to +122°F) *	AC 24 V: -40°C to +50°C (-40°F to +122°F) *	-5°C to +50°C (23°F to 122°F)	-5°C to +50°C (23°F to 122°F)	-40°C to +60°C (-40°F to +140°F)	-5°C to +65°C (23°F to 149°F)
Dimensions	ø222.0 x 324.1 mm (ø8 3/4 x 12 7/8")	ø222.0 x 324.1 mm (ø8 3/4 x 12 7/8")	ø146.3 x 204.5 mm (ø5 7/8 x 8 1/8")	ø146.3 x 204.5 mm (ø5 7/8 x 8 1/8")	ø222.0 x 323.9 mm (ø8 3/4 x 12 7/8")	ø222.0 x 323.9 mm (ø8 3/4 x 12 7/8")

■ Available – Not available
* Please refer to the website specifications area
** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended
(*1) When using DynaView technology, the maximum frame rate becomes 15 fps. (*2) Power supply can be generated from the Bosch NPD-6001A which is a High Power, 60W Single Port POE Midspan with AC in.

Rapid Dome and PTZ Network Cameras

P/T/Z: Pan/Tilt/Zoom

Series Name	E Series					
Model Name	SNC-ER580	SNC-EP580	SNC-ER550	SNC-EP550	SNC-ER520/ER521 (*2)	SNC-EP520/EP521 (*2)
						
Video Compression Format	H.264/MPEG-4/JPEG					
Multi Streaming Capability	■ (2)	■ (2)	■ (2)	■ (2)	■ (2)	■ (2)
Maximum Resolution	1920 x 1080	1920 x 1080	1280 x 720	1280 x 720	720 x 480/720 x 576 (*2)	720 x 480/720 x 576 (*2)
Environmental protection	– / –	– / –	– / –	– / –	– / –	– / –
Horizontal Viewing Angle	55.4° to 2.9°	55.4° to 2.9°	55.9° to 2.1°	55.9° to 2.1°	57.8° to 1.7°	57.8° to 1.7°
Zoom Ratio	20x optical zoom 12x digital zoom 240x total zoom	20x optical zoom 12x digital zoom 240x total zoom	28x optical zoom 12x digital zoom 336x total zoom	28x optical zoom 12x digital zoom 336x total zoom	36x optical zoom 12x digital zoom 432x total zoom	36x optical zoom 12x digital zoom 432x total zoom
Focal Length	f = 4.7 mm to 94.0 mm	f = 4.7 mm to 94.0 mm	f = 3.5 mm to 98 mm	f = 3.5 mm to 98 mm	f = 3.4 mm to 122.4 mm	f = 3.4 mm to 122.4 mm
Lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens	Auto-focus zoom lens
Image Sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/4-type progressive scan Exmor CMOS sensor	1/4-type progressive scan Exmor CMOS sensor	1/4-type EXview HAD CCD	1/4-type EXview HAD CCD
WDR / Tone correction	DynaView™ (*1) / –	DynaView™ (*1) / –	DynaView™ (*1) / –	DynaView™ (*1) / –	DynaView™ (*1) / –	DynaView™ (*1) / –
Dynamic Range	86 dB (theoretical) with DynaView technology	86 dB (theoretical) with DynaView technology	86 dB (theoretical) with DynaView technology	86 dB (theoretical) with DynaView technology	92 dB (theoretical) with DynaView technology	92 dB (theoretical) with DynaView technology
Minimum Illumination (30 IRE)	Color: 1.2 lx, B/W: 0.18 lx (F1.6, AGC On, 1/30 s)	Color: 1.2 lx, B/W: 0.18 lx (F1.6, AGC On, 1/30 s)	Color: 0.7 lx, B/W: 0.07 lx (F1.35, AGC On, 1/30 s)	Color: 0.7 lx, B/W: 0.07 lx (F1.35, AGC On, 1/30 s)	Color: 0.9 lx, B/W: 0.1 lx (F1.6, AGC On, 1/60 s/1/50 s)	Color: 0.9 lx, B/W: 0.1 lx (F1.6, AGC On, 1/60 s/1/50 s)
Maximum Frame Rate	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *	Up to 30 fps *
Day/Night	True D/N	True D/N	True D/N	True D/N	True D/N	True D/N
Noise Reduction	■	■	■	■	■	■
Image Stabilizer	–	–	–	–	–	–
Defog Image Processing	–	–	–	–	–	–
Edge Storage	■ / SD/SDHC card x1	■ / SD/SDHC card x1	■ / SD/SDHC card x1	■ / SD/SDHC card x1	■ / SD/SDHC card x1	■ / SD/SDHC card x1
Analog Video/Monitor Output	–	–	–	–	–	–
"Rapid Dome" or "PTZ"	Rapid Dome	PTZ	Rapid Dome	PTZ	Rapid Dome	PTZ
Pan/Tilt Angle (Powered)	360° endless rotation/210°	340°/105°	360° endless rotation/210°	340°/105°	360° endless rotation/210°	340°/105°
Pan Speed	300°/s (max.)	300°/s (max.)	300°/s (max.)	300°/s (max.)	300°/s (max.)	300°/s (max.)
Analytics Architecture	DEPA	DEPA	DEPA	DEPA	DEPA	DEPA
ONVIF Conformance	■	■	■	■	■	■
Power Requirements	24V AC / PoE+ **	24V AC / PoE+ **	24V AC / PoE+ **	24V AC / PoE+ **	24V AC / PoE+ **	24V AC / PoE+ **
Operating Temperature	-5°C to +50°C (23°F to 122°F) *	-5°C to +50°C (23°F to 122°F) *	-5°C to +50°C (23°F to 122°F) *	-5°C to +50°C (23°F to 122°F) *	-5°C to +50°C (23°F to 122°F) *	-5°C to +50°C (23°F to 122°F) *
Dimensions	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8")
Outdoor housing bundle option (clear dome)	24V: UNI-ONER580C2 HPoE: UNI-ONER580C7	24V: UNI-ONEP580C2 HPoE: UNI-ONEP580C7	24V: UNI-ONER550C2 HPoE: UNI-ONER550C7	24V: UNI-ONEP550C2 HPoE: UNI-ONEP550C7		

■ Available – Not available

* Please refer to the website specifications area

** PoE = IEEE-802.3af; PoE+ = IEEE-802.3at; HPoE+ = IEEE-802.3at extended

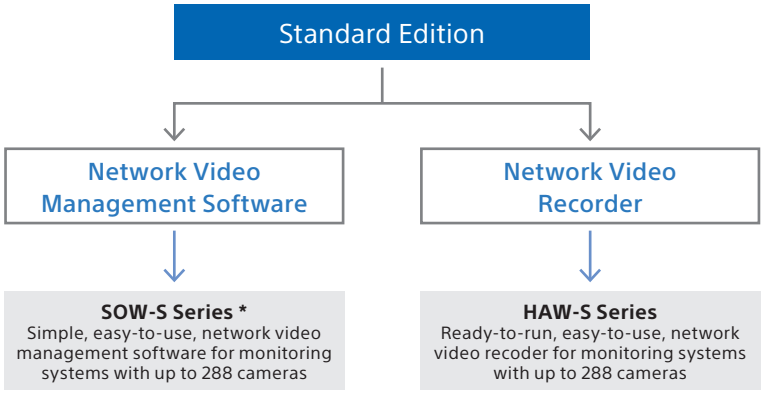
(*1) When using DynaView technology, the maximum frame rate becomes 15 fps.

(*2) When "/" (slash) is included in the model name, please read as the model name for NTSC and PAL, respectively.
Likewise, when "/" is included in the maximum resolution and maximum frame rate, please read the value for NTSC model and PAL, respectively.

Network Video Management System

Network Video Management System enhances Recording, Content Management and Monitoring

The Sony Video Management System is comprised of server-based video management software (VMS) and network video recorders (NVRs). The system offers monitoring professionals a flexible, fully customizable solution for managing, storing and analyzing video footage from any fleet of network cameras, including 4K.



HAW Series / SOW Series * – Software Specification

Software Feature	Standard Edition
Number of connected cameras per system	288
Max number of cameras per server	32
Max number of servers per system	9
Multiple Monitor Support	■
Interactive Playback	■
Mobile Client	■
Web Client	■
Video Push from Mobile Client	■
Alarm Manager	Yes (with limited function)
Map	■
Multiple video export formats	■
Dual stream (live and recording) per camera	■
Archiving to network storage	■
Device group	–
Microsoft Active Directory support	–
Centralized management	–
Flexible event rule engine	–
System Monitor	–
Edge Storage	–
Smart Wall	–

■ Available – Not available

HAW Series - Hardware Specification

	Standard Edition
Number of Drives	6 Drives (3.5”)
Max number of cameras	32**
OS	Windows Embedded Standard 7 Runtime (WS7P)
RAID	Levels: RAID0, RAID1, RAID3, RAID5, RAID10, RAID1E, RAID30, RAID50, RAID6
Drive Type	SATA (6G/s), Hot Swappable
Network	2x Gigabit Ethernet (RJ45)
USB Ports	2x USB2.0 (Rear), 4x USB3.0 (2x Front, 2x Rear)
HDMI	1x HDMI (max. resolution: 1920 x 1200)
VGA	1x HD15 (max. resolution: 1920 x 1200)
Display Port	N/A
PS/2	1x Keyboard, 1x Mouse
Audio	Mic-in, Line-out
AC Input	100-240 V, 50-60 Hz
Dimensions (H x W x D)	88.5 x 440 x 395 mm

* SOW Series not available in EMEA

** 720P, 30fps, H.264, RAID5+hot spare, 690KB/s 1 stream per camera, 16ch remote live view, No remote playback, No mobile device, No recording data overwrite, Use 6 HDD (ST4000NM0033)

Housings & Accessories

Mini Dome Cameras

Models	IN-CEILING MOUNTING	MOUNTING COVER	DROP POLE MOUNTING	WALL MOUNTING	OPTIONAL ADAPTERS FOR WALL MOUNTING	ACCESSORIES	OPTIONAL LENS
SNC-EM602RC SNC-EM632RC SNC-EM642R SNC-VM602R SNC-VM632R SNC-VM642R	 **YT-ICB45** In-ceiling bracket  **UNI-LD280S** Tinted dome cover			 **UNI-MDW1/T** Outdoor wall mount bracket with pendant dome			
SNC-VM772R		 **UNI-MDPEM600** Pendant mount cover  **UNI-MDPADPLT1/T** Stainless steel plate adapter	 **UNI-MDPBKPLT1/T** Ceiling mount bracket **OR**  **UNI-MDPBKBOX1/T** Ceiling mount bracket with box			 **UNI-PD-9001GR/AT/AC** Single port high power Midspan 30W	
SNC-EM600 SNC-EM630 SNC-VM600 SNC-VM630 SNC-EM601 SNC-EM631 SNC-EM641 SNC-VM601 SNC-VM631 SNC-VM641	 **YT-ICB600** In-ceiling bracket  **YT-LD600S** Tinted dome cover **OR**  **YT-LD601S** Vandal proof tinted dome cover	 **UNI-MDPEM600** Pendant mount cover	**+** **UNI-MDPPOLE1/T** 30cm 1" male-male aluminum pole	 **UNI-WMB2R/T** Outdoor wall mount bracket	 **UNI-PMA2D/T** Pole mount adapter	 **FPI-100** Single port PoE injector (Midspan)	
SNC-XM631 SNC-XM632							 **SNCA-L038MF** Horizontal 83 degree lens  **SNCA-L060MF** Horizontal 51 degree lens  **SNCA-L120MF** Horizontal 25 degree lens
SNC-HMX70		 **UNI-IBBHMX70** Conduit box		 **UNI-ILDHMX** Plenum enclosure	 **UNI-P1C15** **UNI-OBBP1** (optional; only with UNI-P1C15) **UNI-C1CHMX70** Pole adapter		

Housings & Accessories

Fixed Network Cameras

Models	OUTDOOR BOX HOUSING WALL MOUNTING	OPTIONAL ADAPTERS FOR WALL MOUNTING	ACCESSORIES
SNC-EB600 SNC-EB630 SNC-EB640 SNC-VB600 SNC-VB630 SNC-VB640	 **UNI-ORF8C1/T** IP66 & IK10 Outdoor housing with heater and blower  **UNI-ORF8C2/T** IP66 & IK10 Outdoor housing with heater and blower	 **UNI-PMA3D/T** Pole mount adaptor	 **FPI-100** Single port PoE injector (Midspan)
SNC-VB635			
SNC-VB770	 **UNI-E2DG8** 533mm with heater/blower and Wall / Pole-Mount adapter, NEMA4x, IP66 (24VAC/VDC , 110/220Vac)		 **UNI-PD-9001GR/AT/AC** Single port high power Midspan 30W

Rapid Dome and PTZ Network Cameras

Models	IN-CEILING MOUNTING		HOUSING	WALL MOUNTING	OPTIONAL ADAPTERS FOR WALL MOUNTING	ACCESSORIES
SNC-ER580 SNC-EP580 SNC-ER550 SNC-EP550	 **YT-ICB124**	 **YT-LD124C** Clear dome cover	 **UNI-ORD7C2/W** IP66 & IK10 7" Outdoor PTZ with clear bubble	 **UNI-WMB5/T** Gooseneck wall mount bracket **OR**  **UNI-WMB2P/T** Wall mount bracket **OR**  **UNI-PBU2G/W** Power block unit with wall mount bracket	 **UNI-PMA2D/W** Pole mount adapter	
SNC-WR600 SNC-WR630	 **YT-ICB630**	 **YT-LD124S** Tinted dome cover	 **UNI-ORD7T2/W** IP66 & IK10 7" Outdoor PTZ with tinted bubble			 **UNI-PD9001GR/AT/AC** Single port high power Midspan 30W
SNC-WR602C SNC-WR632C		 **YT-LDR632S** Tinted dome cover				 **UNI-PD9501GR/AC** Single port high power Midspan 60W AC input with UK/EU plug

UNI series is a third-party item. For more details, availability or any other questions on accessories please contact your regional Sony Video Security Sales at Bosch.
www.boschsecurity.com/sonyvideosecurity

Glossary

Adaptive IR

Adaptive IR analyzes camera's captured images and adjusts the intensity of brightness of the camera's built-in IR LEDs to prevent overexposure of close object images. The SNC-VM772R 4K camera adopts a new version of Advanced IR, which is equipped with two types of IR LED, each for short and long distances, and adjusts them independently to match the zoom setting providing the best IR images with the appropriate exposure even for near and far objects.

Advanced IR

Advanced IR technology provides high-quality IR images without overexposure, providing clear B/W images of close and distant objects.

Bit Rate Control Mode

Constant Bit Rate (CBR)

Sony's constant bit rate (CBR) algorithm helps to optimize the image quality while maintaining a constant bit rate from the camera. It allows users to easily predict required data storage and network capacity since the amount of data can be calculated based on the predefined bit rate value.

Variable Bit Rate (VBR)

Variable bit rate (VBR) is an encoding method where the bit rate varies proportionally to the amount of movement and detail in the scene. In a simple scene (such as an empty corridor), the compression ratio can be higher, providing a lower bit rate. As the level of detail and movement increases, the compression ratio can be reduced to maintain high image quality; this creates much higher bit rates, and helps to provide the best image.

Variable Bit Rate with Cap (VBR with Cap)

Sony's variable bit rate with cap (VBR with cap) is an advanced version of the VBR method. Users can set a maximum target bit rate (cap) for encoding, but the bit rate is unrestricted and can vary, responding to changes in image complexity. When the bit rate exceeds the cap value, the compression ratio is automatically adjusted to drop the bit rate below the target value, reducing network load while maintaining high picture quality. For planning purposes, by referring to the cap value, users can plan storage resources in a similar manner as with CBR encoding.

Clear Image Zoom

Thanks to Sony's proprietary By Pixel Super Resolution Technology, the Clear Image Zoom feature can enlarge an image by up to 2x without degrading picture quality (a problem that is often seen with a conventional digital zoom.) Combine the SNC-VM772R 4K camera with its optical 2.9x lens, and you can achieve a high-quality zoom of up to 5.8x.

Defog Image Processing

The Defog Image Processing feature is capable of clearing up fog, mist, and haze in a scene, resulting in better image visibility.

DEPA™ System

With a DEPA system from Sony, DEPA-enabled cameras send not only video images but also related metadata (including object size and position data) to a DEPA-enabled recorder. Since part of the image processing is done on the camera side, the load to the recorder is reduced, enabling camera expansion. Conventional video analytic systems, on the other hand, process images solely on the recorder side often causing CPU overload.

DEPA Advanced

DEPA Advanced is an enhanced DEPA technology. Unlike DEPA, a camera incorporating DEPA Advanced completes the entire DEPA analysis (such as intrusion detection with a virtual borderline) on the camera side, and sends only an alarm to the recorder. Since analytic processing is completed in the camera, end users can benefit from DEPA Advanced because it can be easily integrated with a variety of recorders and/or video management solutions.

Distortion Correction

Distortion Correction is a camera function that compensates for image distortion that occurs mainly at the periphery of the lens typically appearing as barrel distortion by using the camera's image processing engine, and provides high picture quality with less distortion.

Dual-light System

The dual-light system offers effective surveillance and crime deterrence/safety with a combination of IR and white-light illuminators. When darkness falls, the camera's on-board infrared (IR) illuminator switches on automatically to capture clear black and white images. Then if there's movement within its field of view, the camera automatically triggers its integrated white LED illuminator, bathing the immediate scene in light. The illuminator can also be spotted clearly from far away. The illuminator's sudden switch-on also provides a powerful visual warning to unexpected visitors. At the same time, the camera switches automatically to color video mode, capturing detail-packed images in color to assist with positive identification of the subject.

Easy Focus

The feature allows the installer or user the ability to focus the camera remotely using a PC or locally.

Easy Zoom

This feature allows the installer or user the ability to change the field of view locally or remotely using a PC.

Edge Storage (onboard recording with memory cards)

The Edge Storage function records video and audio data with memory cards (such as SD and micro SD cards) attached to the camera. It can be used for fail-over data backup if the network is disconnected due to unstable network conditions or other difficulties. It can also be used for event recording when the recording is started by an alarm signal triggered by the camera's video analytics functions (such as Intelligent Motion Detection and Tamper Alarm), as well as by user-defined rules of DEPA™ and DEPA Advanced technologies. This function also enables scheduled recording, for convenient local storage. The recorded data can be transmitted to network video recorders (NVR)/video management software (VMS) and merged with data saved on the NVR/VMS storage. SD cards capable of an Edge Storage Maintenance Notification function* are recommended for these applications.

* Memory cards have a finite lifespan that is reduced over time by recording. With the Edge Storage Maintenance Notification function, users can obtain remotely the lifespan information of cards attached to the camera.

Edge Storage Maintenance Notification

When using SD cards with an Edge Storage Maintenance Notification function, users can obtain the lifespan information of an SD card attached to the camera via various methods such as web browsers, e-mail notification, alarm output, CGI commands, and system logs in a timely manner.

Electronic D/N

This function allows the camera to automatically switch to Day or Night mode depending on the light level.

Electronic Image Stabilizer

Electronic Image Stabilizer electronically compensates for movement in captured images using image processing. Two images captured back and forth by the camera are recorded to its buffer memory, calculated their distance and compensated for movement. This helps to minimize the effect of camera shake or vibration and achieve less blurry images.

e-Varifocal

The e-Varifocal feature allows the installer to adjust the fixed-lens camera's field of view in a similar way to adjusting the field of view on a varifocal lens camera at installation. The fixed-lens camera maintains the selected resolution, while also allowing digital zoom, pan and tilt operation to fine tune the angle of view. After installation, precise adjustments can be made to the fixed-lens camera's field of view. This can be done on a remote basis, reducing the cost of maintenance.

Evidence Shot

Evidence Shot records high quality JPEG images with the camera's maximum resolution at a low frame rate, simultaneously providing an overview video stream at smaller size images in H.264. This function is useful for applications where forensic analysis is required to identify people's faces and car license plates in city streets and car parks. The high resolution (20 megapixels with SNC-VM772R) allows for enlargement of specific areas of interest in the scene to examine details more precisely.

Flicker Reduction

Flicker Reduction minimizes flicker phenomena that are seen as blinks or horizontal stripes caused by differences in brightness on the monitor when shooting video under fluorescent, sodium, or mercury lamps. This function analyzes brightness of the captured images and compensates for the differences in brightness with image processing to maintain picture quality with fewer flickers.

Gyroscopic Image Stabilizer

The Gyroscopic Image Stabilizer helps to minimize effect of camera shake or vibration, reducing image blur. Thanks to an advanced gyroscopic sensor technology, this stabilizer is capable of detecting camera vibration precisely and compensating for blurred images effectively.of withstanding the impact of 5 joules; this is equivalent to withstanding the impact of a 1.7 kg weight dropped from a height of 29.5 cm.

Highlight Compensation (HLC)

The HLC function detects any strong light spots such as car headlights and flashlights in the dark and masks them in the captured images. This can relieve operator eye strain, making the monitoring task easier.

HPoE+ (HPoE Plus)

HPoE+ enables devices to receive power (up to 60 W) from HPoE+-enabled equipment such as a PowerDsine® 9501G/B power injector from Microsemi Corporation through the same Ethernet cable that transports data by using 4 wires. HPoE+ is useful especially for PTZ/Rapid Dome cameras that require motor control, and outdoor dome cameras that operate a heater in low-temperature conditions.

PoE+ (PoE Plus, IEEE 802.3at)

PoE+ enables networked devices to receive power (up to 25.5 W) from PoE+-enabled equipment through the same Ethernet cable that transports data. PoE+ is useful especially for PTZ/Rapid Dome cameras that require motor control, and outdoor dome cameras that operate a heater in low-temperature conditions.

IK8 Rated

The IK rating system (defined in the IEC 62262 standard) classifies the level of protection provided by electrical appliances against external impacts (i.e., physical impact on the outside of the camera). An IK8-rated camera is capable of withstanding the impact of 5 joules; this is equivalent to withstanding the impact of a 1.7 kg weight dropped from a height of 29.5 cm.

IK10 Rated

The IK rating system (defined in the IEC 62262 standard) classifies the level of protection provided by electrical appliances against external impacts (i.e., physical impact on the outside of the camera). An IK10-rated camera is capable of withstanding the impact of 20 joules; this is equivalent to withstanding the impact of a 5 kg weight dropped from a height of 40 cm.

Image Stabilizer

The Image Stabilizer helps to minimize the effect of camera shake or vibration to reduce image blur. This function adopts a motion vector to compensate for blurry images, which is calculated based on image data obtained from the camera's image sensor.

Intelligent Coding

Intelligent Coding is a function to efficiently manage your network bandwidth and storage costs. It keeps specific area of interest[*1] in the scene clear and crisp with original high image quality, while encoding the other parts of the image with a higher compression ratio, reducing the data size by up to 50%[*2]. Auto mode can be selected to scale areas of interest according to the size of an object.

[*1] The specific areas of interest can be selected from Static (fixed area), or Dynamic (movable area in combined use with a Multi Tracking function).

[*2] The conditions: 4K/30 fps video footage with 30% of areas of interest.

Intelligent Cropping

Intelligent Cropping is a function to efficiently manage your network bandwidth and storage costs. It observes specific areas of interest* in any captured image with a 4K resolution, while overviewing the entire image with a lower Full HD resolution, reducing the data size by up to 50%. This function provides a Full HD resolution overview, in parallel with four separate close-ups at a VGA-cropped view or two separate close-ups at Full HD with an original 4K resolution.

* The specific areas of interest can be selected from Static (fixed area), or Dynamic (movable area in combined use with a Multi Tracking function).

Intelligent Scene Capture

Intelligent Scene Capture is a function to provide the best picture quality for the scene, 24/7. It analyzes captured images and automatically adjusts parameters such as shutter speed and gain, responding to environmental factors such as weather, time, and lighting conditions. In addition to Standard mode, you can select Motion Priority mode (ideal for capturing moving objects) and Low Noise Priority mode (ideal for noise reduction). You can use a scheduling function to switch Intelligent Scene Capture modes and manual setting modes.

IP-66 Rated

The "IP" of IP66 stands for ingress protection (defined in the IEC 605292 standard), and its two-digit number shows the durability rating of equipment for outdoor use. The first digit of IP66 relates to ingress protection against dust, and "6" means "dust tight". The second digit of IP66 relates to ingress protection against water, and "6" means protected against "heavy jet sprays", such as conditions encountered during hurricanes.

IR Illuminator

The IR illuminators built into Sony's cameras consist of multiple high-performance IR LEDs located around the camera lens. This enables each camera to project a powerful and uniform IR light over a great distance. Combined with the True D/N function, IR illuminators enable each camera to produce clear B/W images even in complete darkness (0 lx), up to 164 feet (50m) (50 IRE) away.

Multi Tracking*

Multi Tracking is a useful function to chase and observe multiple moving objects in the image captured with a single 4K camera. It can chase moving objects such as people or cars in the captured image from the position designated with Intelligent Cropping or Intelligent Coding. The operation starts with a trigger from the camera's VMD (video motion detection) function. This allows a single 4K camera to track and follow up to four moving objects – useful for a scene in which multiple PTZ cameras are used. Thanks to Sony's proprietary technology, this function realizes a precise tracking capability; for example, it can keep tracking two moving objects even if they cross each other.

*Multi Tracking is used in combination with Intelligent Coding or Intelligent Tracking

ONVIF Profile S

ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between different network video devices regardless of manufacturer, and achieves greater interoperability in multi-vendor network video systems.

Profile S is the latest specification (issued by ONVIF in 2012), which improves interoperability between ONVIF-compatible devices and simplifies device management.

Optical Image Stabilizer

Optical Image Stabilizer incorporates a lens element with gyroscopic sensors in the camera's lens unit and optically compensates for movement in captured images. After detection of camera shake and vibration with the gyroscopic sensors, this function makes the lens element shift to the direction to cancel the camera's movement so that the optical axis can be kept in a proper position. This helps to minimize the effect of camera shake or vibration, achieving less blurry images. Unlike some Electronic Image Stabilizers this function maintains original picture quality without reducing image resolution.

Picture Mode

Picture mode feature allows users to easily adjust camera settings based on scene requirements.

PoE (Power-over-Ethernet, IEEE 802.3af)

Enables networked devices to receive power (up to 12.95 W) from PoE-enabled equipment through the same Ethernet cable that transports data. It provides substantial installation cost savings, and can simplify the installation process.

Smartphone Viewer

The Smartphone Viewer enables an image of the camera to be displayed on a smartphone screen. In addition, the camera's pan, tilt, and zoom functions can be controlled by simple touch-panel manipulation.

SNC Toolbox Mobile

SNC toolbox mobile is a convenient smartphone/tablet app (supported by Android and iOS) that is intended for use in installation of a camera. It allows you to view[*1] live camera images and adjust the filed of view with your camera's zoom and focus control buttons. In addition to live image viewing, this app allows you to control[*2] zoom and focus as well as other view-related features of the SNC-VM772R 4K camera on your smartphone touchscreen.

[*1] A Wi-Fi router must be installed in the network

[*2] The optional IFU-WLM3 USB wireless LAN module must be attached to the camera.

Solid PTZ

Solid PTZ can navigate the camera's visible area in the captured images by its digital pan, tilt, and zoom functionalities. This can be used to monitor particular points of interest during the operation.

True D/N (Day/Night)

A True D/N camera has two modes of operation: a day mode and a night mode. The camera switches from day mode (color) to night mode (B/W), depending on the light level, by replacing its infrared-cut filter with a clear filter. In night mode, the camera becomes sensitive to near-IR light and is capable of reproducing images even when the scene is not visible to the naked eye.

View-DR® Technology

View-DR is Sony's innovative technology to produce images with an extremely wide dynamic range. View-DR is a combination of Sony's full-capture Wide-D technology, the high-speed Exmor® CMOS sensor, and Visibility Enhancer (VE) technology.
The full-capture Wide-D technology in View-DR uses an electronic shutter to capture multiple images and reproduce each frame. One image is taken using a standard exposure time and either one or three images are taken using very short exposure times, depending on the camera type. With the newly developed View-DR algorithm, all of the electrons converted from the captured light are fully used by the imager, which is quite different to some other Wide-D technologies in the industry that discard approximately half of these electrons. As a result, View-DR nearly doubles sensitivity compared to conventional Wide-D technologies. To capture multiple HD resolution images at a very high speed, the Exmor® CMOS sensor is used because of its high-speed readout characteristics. During the process of combining multiple images, the Visibility Enhancer (VE) is employed to provide a high level of chrominance and luminance. With View-DR technology, the monitored image become very visible – sometimes it is even more visible than when viewed with the naked eye.

Visibility Enhancer (VE)

VE is one of Sony's advanced technologies that optimizes contrast and makes a scene more visible. It is ideal for scenes in which objects are difficult to recognize due to severe backlight or shadows. VE helps to optimize the brightness and color reproduction of an image dynamically on a pixel-by-pixel basis, while continuously adapting to the scene. Technically, VE stretches the contrast in both the backlit portions and the shadows within a given dynamic range, which is different to Wide-D. VE also contributes to the camera's high sensitivity. By combining VE with XDNR, the camera can reproduce clear and bright images in very low-light conditions, while keeping noise at a minimal level.

White-light LED Illuminator

The white-light LED illuminators built in Sony's cameras emit visible light; they illuminate a scene in an extremely wide range, enabling each camera to capture clear color images in low-light conditions.

Wide-D Technology

Sony's Wide-D technology is a powerful feature that helps expand a camera's video dynamic range. It helps to improve the visibility of images in extremely high-contrast environment.

XDNR® Technology (eXcellent Dynamic Noise Reduction)

XDNR is Sony's noise reduction technology for network security cameras. XDNR utilizes 2D and 3D noise reduction methods adaptively to scenes. 2D noise reduction (2DNR) reduces noise on the image by maintaining a smooth edge on moving objects, while 3D noise reduction (3DNR) drastically reduces noise on the image of still objects. Under low-light conditions, XDNR provides clear images for both moving objects and still portions of the image, using 2DNR and 3DNR respectively. This method provides clear images while minimizing motion blur, which is a typical challenge in outdoor surveillance monitoring applications such as in parking lots.

2018 September (MK20267V4)