

Network Surveillance Products

Quick Reference Guide 

New Lineup of IPELA ENGINE Network Cameras

Powered by the IPELA ENGINE™ signal processing system*, Sony's new generation of cameras delivers excellent HD image quality with high sensitivity and wide dynamic range.

W Series with IPELA ENGINE PRO System

The W Series cameras are the most advanced rapid dome cameras in the security industry and adopt the top-end signal processing system – IPELA ENGINE™ PRO. This series consists of four models – two indoor and two outdoor unitized models – all of which provide advanced features such as a 130dB dynamic range in FHD with View-DR technology, 60p high frame rate, 30x optical zoom, pan speed of 700°/s, Gyroscopic Image Stabilizer, Defog Image Processing, and Focal Plane Distortion Correction. The SNC-WR630 and SNC-WR600 are 1080p and 720p models, while the SNC-WR632 and SNC-WR602 are 1080p and 720p unitized models.



V and E Series with IPELA ENGINE EX System

The V Series cameras are the top of the line in the EX series with value-added features, while the E Series cameras are more cost-effective compared to the V Series, and are best suited for entry-to-mid level applications. Both series provide a variety of features, such as View-DR®, picture mode, H.264 CBR/VBR with high/main profiles, Image Stabilizer, easy installation (Easy Zoom, Easy Focus), and DEPA™ Advanced Intelligent Video Analytics. The value-added features for the V Series include a 60p high frame rate and Edge Storage (onboard recording with SD cards). Both series offer a range of models with various form factors including vandal-resistant, IR ruggedized mini dome, and box-type models.



IR Ruggedized Cameras

Sony's IR ruggedized mini dome cameras are designed for use in harsh outdoor environments, where lighting conditions during the night are poor, and dust/water ingress as well as vandalism may pose challenges. This type of camera features a minimum illumination of 0 lx in B/W mode using built-in IR illuminators, an operating temperature range from -40°F (-40°C) to +122°F (+50°C), and IK10-rated vandal resistant and IP66-rated water-resistant/dust-tight features. There are four models in the product range: The V Series offers the SNC-VM632R 1080p and SNC-VM602 720p models, while the E Series offers the SNC-EM632R 1080p and SNC-EM602 720p models.

Half-inch Full HD CMOS Sensor Camera

The SNC-VB635 camera is designed for use in highly demanding conditions such as transportation, municipality, and energy applications. Thanks to the high sensitivity of its 1/1.9-type 1080p Exmor® CMOS sensor, this camera can provide high picture quality even in very low-light conditions. Other key features include a 90 dB dynamic range with View-DR technology, True Day/Night, and RS-485 external control.

C Series with IPELA ENGINE EX System

The C Series offers 720/30p compact cameras that adopt an all-in-one design, incorporating a passive IR sensor, white-light LED illuminators, a speaker, and a microphone. Another convenient feature is Edge Storage (onboard recording with micro SD cards). These cameras provide high picture quality with a wide horizontal viewing angle of 120°. There are two models in the C Series: The SNC-CX600W is a wireless network model that offers easy, reliable, and stable network operation thanks to the WPS (Wi-Fi Protected Setup) standard, Wi-Fi certification, and the WMM (Wi-Fi Multimedia) standard, while the SNC-CX600 is a PoE (Power over Ethernet) model that requires just a single network cable for data transmission and power supply.



X Series with IPELA ENGINE EX System

X Series cameras are 1080/30p mini dome models that are primarily designed for use in vehicles and for outdoor applications such as retail, banking, and education. Key features include a 90 dB dynamic range with View-DR technology, IK10 vandal resistance, IP66 ingress protection, and Image Stabilization. There are three models in the X Series: The SNC-XM632 is a perfect choice for general outdoor applications, while the SNC-XM636 and SNC-XM637 are ideal for train surveillance, providing high picture quality with a wide horizontal viewing angle of approximately 83° and 113°, respectively.



360° Hemispheric-view Camera (H Series)















The SNC-HM662 is a 360° hemispheric-view dome camera with a 5 megapixel CMOS sensor. It can be used for activity monitoring and situational awareness in various environments such as retail outlets, education, and office buildings. The SNC-HM662 provides a variety of 11 view modes that include a 360° hemispheric view, 180° panoramic view, and multiple view. Other key features include IP66 ingress protection, IK10 vandal resistance, two-way audio, and Edge Storage (onboard recording with micro SD cards).

* The SNC-HM662 is not equipped with an IPELA ENGINE processor.
All other V, E, X and Z series do not include IPELA ENGINE signal processing system.

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IP Fixed Cameras

| Series Name | V Series with IPELA ENGINE EX | | | | E Series with IPELA ENGINE EX | | | | C Series with IPELA ENGINE EX | |
|---------------------------------|---|---|---|---|--|---|---|---|---|---|
| Model Name | SNC-VB635 | SNC-VB630 | SNC-VB600 | SNC-VB600B | SNC-EB630 | SNC-EB600 | SNC-EB630B | SNC-EB600B | SNC-CX600W | SNC-CX600 |
| |  |  |  |  |  |  |  |  |  |  |
| | (lens not included) | | | | | | | | | |
| Video Compression Format | H.264 (High/Main/Baseline Profile)/JPEG | | | | H.264 (High/Main/Baseline Profile)/JPEG | | | | H.264 (High/Main/Baseline Profile)/JPEG | |
| Multi Streaming Capability | Triple streaming | | | | Triple streaming | | | | Triple streaming | |
| Computer Display Format |  |  | HD (*) | HD (*) |  | HD (*) |  | HD (*) | HD (*) | HD (*) |
| Maximum Resolution | 1920 x 1080 | 1920 x 1080 | 1280 x 1024 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1280 x 720 | 1280 x 720 |
| IR Illuminators | No | No | No | No | No | No | No | No | No | No |
| White-light LED Illuminator | No | No | No | No | No | No | No | No | Yes | Yes |
| Built-in Speaker and Microphone | No | No | No | No | No | No | No | No | Yes | Yes |
| Outdoor Use/Ingress Protection | No | No | No | No | No | No | No | No | No | No |
| Vandal Resistant | No | No | No | No | No | No | No | No | No | No |
| Horizontal Viewing Angle | NA | 114.2° to 40.0° | 100.0° to 35.7° | 100.0° to 35.7° | 114.2° to 40.0° | 100.0° to 35.7° | 114.2° to 40.0° | 100.0° to 35.7° | 120° | 120° |
| Zoom Ratio | NA | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.7x optical zoom | 2.9x optical zoom | 2.7x optical zoom | NA | NA |
| Focal Length | NA | f = 2.8 mm to 8.0 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 | 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 = 1.83 mm |
| Lens | C/CS mount lens (not included) | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | Fixed lens | Fixed lens |
| Image 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 | 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 | 1/2.9-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/4-type progressive scan Exmor CMOS sensor | 1/4-type progressive scan Exmor CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) |
| Wide-D/Dynamic Range | Equivalent to 90 dB with View-DR technology (30 fps) | Equivalent to 90 dB with View-DR technology | Equivalent to 130 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 | Equivalent to 90 dB with View-DR technology | Equivalent to 90 dB with View-DR technology | More than 60 dB | More than 60 dB |
| Minimum Illumination (50 IRE) | Color: 0.04 lx, B/W: 0.03 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.1 lx, B/W: 0.1 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.05 lx (F1.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 1.0 lx (F2.0, VE OFF, AGC MAX, 1/30 s, 30 fps) | Color: 1.0 lx (F2.0, VE OFF, AGC MAX, 1/30 s, 30 fps) |
| Maximum Frame Rate | 60 fps (H.264) at 1920 x 1080, 60 fps (JPEG) at 1280 x 720 | 60 fps (H.264) at 1920 x 1080, 60 fps (JPEG) at 1280 x 720 | 60 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1280 x 720 | 30 fps (H.264/JPEG) at 1280 x 720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | Electrical D/N | Electrical D/N | No | No |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology |
| Image Stabilizer | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Edge Storage | Yes | Yes | Yes | Yes | No | No | No | No | Yes | Yes |
| Card Slot | SD card | SD card | SD card | SD card | No | No | No | No | micro SD card | micro SD card |
| Wireless Network | No | No | No | No | No | No | No | No | IEEE802.11b/g/n | No |
| Analog Video/Monitor Output | Yes | Yes | Yes | Yes | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | No | No |
| Analytics Architecture | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | No | No | No | No | Yes, 2-way Audio | Yes, 2-way Audio |
| ONVIF™ Conformance | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| Power Requirements | IEEE802.3af compliant (PoE), AC 24 V, DC 12 V 6 W max. | IEEE802.3af compliant (PoE), AC 24 V, DC 12 V 6 W max. | IEEE802.3af compliant (PoE), AC 24 V, DC 12 V 6 W max. | IEEE802.3af compliant (PoE), AC 24 V, DC 12 V 6 W max. | IEEE 802.3af compliant (PoE) | IEEE 802.3af compliant (PoE) | IEEE 802.3af compliant (PoE) | IEEE 802.3af compliant (PoE) | DC 5 V | IEEE802.3af compliant (PoE) |
| Power Consumption | 6 W max. | 6 W max. | 6 W max. | 6 W max. | 6 W max. | 6 W max. | 6 W max. | 6 W max. | 5.0 W max. | 5.0 W max. |
| Operating Temperature | 14°F to 140°F (-10°C to +60°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 (-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) | Wired: 32°F to 122°F (0°C to 50°C) Wireless: 32°F to 104°F (0°C to 40°C) | 32°F to 122°F (0°C to +50°C) |
| Dimensions | Approx. 3 1/8 x 3 x 5 3/4 inches (79 x 74 x 145 mm) without lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 197 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 197 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 197 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 199 mm) with lens | 2 7/8 x 2 1/2 x 7 1/2 inches (72 x 63 x 188 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 199 mm) with lens | 2 7/8 x 2 1/2 x 7 1/2 inches (72 x 63 x 188 mm) with lens | Approx. 2 13/32 x 3 3/4 x 1 5/8 inches (61 x 95 x 41 mm) | Approx. 2 13/32 x 3 3/4 x 1 5/8 inches (61 x 95 x 41 mm) |









(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels.

IP Fixed Cameras

| Series Name | V Series | | | | E Series | | | | | X Series | |
|---------------------------------|---|---|---|---|--|---|---|---|---|---|---|
| Model Name | SNC-CH280 | SNC-CH180 | SNC-CH240 | SNC-CH140 | SNC-CH260 | SNC-CH160 | SNC-CH220 | SNC-CH120 | SNC-EB520 | SNC-CH210 | SNC-CH110 |
| |  |  |  |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | | | | H.264/MPEG-4/JPEG | | | | | H.264/MPEG-4/JPEG | |
| Multi Streaming Capability | Dual streaming | | | | Dual streaming | | | | | Dual streaming | |
| Computer Display Format | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | SD | Full HD 1080 | HD (*) |
| Maximum Resolution | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 | 800 x 600 | 2048 x 1536 | 1280 x 960 |
| IR Illuminators | Yes | Yes | No | No | Yes | Yes | No | No | No | No | No |
| White-light LED Illuminator | No | No | No | No | No | No | No | No | No | No | No |
| Built-in Speaker and Microphone | No | No | No | No | No | No | No | No | No | No | No |
| Outdoor Use/Ingress Protection | Yes/IP66 | Yes/IP66 | No | No | Yes/IP66 | Yes/IP66 | No | No | No | No | No |
| Vandal Resistant | No | No | No | No | No | No | No | No | No | No | No |
| Horizontal Viewing Angle | 88.5° to 32.3° | 85.4° to 31.2° | 101.2° to 47.0° | 96.5° to 33.9° | 88.5° to 32.3° | 85.4° to 31.2° | 101.2° to 47.0° | 96.5° to 33.9° | 89.2° to 34.6° | 89° | 80.7° |
| Zoom Ratio | 2.9x optical zoom | 2.9x optical zoom | 2.1x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.1x optical zoom | 2.9x optical zoom | 2.6x optical zoom | NA | NA |
| Focal Length | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=2.8 mm to 6.0 mm | f=2.8 mm to 8.0 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=2.8 mm to 6.0 mm | f=2.8 mm to 8.0 mm | f=3.0 mm to 8.0 mm | f=3.3 mm | f=2.3 mm |
| Lens | Built-in varifocal lens | Built-in varifocal lens | CS mount varifocal lens | CS mount varifocal lens | Built-in varifocal lens | Built-in varifocal lens | CS mount varifocal lens | CS mount varifocal lens | CS mount varifocal lens | Built-in fixed focal lens | Built-in fixed focal 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 | 1/3-type progressive scan Exmor CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3.8-type progressive scan Exmor CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | No | No | No | No | No | No | No |
| Wide-D/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 | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB | NA | NA |
| Minimum Illumination (50 IRE) | Color: 0.40 lx, B/W: 0 lx (IR illuminator ON) (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.22 lx, B/W: 0 lx (IR illuminator ON) (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.40 lx, B/W: 0 lx (IR illuminator ON) (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.20 lx, B/W: 0.1 lx (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.7 lx, B/W: 0 lx (IR illuminator ON) (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0 lx (IR illuminator ON) (F1.2, AGC 42 dB) | Color: 0.7 lx, B/W: 0.45 lx (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0.3 lx (F1.2, AGC 42 dB) | Color: 0.47 lx, B/W: 0.27 lx (F1.0, AGC ON) | 2.0 lx (AGC 38 dB) | 5.0 lx (AGC 30 dB) |
| Maximum Frame Rate | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720, 15 fps (H.264/MPEG-4/JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | Electrical D/N | Electrical D/N |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Image Stabilizer | No | No | No | No | No | No | No | No | No | No | No |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | CF card | CF card | CF card | CF card | No | No | No | No | No | No | No |
| Wireless Network | Yes (option) | Yes (option) | Yes (option) | Yes (option) | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes | Yes | Yes | Yes | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only |
| Analytics Architecture | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA | DEPA | DEPA | DEPA | DEPA | DEPA | DEPA |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | No | No | No | No | No | No | No |
| Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| ONVIF Conformance | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| Power Requirements | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) |
| Power Consumption | 33 W max. | 30 W max. | 11.2 W max. | 9 W max. | 12.9 W max. | 12.9 W max. | 5 W max. | 5 W max. | 5 W max. | 2.4 W max. | 2.4 W max. |
| Operating Temperature | -22°F to +122°F (-30°C to +50°C) for 24VAC/12VDC | -22°F to +122°F (-30°C to +50°C) for 24VAC/12VDC | 14°F to 122°F (-10°C to +50°C) | 14°F to 122°F (-10°C to +50°C) | -22°F to +122°F (-30°C to +50°C) for 24VAC/12VDC | -22°F to +122°F (-30°C to +50°C) for 24VAC/12VDC | 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) | 32°F to 122°F (0°C to +50°C) | 32°F to 122°F (0°C to +50°C) |
| Dimensions | ø3 3/4 x 7 3/8 inches (ø93 x 186 MM) | ø3 3/4 x 7 3/8 inches (ø93 x 186 MM) | ø2 7/8 x 2 1/2 x 7 3/4 inches (ø72 x 63 x 197.3 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 X 63 X 197 mm) with lens | ø3 3/4 x 7 3/8 inches (ø93 x 186 mm) | ø3 3/4 x 7 3/8 inches (ø93 x 186 mm) | ø2 7/8 x 2 1/2 x 7 3/4 inches (ø72 x 63 x 197.3 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 197 mm) with lens | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 187.8 mm) with lens | ø1 3/4 x 3 3/4 inches (ø44 x 93 mm) | ø1 3/4 x 3 3/4 inches (ø44 x 93 mm) |











(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels.

IP Mini Dome Cameras

| Series Name | V Series with IPELA ENGINE EX | | | | | | | |
|---------------------------------|--|--|---|--|---|---|---|---|
| Model Name | SNC-VM632R | SNC-VM602R | SNC-VM631 | SNC-VM601 | SNC-VM601B | SNC-VM630 | SNC-VM600 | SNC-VM600B |
| |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264 (High/Main/Baseline Profile)/JPEG | | | | | | | |
| Multi Streaming Capability | Triple streaming | | | | | | | |
| Computer Display Format | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | HD (*) | Full HD 1080 | HD (*) | HD (*) |
| Maximum Resolution | 1920 x 1080 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1280 x 1024 |
| IR Illuminators | Yes | Yes | No | No | No | No | No | No |
| Built-in Speaker and Microphone | No | No | No | No | No | No | No | No |
| Outdoor Use/Ingress Protection | Yes/IP66 | Yes/IP66 | No | No | No | No | No | No |
| Vandal Resistant | IK10 | IK10 | IK10 | IK10 | IK10 | No | No | No |
| Horizontal Viewing Angle | 105.2° to 35.4° | 93.0° to 31.6° | 105.2° to 35.4° | 93.0° to 31.6° | 93.0° to 31.6° | 105.2° to 35.4° | 93.0° to 31.6° | 93.0° to 31.6° |
| Zoom Ratio | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical 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 | 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 | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens |
| 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 | 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 | 1/3-type progressive scan Exmor CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) |
| Wide-D/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 | Equivalent to 130 dB with View-DR technology | Equivalent to 90 dB with View-DR technology | Equivalent to 130 dB with View-DR technology | Equivalent to 130 dB with View-DR technology |
| Minimum Illumination (50 IRE) | Color: 0.1 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR Illuminator ON) | Color: 0.05 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR Illuminator ON) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) |
| Maximum Frame Rate | 60 fps (H.264) at 1920 x 1080, 60 fps (JPEG) at 1280 x 720 | 60 fps (H.264/JPEG) at 1280 x 1024 | 60 fps (H.264) at 1920 x 1080, 60 fps (JPEG) at 1280 x 720 | 60 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1280 x 1024 | 60 fps (H.264) at 1920 x 1080, 60 fps (JPEG) at 1280 x 720 | 60 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1280 x 1024 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology |
| Image Stabilizer | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | SD card | SD card | SD card | SD card | SD card | SD card | SD card | SD card |
| Wireless Network | No | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio |
| ONVIF Conformance | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| Power Requirements | IEEE 802.3at compliant (PoE/PoE+ system), AC 24V, DC 12V | IEEE 802.3at compliant (PoE/PoE+ system), AC 24V, DC 12V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system), AC 24 V, DC 12 V |
| Power Consumption | Max. 22 W (AC 24 V/DC 12 V, heater ON) Max. 18 W (IEEE802.3at (PoE+), heater ON) Max. 12.8 W (IEEE802.3af/at (PoE/PoE+), heater OFF) | Max. 22 W (AC 24 V/DC 12 V, heater ON) Max. 18 W (IEEE802.3at (PoE+), heater ON) Max. 12.8 W (IEEE802.3af/at (PoE/PoE+), heater OFF) | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. |
| Operating Temperature | -40°F to 140°F (*) (-40°C to +60°C) (*) | -40°F to 140°F (*) (-40°C to +60°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 (-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) |
| Dimensions | ø6 5/8 x 5 1/8 inches (ø166 x 128 mm) | ø6 5/8 x 5 1/8 inches (ø166 x 128 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 109 mm) |








(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (**) 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.

IP Mini Dome Cameras

| Series Name | E Series with IPELA ENGINE EX | | | | | | X Series with IPELA ENGINE EX | | | H Series |
|---------------------------------|---|--|---|---|--|---|---|---|---|---|
| Model Name | SNC-EM632R | SNC-EM602R | SNC-EM631 | SNC-EM601 | SNC-EM630 | SNC-EM600 | SNC-XM632 | SNC-XM636 | SNC-XM637 | SNC-HM662 |
| |  |  |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264 (High/Main/Baseline Profile)/JPEG | | | | | | H.264 (High/Main/Baseline Profile)/JPEG | | | |
| Multi Streaming Capability | Triple streaming | | | | | | Triple streaming | | | Triple streaming |
| Computer Display Format | Full HD 1080 | HD (**) | Full HD 1080 | HD (**) | Full HD 1080 | HD (**) | Full HD 1080 | Full HD 1080 | Full HD 1080 | 5MP |
| Maximum Resolution | 1920 x 1080 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1920 x 1080 | 1280 x 1024 | 1920 x 1080 | 1920 x 1080 | 1920 x 1080 | 2560 x 1920 |
| IR Illuminators | Yes | Yes | No | No | No | No | No | No | No | No |
| Built-in Speaker and Microphone | No | No | No | No | No | No | Yes (built-in microphone) | Yes (built-in microphone) | Yes (built-in microphone) | Yes (built-in microphone) |
| Outdoor Use/Ingress Protection | Yes/IP66 | Yes/IP66 | No | No | No | No | Yes/IP66 | Yes/IP66 | Yes/IP66 | Yes/IP66 |
| Vandal Resistant | IK10 | IK10 | IK10 | IK10 | No | No | IK10 | IK10 | IK10 | IK10 |
| Horizontal Viewing Angle | 105.2° to 35.4° | 93.0° to 31.6° | 105.2° to 35.4° | 93.0° to 31.6° | 105.2° to 35.4° | 93.0° to 31.6° | 113° | 83° | 113° | 182° |
| Zoom Ratio | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3.0x optical zoom | 3x digital zoom | 3x digital zoom | 3x digital zoom | 12x digital 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 | f=3.0 mm to 9.0 mm | f=3.0 mm to 9.0 mm | f = 2.8 mm | f = 3.8 mm | f = 2.8 mm | f= 0.98 mm to 1.12 mm |
| Lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Fixed lens | Fixed lens | Fixed lens | Fixed lens |
| 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 | 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 | 1/2.9-type progressive scan Exmor CMOS sensor | 1/2.9-type progressive scan Exmor CMOS sensor | 1/2.5-type progressive scan CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Yes |
| Wide-D/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 | 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 | Equivalent to 90 dB with View-DR technology | More than 60 dB |
| Minimum Illumination (50 IRE) | Color: 0.1 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR illuminator ON) | Color: 0.05 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR illuminator ON) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.1 lx, B/W: 0.07 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.05 lx, B/W: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.3 lx, B/W: 0.3 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.3 lx, B/W: 0.3 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.3 lx, B/W: 0.3 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 0.7 lx, B/W: 0.01 lx (F2.0, AGC ON, 1/30 s, 10 fps) |
| Maximum Frame Rate | 30 fps (H.264) at 1920 x 1080, 30 fps (JPEG) at 1280 x 720 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1280 x 1024 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1920 x 1080 | 30 fps (H.264/JPEG) at 1920 x 1080, 13 fps (JPEG)/10 fps (H.264) at 2560 x 1920 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | Electrical D/N | Electrical D/N | Electrical D/N | True D/N |
| Noise Reduction | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | XDNR [®] Technology | No |
| Image Stabilizer | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No |
| Edge Storage | No | No | No | No | No | No | Yes | Yes | Yes | Yes |
| Card Slot | No | No | No | No | No | No | SD Card | SD Card | SD Card | micro SD card |
| Wireless Network | No | No | No | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | Yes/for setup only | No | No | No | No |
| Audio Capability | No | No | No | No | No | No | Yes | Yes | Yes | Yes |
| ONVIF Conformance | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| Power Requirements | IEEE 802.3af compliant (PoE/PoE+ system) | IEEE 802.3af compliant (PoE/PoE+ system) | IEEE 802.3af compliant (PoE system) | IEEE 802.3af compliant (PoE system) | IEEE 802.3af compliant (PoE system) | IEEE 802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system), DC 12 V |
| Power Consumption | Max. 17 W (IEEE802.3af (PoE+), heater ON) Max. 11 W (IEEE802.3af/at (PoE/PoE+), heater OFF) | Max. 17 W (IEEE802.3af (PoE+), heater ON) Max. 11 W (IEEE802.3af/at (PoE/PoE+), heater OFF) | 6 W max. | 6 W max. | 6 W max. | 6 W max. | Max. 10.0 W (heater ON) Max. 3.8 W (heater OFF) equivalent to PoE Class 1 | Max. 10.0 W (heater ON) Max. 3.8 W (heater OFF) equivalent to PoE Class 1 | Max. 10.0 W (heater ON) Max. 3.8 W (heater OFF) equivalent to PoE Class 1 | 6.0 W max. |
| Operating Temperature | -40°F to 122°F (**) (-40°C to +50°C) (**) | -40°F to 122°F (**) (-40°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 (-10°C to +50°C) | -13°F to +122°F (-25°C to +50°C) | -13°F to +122°F (-25°C to +50°C) | -13°F to +122°F (-25°C to +50°C) | -22°F to +122°F (-30°C to +50°C) |
| Dimensions | ø16 5/8 x 5 1/8 inches (ø166 x 129 mm) | ø16 5/8 x 5 1/8 inches (ø166 x 129 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 108 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 108 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 108 mm) | ø5 7/8 x 4 3/8 inches (ø148 x 108 mm) | Approx. ø 1/2 x 1 27/32 inches (ø114 x 47 mm) | Approx. ø 1/2 x 1 27/32 inches (ø114 x 47 mm) | Approx. ø 1/2 x 1 27/32 inches (ø114 x 47 mm) | Approx. 5.71 x 5.71 x 1.43 inches (145 x 145 x 36.3 mm) |











(**) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (***) 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.

IP Mini Dome Cameras

| Series Name | V Series | | | | | | E Series | |
|---------------------------------|---|---|--|--|---|---|---|---|
| | SNC-DH280 | SNC-DH180 | SNC-DH240T | SNC-DH140T | SNC-DH240 | SNC-DH140 | SNC-DH260 | SNC-DH160 |
| Model Name |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | | | | | | H.264/MPEG-4/JPEG | |
| Multi Streaming Capability | Dual streaming | | | | | | Dual streaming | |
| Computer Display Format | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) |
| Maximum Resolution | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 | 1920 x 1440 | 1280 x 1024 |
| IR Illuminators | Yes | Yes | No | No | No | No | Yes | Yes |
| Built-in Speaker and Microphone | No | No | No | No | No | No | No | No |
| Outdoor Use/Ingress Protection | Yes/IP66 | Yes/IP66 | No | No | No | No | Yes/IP66 | Yes/IP66 |
| Vandal Resistant | IK10 | IK10 | IK10 | IK10 | No | No | IK10 | IK10 |
| Horizontal Viewing Angle | 88.5° to 32.3° | 85.4° to 31.2° | 88.5° to 32.3° | 85.4° to 31.2° | 88.5° to 32.3° | 85.4° to 31.2° | 88.5° to 32.3° | 85.4° to 31.2° |
| Zoom Ratio | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom |
| Focal Length | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm | f = 3.1mm to 8.9 mm |
| Lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal 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 | 1/3-type progressive scan Exmor CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | No | No |
| Wide-D/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 | Equivalent to 90 dB with View-DR technology | Equivalent to 130 dB with View-DR technology | More than 60 dB | More than 60 dB |
| Minimum Illumination (50 IRE) | Color: 0.40 lx, B/W: 0 lx (IR illuminator ON) (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.22 lx, B/W: 0 lx (IR illuminator ON) (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.40 lx, B/W: 0.25 lx (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.20 lx, B/W: 0.10 lx (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.40 lx, B/W: 0.25 lx (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.20 lx, B/W: 0.10 lx (F1.2, View-DR OFF, XDNR ON-Middle, VE OFF, AGC High) | Color: 0.7 lx, B/W: 0 lx (IR illuminator ON) (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0 lx (IR illuminator ON) (F1.2, AGC 42 dB) |
| Maximum Frame Rate | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | Yes | Yes |
| Image Stabilizer | No | No | No | No | No | No | No | No |
| Edge Storage | No | No | No | No | No | No | No | No |
| Card Slot | No | No | No | No | No | No | No | No |
| Wireless Network | No | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes | Yes | Yes | Yes | Yes | Yes | Yes / for setup only | Yes / for setup only |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | No | No |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE 802.3af compliant (PoE system), AC 24 V, DC 12 V | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) |
| Power Consumption | 29 W max. | 28 W max. | 10.2 W max. | 8.0 W max. | 10.2 W max. | 8 W max. | 12.9 W max. | 12.9 W max. |
| Operating Temperature | -22°F to +122°F (-30°C to +50°C) for AC 24 V/DC 12 V, 14°F to 122°F (-10°C to +50°C) for PoE | -22°F to +122°F (-30°C to +50°C) for AC 24 V/DC 12 V, 14°F to 122°F (-10°C to +50°C) for PoE | 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 (-10°C to +50°C) | -22 to +122°F (-30 to +50°C) | -22 to +122°F (-30 to +50°C) |
| Dimensions | ø6 5/8 x 4 3/4 inches (ø166 x 119 mm) | ø6 5/8 x 4 3/4 inches (ø166 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø6 5/8 x 4 3/4 inches (ø166 x 119 mm) | ø6 5/8 x 4 3/4 inches (ø166 x 119 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels.









IP Mini Dome Cameras

| Series Name | E Series | | | | | | X Series | | | |
|---------------------------------|---|---|---|---|--|---|---|---|---|---|
| Model Name | SNC-DH220T | SNC-DH120T | SNC-EM521 | SNC-DH220 | SNC-DH120 | SNC-EM520 | SNC-DH210T | SNC-DH110T | SNC-DH210 | SNC-DH110 |
| |  |  |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | | | | | | H.264/MPEG-4/JPEG | | | |
| Multi Streaming Capability | Dual streaming | | | | | | Dual streaming | | | |
| Computer Display Format | Full HD 1080 | HD (*) | SD | Full HD 1080 | HD (*) | SD | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) |
| Maximum Resolution | 1920 x 1440 | 1280 x 1024 | 800 x 600 | 1920 x 1440 | 1280 x 1024 | 800 x 600 | 2048 x 1536 | 1280 x 960 | 2048 x 1536 | 1280 x 960 |
| IR Illuminators | No | No | No | No | No | No | No | No | No | No |
| Built-in Speaker and Microphone | No | No | No | No | No | No | No | No | No | No |
| Outdoor Use/Ingress Protection | No | No | No | No | No | No | No | No | No | No |
| Vandal Resistant | IK10 | IK10 | IK10 | No | No | No | IK10 | IK10 | No | No |
| Horizontal Viewing Angle | 88.5° to 32.3° | 85.4° to 31.2° | 85.4° to 31.2° | 88.5° to 32.3° | 85.4° to 31.2° | 85.4° to 31.2° | 86° | 79° | 88° | 80.7° |
| Zoom Ratio | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | NA | NA | NA | NA |
| Focal Length | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f = 3.3 mm | f = 2.34 mm | f = 3.3 mm | f = 2.34 mm |
| Lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in varifocal lens | Built-in fixed focal lens | Built-in fixed focal lens | Built-in fixed focal lens | Built-in fixed focal lens |
| Image Sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3-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 | 1/3-type progressive scan Exmor CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3.8-type progressive scan CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor | 1/3.8-type progressive scan CMOS sensor |
| Tone Correction | No | No | No | No | No | No | No | No | No | No |
| Wide-D/Dynamic Range | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB | NA | NA | NA | NA |
| Minimum Illumination (50 IRE) | Color: 0.7 lx, B/W: 0.45 lx (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0.3 lx (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0.3 lx (F1.2, AGC 42 dB) | Color: 0.7 lx, B/W: 0.45 lx (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0.3 lx (F1.2, AGC 42 dB) | Color: 0.5 lx, B/W: 0.3 lx (F1.2, AGC 42 dB) | 2.3 lx (AGC 38 dB) | 5.5 lx (AGC 30 dB) | 2.0 lx (AGC 38 dB) | 5.0 lx (AGC 30 dB) |
| Maximum Frame Rate | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720, 15 fps (H.264/MPEG-4/JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 960/720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720, 15 fps (H.264/MPEG-4/JPEG) at 1920 x 1080 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 960/720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | Electrical D/N | Electrical D/N | Electrical D/N | Electrical D/N |
| Noise Reduction | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Image Stabilizer | No | No | No | No | No | No | No | No | No | No |
| Edge Storage | No | No | No | No | No | No | No | No | No | No |
| Card Slot | No | No | No | No | No | No | No | No | No | No |
| Wireless Network | No | No | No | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only | Yes / for setup only |
| Audio Capability | No | No | No | No | No | No | No | No | No | No |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) | IEEE802.3af compliant (PoE system) |
| Power Consumption | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. | 6.0 W max. | 2.4 W max. | 2.4 W max. | 2.4 W max. | 2.4 W max. |
| Operating Temperature | 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 (-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) | 32°F to 122°F (0°C to +50°C) | 32°F to 122°F (0°C to +50°C) | 32°F to 122°F (0°C to +50°C) | 32°F to 122°F (0°C to +50°C) |
| Dimensions | ø5 5/8 x 4 3/4 inches (ø140 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 119 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø4 1/4 x 2 1/4 inches (ø106 x 56.5 mm) | ø4 1/4 x 2 1/4 inches (ø106 x 56.5 mm) | ø4 1/4 x 2 inches (ø106 x 50.5 mm) | ø4 1/4 x 2 inches (ø106 x 50.5 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels.

IP Rapid Dome and PTZ Cameras

P/T/Z: Pan/Tilt/Zoom

| Series Name | W Series with IPELA ENGINE PRO | | | | E Series (Fixed Dome) | | | |
|--------------------------------|---|---|---|--|---|---|---|---|
| Model Name | SNC-WR632 | SNC-WR602 | SNC-WR630 | SNC-WR600 | SNC-ER585 | SNC-ER580 | UNI-ONER580C7 | UNI-ONER580C2 |
| |  |  |  |  |  |  |  |  |
| Video Compression Format | H.264 (High/Main/Baseline Profile)/JPEG | | | | H.264/MPEG-4/JPEG | | | |
| Multi Streaming Capability | Triple streaming | | | | Dual streaming | | | |
| Computer Display Format | Full HD 1080 | HD (*) | Full HD 1080 | HD (*) | Full HD 1080 | Full HD 1080 | Full HD 1080 | Full HD 1080 |
| Maximum Resolution | 1920 x 1080 | 1280 x 720 | 1920 x 1080 | 1280 x 720 | 1920 x 1080 | 1920 x 1080 | 1920 x 1080 | 1920 x 1080 |
| Outdoor Use/Ingress Protection | Yes/IP66 | Yes/IP66 | No | No | Yes/IP66 | No | Yes/IP66 | Yes/IP66 |
| Vandal Resistant | IK10 | IK10 | No | No | IK10 | No | No | No |
| 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° | 55.4° to 2.9° | 55.4° to 2.9° | 55.4° to 2.9° |
| Zoom Ratio | 30x optical zoom | 30x optical zoom | 30x optical zoom | 30x optical zoom | 30x optical zoom | 20x optical zoom | 20x optical zoom | 20x optical 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 = 4.7 mm to 94.0 mm | f = 4.7 mm to 94.0 mm | f = 4.7 mm to 94.0 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 | 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 | 1/2.8-type progressive scan Exmor CMOS sensor | 1/2.8-type progressive scan Exmor CMOS sensor |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | No | No | No | No |
| Wide-D/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 | 86 dB (theoretical) with DynaView technology | 86 dB (theoretical) with DynaView technology |
| Minimum Illumination (50 IRE) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 1.0 lx, B/W: 0.03 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 1.0 lx, B/W: 0.03 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) |
| Maximum Frame Rate | 60 fps (H.264/JPEG) at 1920 x 1080 | 60 fps (H.264/JPEG) at 1280 x 720 | 60 fps (H.264/JPEG) at 1920 x 1080 | 60 fps (H.264/JPEG) at 1280 x 720 | 30 fps (H264)/20 fps (MPEG-4)/16 fps (JPEG) (*) at 1920 x 1080 | 30 fps (H264)/20 fps (MPEG-4)/16 fps (JPEG) (*) at 1920 x 1080 | 30 fps (H264)/20 fps (MPEG-4)/16 fps (JPEG) (*) at 1920 x 1080 | 30 fps (H264)/20 fps (MPEG-4)/16 fps (JPEG) (*) at 1920 x 1080 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | Yes | Yes | Yes | Yes |
| Image Stabilizer | Gyroscopic Image Stabilizer | Gyroscopic Image Stabilizer | Gyroscopic Image Stabilizer | Gyroscopic Image Stabilizer | Yes | No | No | No |
| Defog Image Processing | Yes | Yes | Yes | Yes | No | No | No | No |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | SD card | SD card | SD card | SD card | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card |
| Wireless Network | No | No | No | No | No | No | No | No |
| Analog Video/Monitor Output | Yes | Yes | Yes | Yes | No | No | No | No |
| Rapid Dome or PTZ | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome |
| Pan/Tilt Angle (Mechanical) | 360° endless rotation/220° | 360° endless rotation/220° | 360° endless rotation/220° | 360° endless rotation/220° | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) |
| Pan Speed | 700°/s (max.) | 700°/s (max.) | 700°/s (max.) | 700°/s (max.) | 300°/s (max.) | 300°/s (max.) | 300°/s (max.) | 300°/s (max.) |
| Analytics Architecture | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA | DEPA | DEPA | DEPA |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio |
| ONVIF Conformance | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S | Profile S |
| Power Requirements | HPoE+, AC 24 V | HPoE+, AC 24 V | IEEE802.3at compliant (HPoE system), AC 24 V, DC 12 V | IEEE802.3at compliant (HPoE system), AC 24 V, DC 12 V | AC 24 V | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V |
| Power Consumption | 80 W max. | 80 W max. | 25 W max. | 25 W max. | 75 W max. (heater ON)/25 W max. (heater OFF) | 25 W max. | 60 W max. | 52 W max. |
| Operating Temperature | AC 24 V: -40°F to +122°F (-40°C to +50°C) HPoE+: 23°F to 122°F (-5°C to +50°C) | AC 24 V: -40°F to +122°F (-40°C to +50°C) HPoE+: 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) | -40°F to +140°F (-40°C to +60°C) | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) |
| Dimensions WHD | ø8 3/4 x 12 7/8 inches (ø222.0 x 324.1 mm) | ø8 3/4 x 12 7/8 inches (ø222.0 x 324.1 mm) | ø5 7/8 x 8 1/8 inches (ø146.3 x 205.0 mm) | ø5 7/8 x 8 1/8 inches (ø146.3 x 205.0 mm) | ø8 3/4 x 12 7/8 inches (ø222.0 x 323.9 mm) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (**) When using DynaView technology, the maximum frame rate becomes 15 fps. Definition of Rapid Dome: 360 degree endless rotation. Definition of Pan Tilt Zoom: 340 degrees.

IP Rapid Dome and PTZ Cameras







P/T/Z: Pan/Tilt/Zoom

| Series Name | E Series (PTZ) | | | E Series (Rapid Dome) | | |
|--------------------------------|---|---|---|--|---|---|
| Model Name | SNC-EP580 | UNI-ONEP580C7 | UNI-ONEP580C2 | SNC-ER550 | UNI-ONER550C7 | UNI-ONER550C2 |
| |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG |
| Multi Streaming Capability | Dual streaming | | | | | |
| Computer Display Format | Full HD 1080 | Full HD 1080 | Full HD 1080 | HD (*) | HD (*) | HD (*) |
| Maximum Resolution | 1920 x 1080 | 1920 x 1080 | 1920 x 1080 | 1280 x 720 | 1280 x 720 | 1280 x 720 |
| Outdoor Use/Ingress Protection | No | Yes/IP66 | Yes/IP66 | No | Yes/IP66 | Yes/IP66 |
| Vandal Resistant | No | No | No | No | No | No |
| Horizontal Viewing Angle | 55.4° to 2.9° | 55.4° to 2.9° | 55.4° to 2.9° | 55.9° to 2.1° | 55.4° to 2.9° | 55.9° to 2.1° |
| Zoom Ratio | 20x optical zoom | 20x optical zoom | 20x optical zoom | 28x optical zoom | 28x optical zoom | 28x optical zoom |
| Focal Length | f = 4.7 mm to 94.0 mm | 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 = 3.5 mm to 98 mm |
| Lens | Auto-focus zoom lens | No | No | Auto-focus zoom lens | No | No |
| Image Sensor | 1/2.8-type progressive scan Exmor CMOS 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 progressive scan Exmor CMOS sensor |
| Tone Correction | No | No | No | No | No | No |
| Wide-D/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 | 86 dB (theoretical) with DynaView technology | 86 dB (theoretical) with DynaView technology |
| Minimum Illumination (50 IRE) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.7 lx, B/W: 0.3 lx (F1.6, AGC ON, 1/30 s) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) |
| Maximum Frame Rate | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) (***) at 1920 x 1080 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) (***) at 1920 x 1080 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) (***) at 1920 x 1080 | 30 fps (H.264)/20 fps (MPEG-4)/16 fps (JPEG) (***) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | Yes | Yes | Yes | Yes | Yes | Yes |
| Image Stabilizer | No | No | No | No | No | No |
| Defog Image Processing | No | No | No | No | No | No |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card |
| Wireless Network | No | No | No | No | No | No |
| Analog Video/Monitor Output | No | No | No | No | No | No |
| Rapid Dome or PTZ | PTZ | PTZ | PTZ | Rapid Dome | Rapid Dome | Rapid Dome |
| Pan/Tilt Angle (Mechanical) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) |
| 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 |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V |
| Power Consumption | 25 W max. | 60 W max. | 52 W max. | 25 W max. | 60 W max. | 52 W max. |
| Operating Temperature | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) |
| Dimensions (WHD) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (**) When using DynaView technology, the maximum frame rate becomes 15 fps. Definition of Rapid Dome: 360 degree endless rotation. Definition of Pan Tilt Zoom: 340 degrees.

IP Rapid Dome and PTZ Cameras








P/T/Z: Pan/Tilt/Zoom

| Series Name | E Series (PTZ) | | | E Series (Rapid Dome) | | |
|--------------------------------|---|---|---|---|---|---|
| Model Name | SNC-EP550 | UNI-ONEP550C7 | UNI-ONEP550C2 | SNC-ER520 | UNI-ONER520C7 | UNI-ONER520C2 |
| |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG |
| Multi Streaming Capability | Dual streaming | | | | | |
| Computer Display Format | HD (*) | HD (*) | HD (*) | SD | SD | SD |
| Maximum Resolution | 1280 x 720 | 1280 x 720 | 1280 x 720 | 720 x 480 | 720 x 480 | 720 x 480 |
| Outdoor Use/Ingress Protection | No | Yes/IP66 | Yes/IP66 | No | Yes/IP66 | Yes/IP66 |
| Vandal Resistant | No | No | No | No | No | No |
| Horizontal Viewing Angle | 55.9° to 2.1° | 55.9° to 2.1° | 55.9° to 2.1° | 57.8° to 1.7° | 57.8° to 1.7° | 57.8° to 1.7° |
| Zoom Ratio | 28x optical zoom | 28x optical zoom | 28x optical zoom | 36x optical zoom | 36x optical zoom | 36x optical zoom |
| Focal Length | f = 3.5 mm to 98 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 | f = 3.4 mm to 122.4 mm |
| Lens | Auto-focus zoom lens | No | No | Auto-focus zoom lens | No | No |
| Image Sensor | 1/4-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 | 1/4-type EXview HAD CCD |
| Tone Correction | No | No | No | No | No | No |
| Wide-D/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 | 86 dB (theoretical) with DynaView technology | 86 dB (theoretical) with DynaView technology |
| Minimum Illumination (50 IRE) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) | Color: 1.0 lx, B/W: 0.1 lx (F1.35, AGC ON, 1/30 s) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) |
| Maximum Frame Rate | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) (*) | 30 fps (H.264/MPEG-4/JPEG) (*) | 30 fps (H.264/MPEG-4/JPEG) (*) |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | Yes | Yes | Yes | Yes | Yes | Yes |
| Image Stabilizer | No | No | No | No | No | No |
| Defog Image Processing | No | No | No | No | No | No |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card | SD/SDHC card |
| Wireless Network | No | No | No | No | No | No |
| Analog Video/Monitor Output | No | No | No | No | No | No |
| Rapid Dome or PTZ | PTZ | PTZ | PTZ | Rapid Dome | Rapid Dome | Rapid Dome |
| Pan/Tilt Angle (Mechanical) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) |
| 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 |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V |
| Power Consumption | 25 W max. | 60 W max. | 52 W max. | 25 W max. | 60 W max. | 52 W max. |
| Operating Temperature | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) |
| Dimensions (WHD) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 546.1 x 292.1 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (*) When using DynaView technology, the maximum frame rate becomes 15 fps.
 Definition of Rapid Dome: 360 degree endless rotation. Definition of Pan Tilt Zoom: 340 degrees.

IP Rapid Dome and PTZ Cameras

P/T/Z: Pan/Tilt/Zoom

| Series Name | E Series (PTZ) | | | SNC-RH164 | SNC-RH124 | SNC-RS86N | SNC-RS46N |
|--------------------------------|---|---|---|--|---|---|---|
| Model Name | SNC-EP520 | UNI-ONEP520C7 | UNI-ONEP520C2 | SNC-RH164 | SNC-RH124 | SNC-RS86N | SNC-RS46N |
| |  |  |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | H.264/MPEG-4/JPEG | | H.264/MPEG-4/JPEG | |
| Multi Streaming Capability | | | Dual streaming | | | Triple streaming | |
| Computer Display Format | SD | SD | SD | HD ^(*) | HD ^(*) | SD | SD |
| Maximum Resolution | 720 x 480 | 720 x 480 | 720 x 480 | 1280 x 720 | 1280 x 720 | 720 x 480 | 720 x 480 |
| Outdoor Use/Ingress Protection | No | Yes/IP66 | Yes/IP66 | Yes/IP66 | No | Yes/IP66 | No |
| Vandal Resistant | No | No | No | IK10 | No | IK10 | No |
| Horizontal Viewing Angle | 57.8° to 1.7° | 57.8° to 1.7° | 57.8° to 1.7° | 50° to 5.4° | 50° to 5.4° | 57.8° to 1.7° | 57.8° to 1.7° |
| Zoom Ratio | 36x optical zoom | 36x optical zoom | 36x optical zoom | 10x optical zoom | 10x optical zoom | 36x optical zoom | 36x optical zoom |
| Focal Length | f = 3.4 mm to 122.4 mm | f = 3.4 mm to 122.4 mm | f = 3.4 mm to 122.4 mm | f = 5.1 mm to 51 mm | f = 5.1 mm to 51 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 | Auto-focus zoom lens |
| Image Sensor | 1/4-type EXview HAD CCD | 1/4-type EXview HAD CCD | 1/4-type EXview HAD CCD | 1/3-type HD CMOS sensor | 1/3-type HD CMOS sensor | 1/4-type EXview HAD CCD | 1/4-type EXview HAD CCD |
| Tone Correction | No | No | No | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) |
| Wide-D/Dynamic Range | 92 dB (theoretical) with DynaView technology | 92 dB (theoretical) with DynaView technology | 92 dB (theoretical) with DynaView technology | NA | NA | NA | NA |
| Minimum Illumination (50 IRE) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) | Color: 1.4 lx, B/W: 0.15 lx (F1.6, AGC ON, 1/60 s/1/50 s) | Color: 2.1 lx, B/W: 0.19 lx (XDNR ON, VE ON, Slow Shutter OFF) | Color: 1.9 lx, B/W: 0.17 lx (XDNR ON, VE ON, Slow Shutter OFF) | Color: 0.8 lx, B/W: 0.09 lx (XDNR ON, VE ON, Slow Shutter OFF) | Color: 0.7 lx, B/W: 0.08 lx (XDNR ON, VE ON, Slow Shutter OFF) |
| Maximum Frame Rate | 30 fps/25 fps (H.264/MPEG-4/JPEG) ^(*) | 30 fps/25 fps (H.264/MPEG-4/JPEG) ^(*) | 30 fps/25 fps (H.264/MPEG-4/JPEG) ^(*) | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps/25 fps (H.264/MPEG-4/JPEG) ^(*) | 30 fps/25 fps (H.264/MPEG-4/JPEG) ^(*) |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | Yes | Yes | Yes | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology |
| Image Stabilizer | No | No | No | No | No | No | No |
| Defog Image Processing | No | No | No | No | No | No | No |
| Edge Storage | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Card Slot | SD/SDHC card | SD/SDHC card | SD/SDHC card | CF card | CF card | CF card | CF card |
| Wireless Network | No | No | No | Yes (option) | Yes (option) | Yes (option) | Yes (option) |
| Analog Video/Monitor Output | No | No | No | Yes | Yes | Yes | Yes |
| Rapid Dome or PTZ | PTZ | PTZ | PTZ | Rapid Dome | Rapid Dome | Rapid Dome | Rapid Dome |
| Pan/Tilt Angle (Powered) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 340°/105° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) | 360° endless rotation/210° (15° above horizon) |
| Pan Speed | 300°/s (max.) | 300°/s (max.) | 300°/s (max.) | 400°/s (max.) | 400°/s (max.) | 400°/s (max.) | 400°/s (max.) |
| Analytics Architecture | DEPA | DEPA | DEPA | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced |
| Audio Capability | Yes, 2-way Audio | Yes, 2-way Audio | Yes, 2-way Audio | Yes | Yes | Yes | Yes |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | IEEE 802.3at compliant (HPoE system), AC 24 V | HPoE+ (60W) injector included | AC 24 V | AC 24 V | IEEE 802.3at compliant (HPoE), AC 24 V, DC 12 V | AC 24 V | IEEE 802.3at compliant (HPoE), AC 24 V, DC 12 V |
| Power Consumption | 25 W max. | 60 W max. | 52 W max. | 80 W max. | 25 W max. | 78 W max. | 23 W max. |
| Operating Temperature | 23°F to 122°F (-5°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -20°F to +122°F (-30°C to +50°C) | -40°F to +122°F (-40°C to +50°C) | 32°F to 122°F (0°C to +50°C) | -40°F to +122°F (-40°C to +50°C) | 32°F to 122°F (0°C to +50°C) |
| Dimensions (WHD) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.p mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 246.1 x 292.1 mm) | 11 1/2 x 2 1/2 x 11 1/2 inches (292.1 x 246.1 x 292.1 mm) | ø9 3/8 x 13 5/8 inches (ø238 x 344 mm) | ø6 1/8 x 9 inches (ø154 x 226 mm) | ø9 3/8 x 13 5/8 inches (ø238 x 344 mm) | ø6 1/8 x 9 inches (ø154 x 226 mm) |

(*) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels. (**) Requires SNCA-CFw5 wireless card and a SNCA-CW5 wireless antenna cable kit. (***) Requires the wireless card.
Rapid Dome: 360 degree endless rotation. Pan Tilt Zoom: 340 degrees.

Hybrid Camera Solutions

IPELA HYBRID™ – Sony’s IP and Analog-over-Coax Technology*1 – Offers Cost-effective Retrofit Solutions for Existing Analog CCTV Systems

Sony offers a new video surveillance technology that can simultaneously transmit both IP and analog signals on a single coaxial cable. It allows customers to easily migrate to HD IP video surveillance systems with minimal investment, utilizing their existing analog infrastructure. Based on this technology – IPELA HYBRID – Sony offers solutions comprised of hybrid cameras and a compatible SLOC device*2.

These unique solutions deliver the following advantages:

- Cost-effective surveillance systems that can be easily migrated from an analog CCTV system to an IP network-based system, making the most of any existing surveillance infrastructure (e.g. coaxial cables, local power supplies, matrix switchers, controllers, and video wall monitors)
- Simultaneous transmission of IP HD video and analog SD video (see diagram below)
- Utilization of the advanced features and functionalities offered by IP network cameras
- Maximum cable length of 1,000 feet (300 m) with an RG-59 coaxial cable*3
- Minimized latency of analog video and PTZ control for video monitoring

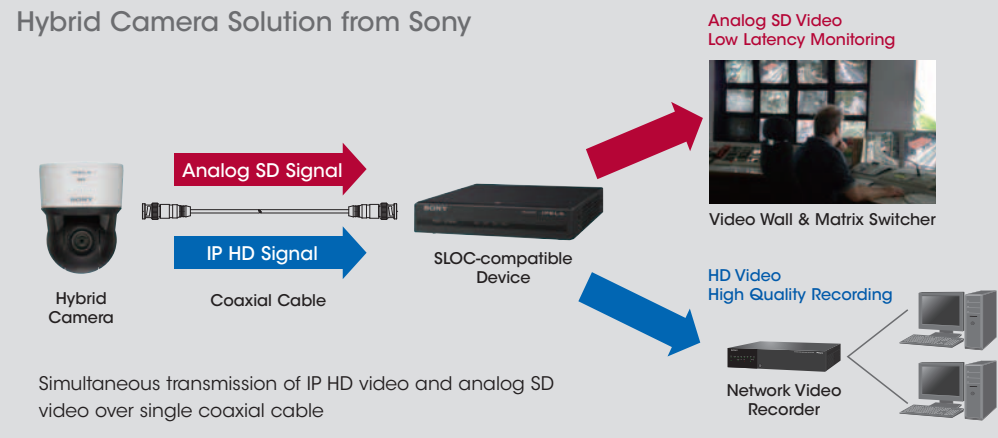
Sony’s hybrid camera solutions can be used in a wide variety of surveillance applications, and in locations such as commercial facilities, financial institutions, office buildings, casinos, airports, government-related facilities, and schools.

*1 Sony’s IP and analog-over-coax technology is developed based on Intersil Corporation’s SLOC™ (Security Link Over Coax) technology.

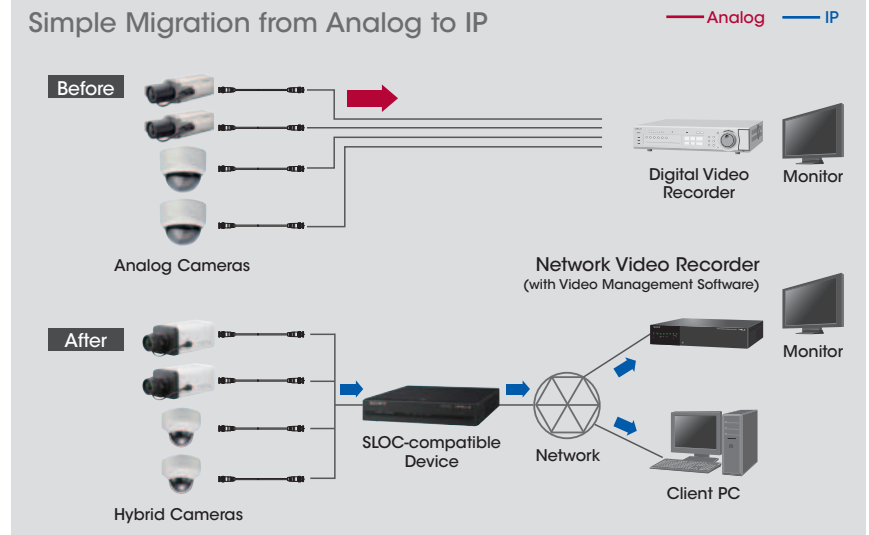
*2 For information on SLOC-compatible devices, please contact your nearest Authorized Sony Reseller.

*3 Cable length varies according to cable grade and quality.

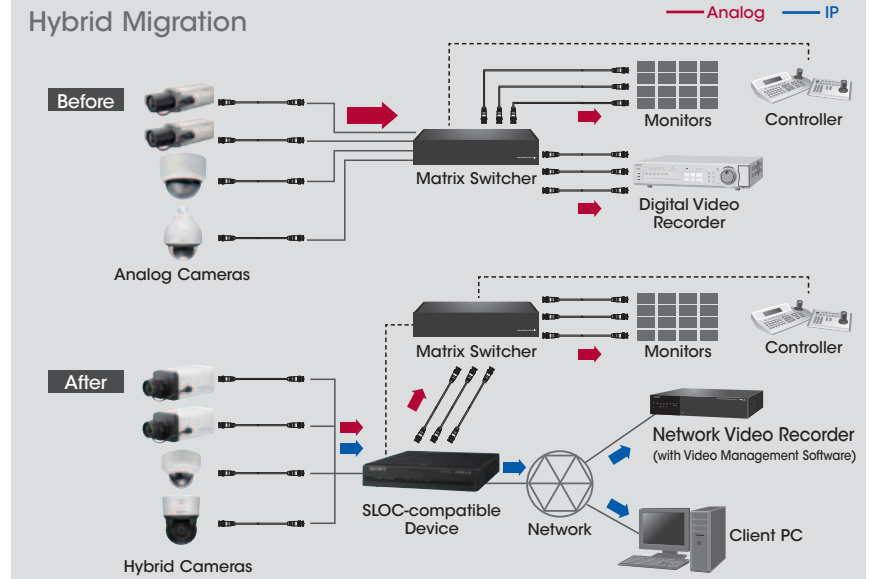
Hybrid Camera Solution from Sony








Simple Migration from Analog to IP



Hybrid Migration



Hybrid Cameras


| Series Name | Z Series | | | | |
|-------------------------------|---|---|---|--|---|
| Model Name | SNC-ZB550 | SNC-ZM551 | SNC-ZM550 | SNC-ZR550 | SNC-ZP550 |
| | Hybrid Fixed HD Camera | Hybrid Vandal-resistant Mini Dome HD Camera | Hybrid Mini Dome HD Camera | Hybrid Rapid Dome HD Camera | Hybrid PTZ HD Camera |
| |  |  |  |  |  |
| Video Compression Format | H.264/MPEG-4/JPEG | | | | |
| Multi Streaming Capability | Dual streaming ^(*) | | | | |
| Computer Display Format | HD ^(**) | HD ^(**) | HD ^(**) | HD ^(**) | HD ^(**) |
| Maximum Resolution (IP) | 1280 x 1024 | 1280 x 1024 | 1280 x 1024 | 1280 x 720 | 1280 x 720 |
| Signal System | NTSC/PAL (switchable) | | | | |
| Vandal Resistant | No | IK10 | No | No | No |
| Horizontal Viewing Angle | 96.5° to 33.9° | 85.4° to 31.2° | 85.4° to 31.2° | 55.9° to 2.1° | 55.9° to 2.1° |
| Zoom Ratio | 2.9x optical zoom | 2.9x optical zoom | 2.9x optical zoom | 28x optical zoom | 28x optical zoom |
| Focal Length | f=2.8 mm to 8 mm | f=3.1 mm to 8.9 mm | f=3.1 mm to 8.9 mm | f=3.5 mm to 98 mm | f=3.5 mm to 98 mm |
| Lens | CS mount lens | Built-in varifocal lens | Built-in varifocal lens | Auto-focus zoom lens | Auto-focus zoom lens |
| Image Sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/3-type progressive scan Exmor CMOS sensor | 1/4-type progressive scan Exmor CMOS sensor | 1/4-type progressive scan Exmor CMOS sensor |
| Wide-D/Dynamic Range | More than 60 dB | More than 60 dB | More than 60 dB | More than 60 dB with DynaView | More than 60 dB with DynaView |
| Minimum Illumination (50 IRE) | Color: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB by IP) | Color: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB by IP) | Color: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB by IP) | Color: 1.0 lx, B/W: 0.10 lx (F1.35, AGC ON, shutter 1/30 s by IP) | Color: 1.0 lx, B/W: 0.10 lx (F1.35, AGC ON, shutter 1/30 s by IP) |
| Maximum Frame Rate | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 | 30 fps (H.264/MPEG-4/JPEG) at 1280 x 720 |
| Day/Night | True D/N | True D/N | True D/N | True D/N | True D/N |
| Noise Reduction | Yes | Yes | Yes | Yes | Yes |
| Card Slot | No | No | No | SD/SDHC card | SD/SDHC card |
| Analog Video Output | Yes | Yes | Yes | Yes | Yes |
| Rapid Dome or PTZ | No | No | No | Rapid Dome | PTZ |
| Pan/Tilt Angle (Powered) | No | No | No | 360° endless rotation/210° (15 degrees above horizon) | 340°/105° (15 degrees above horizon) |
| Pan Speed | No | No | No | 300°/s (max.) | 300°/s (max.) |
| Analytics Architecture | DEPA | DEPA | DEPA | DEPA | DEPA |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes |
| Power Requirements | AC 24 V, DC 12 V | AC 24 V, DC 12 V | AC 24 V, DC 12 V | IEEE 802.3at compliant (HPoE system) ^(***) , AC 24 V | IEEE 802.3at compliant (HPoE system) ^(***) , AC 24 V |
| Power Consumption | 6 W max. | 7 W max. | 7 W max. | 25 W max. | 25 W max. |
| Operating Temperature | 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) | 23°F to 122°F (-5°C to +50°C) | 23°F to 122°F (-5°C to +50°C) |
| Dimensions | 2 7/8 x 2 1/2 x 7 7/8 inches (72 x 63 x 197 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø5 5/8 x 4 3/4 inches (ø140 x 118 mm) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) | ø5 7/8 x 7 5/8 inches (ø147.4 x 190.9 mm) |

(*) Dual streaming is not available when an analog video signal is output from the SLOC port.

(**) Definition of HD: Vertical resolution of at least 720 pixels, and streaming capability of more than 30 fps at 1280 x 720 pixels.

(***) HPoE is available when the camera is connected to HPoE-compatible equipment via an Ethernet cable.

Hybrid Camera Receiver

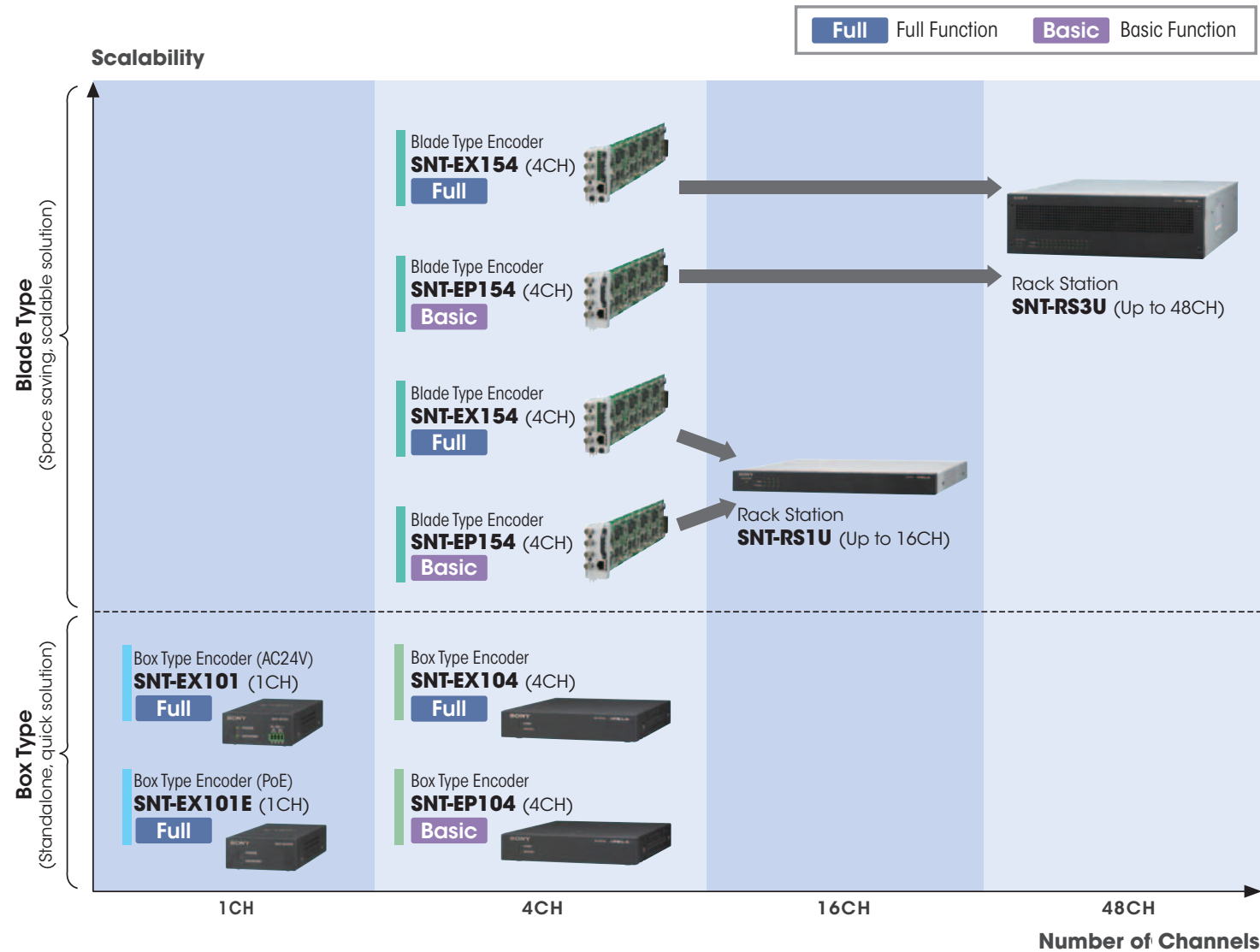
| Model Name | SNCA-ZX104 |
|---------------------------------------|--|
| |  |
| Camera Connection | |
| Number of Cameras Supported | 4 |
| Supported Serial PTZ Control Protocol | Pelco-D |
| Interface | |
| Network Port | 100BASE-TX, 10BASE-T (RJ-45 x1) |
| Serial Interface | RS-485 x1 (I/O port for PTZ camera control) |
| SLOC Port | BNC x4 (75 Ω) |
| Analog Video Output | BNC x4 (1.0 Vp-p, 75 Ω, NTSC or PAL) |
| General | |
| Power Requirements | DC 12 V (AC 100 V to AC 240 V, 50/60 Hz for AC adaptor) |
| Power Consumption | Approx. 12.0 W Approx. 0.22 A/0.12 A (AC adaptor, AC 100 V to AC 240 V) |
| Dimensions (W x H x D) | Approx. 210 mm x 44 mm x 250 mm (without projecting parts) (Approx. 210 mm x 44 mm x 250 mm, without projecting parts) |

| Hybrid Receiver Rack Mount Kit | |
|--------------------------------|--|
| Model name | RMM-ZX104 |
| | 19", 1U rack mount kit for the SMCA-ZX104. Two units can be installed side-by-side per rack kit. Made in USA. |
| Unit color | Black / Steel construction |
| Supplied Accessories | Eight (8) screws (4flat / 4 round head) to attach SNCA-ZX104 to the rack kit, and four (4) rack mount screws. |
| Optional Accessories | Rack mount clips are not included. |
| Dimensions (WHD) | 19" x 1-3/4" x 12" |

IPELA HYBRID

sloc

Surveillance Video Encoders



Rack Station



SNT-RS1U

Accepts up to 4 blade encoders (up to 16 ch)
Universal power capability
AC 100V - AC240V, 50/60 Hz



SNT-RS3U

Accepts up to 12 blade encoders (up to 48 ch)
Universal power capability
AC 100V - AC240V, 50/60 Hz







Optional Accessory



SNTA-RP1

Redundant Power Supply Unit (for SNT-RS3U only)


Surveillance Video Encoders

| | Full Function | | | | Basic Function | |
|----------------------------|--|--|--|--|--|--|
| | 1CH Box | | 4CH Box | 4CH Blade | 4CH Box | 4CH Blade |
| | SNT-EX101 | SNT-EX101E | SNT-EX104 | SNT-EX154 | SNT-EP104 | SNT-EP154 |
| |  |  |  |  |  |  |
| Codec Image Size (HxV) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) | D1 (NTSC: 720 x 480) VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240) |
| Video Compression Format | H.264, MPEG-4, JPEG | H.264, MPEG-4, JPEG | H.264, MPEG-4, JPEG | H.264, MPEG-4, JPEG | H.264, MPEG-4, JPEG | H.264, MPEG-4, JPEG |
| Multi Streaming Capability | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) |
| Maximum Frame Rate | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) | H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480) |
| PTZ Control | Yes | Yes | Yes | Yes | No | No |
| Tone Correction | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) | Visibility Enhancer (VE) |
| Noise Reduction | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology | XDNR® Technology |
| Coaxitron Control | Yes | Yes | Yes | Yes | No | No |
| Serial Interface | RS-422/RS-485 | RS-422/RS-485 | RS-485 | RS-485 | - | - |
| USB Slots | x 1 (*) | x 1 (*) | x 4 (*) | - | - | - |
| Sensor Input | x 2 | x 2 | x 4 | x 4 | - | - |
| Alarm Output | x 2 | x 2 | x 4 | x 4 | - | - |
| Audio Interface (IN/OUT) | IN x 1, OUT x 1 | IN x 1, OUT x 1 | IN x 4, OUT x 4 | IN x 1, OUT x 1 | - | - |
| Audio Support | Full Duplex | Full Duplex | Full Duplex | Full Duplex | No | No |
| Analytics Architecture | DEPA Advanced | DEPA Advanced | DEPA Advanced | DEPA Advanced | No | No |
| ONVIF Conformance | Yes | Yes | Yes | Yes | Yes | Yes |
| Dimensions (W x H x D) | 2 7/8 x 1 3/8 x 6 1/8 inches (73 x 34 x 155 mm) | 2 7/8 x 1 3/8 x 6 1/8 inches (73 x 34 x 155 mm) | 8 3/8 x 1 3/4 x 9 7/8 inches (210 x 44 x 250 mm) | 3 1/8 x 1 3/8 x 15 1/8 inches (78 x 34 x 382 mm) | 8 3/8 x 1 3/4 x 9 7/8 inches (210 x 44 x 250 mm) | 3 1/8 x 1 3/8 x 15 1/8 inches (78 x 34 x 382 mm) |
| Power Requirements | AC 24V in, with loop through output Input: AC 24V, +/- 20% | PoE (Class 2) | DC12V | From Rack Station | DC12V | From Rack Station |

(*) USB slots are inside the chassis, not on the front or rear panels.

These products include software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org>)

Network Surveillance Recording Servers

| NSR-500 | |
|---|--|
|  | |
| Video/Recording | |
| Number of cameras supported | Max. 16 (Max. 24ch w/NSBK-CLO5) (IP/Analog total) |
| Number of analog cameras | 16, using optional (NSBK-EB05) |
| Video compression (IP camera) | H.264 / MPEG-4 / JPEG |
| Video compression (Analog camera) | Option (NSBK-EB05) H.264/JPEG |
| Recording frame rate | 480fps (at H.264, Full-HD, 4Mbps) |
| Hard disk drives (Physical capacity) | Up to 12TB |
| Hard disk drives (RAID level) | RAID 0, 1, 10 (1+0), 5, 5+hot spare |
| Optical disc drive | No |
| Expansion storage | iSCSI storage (max. 16TB) |
| Video Output | |
| Monitor OUT 1 | Analog RGB (D-sub 15-pin) x 1 |
| Monitor OUT 2 | No |
| Audio Output | |
| Audio OUT | Stereo mini jack x 1 |
| Sensor Input/Alarm Output | |
| Sensor input | Compatible with DC3.3V to 24V, photo coupler input x 8 (insulated from main unit) |
| Alarm output | Max. DC 24V/ 1A, mechanical relay output x 8 (insulated from main unit) |
| Other Interfaces | |
| Ethernet | 1000BASE-T/100BASE-TX/10BASE-T x 2 |
| USB | USB2.0 x 2 (Front), USB2.0 x 2 (Rear) |
| Serial interface (for UPS) | RS-232C : D-sub 9-pin x 1 |
| Serial interface (for analog camera control) | RS-232C : D-sub 9pin x 1, RS-422/485 x 1 (when installing NSBK-EB05) *1 |
| General | |
| Dimensions (W x H x D) | 17 3/8 x 3 1/2 x 15 1/2 inches (440 x 89 x 392mm) * excluding protrusions |
| Weight | Approx. 20 lb 12 oz (9.4Kg) (Without HDD model) |
| Power requirements | 100V to 127V AC / 200V to 240V (50/60Hz) |
| Power consumption | max. 250W (100-240V 3.5-1.5A) |
| Operating temperature | 41 to 104°F (5 to 40°C) |
| Operation humidity | 20 to 80% (no condensing) |
| Optional accessories | NSBK-EB05, NSBK-CLO4/05, NSBK-HS05/1T, NSBK-HS05/2T, RM-NS1000 |

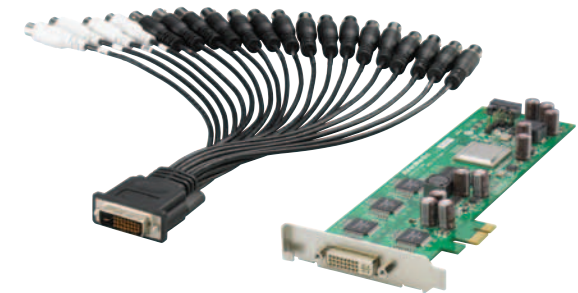
*1: VISCA and Pelco-D are supported.

| NSBK-EB05 | |
|-------------------------------------|--|
| Video/Audio | |
| Number of analog input | Video input (x16)/Audio input (x4)*3 |
| Input video format | NTSC |
| Video codec | H.264/JPEG |
| Motion detection | Yes |
| Noise reduction | Yes |
| Video resolution | NTSC: 720 x 480; 720 x 240; 704 x 480; 704 x 240; 352 x 240 |
| Maximum frame rate | NTSC: 30 fps/camera (total 480 fps) |
| Video quality | Bitrate: 64 Kbps to 2 Mbps (H.264) Quality: Low, Medium, High, Highest (JPEG)*4 |
| Audio codec | G.711, 64 Kbps |
| Interface | |
| Input connector (by supplied cable) | Video input connector (cable) Audio input connector (cable) |
| | BNC (x16) (black) RCA (x4) (white) |
| General | |
| Operating temperature | 41 to 104 °F (5 to 40 °C) |
| Operating humidity | 20 to 80% |
| Dimensions (Board) | Approx. 7 5/8 x 2 3/4 inches (192 x 69 mm) (exclusive projections) |
| Weight | Board Cable |
| | Approx. 3.5 oz (100 g) Approx. 8.5 oz (240 g) |
| Supplied accessories | Analog video/audio input cable (1), Installation manual (1), Warranty booklet (1) |

*2: The audio channels from No. 1 to No. 4 are allotted the video channels 1 to 4 respectively.
*3: When using a JPEG format, the total frame rate for the system is decreased to 240 fps in High quality mode and 160 fps in Highest quality mode.

| NSBK-DH05 | |
|-------------------------------------|---|
| Video/Audio | |
| Maximum Decoding Resolution | Up to 1,920 x 1,080 |
| Video Decoding Format | H.264/MPEG-4 |
| Monitor Output (Display Resolution) | 1920 x 1200 (not supported by HDMI); 1920 x 1080; 1360 x 768; 1600 x 1200; 1280 x 1024; 1024 x 768 |
| Display Frame Rate | Max. 60 fps (30 fps x 2 channels) at 1920 x 1080 at 4 Mbps Max. 60 fps (15 fps x 4 channels) at 1920 x 1080 at 4 Mbps Max. 120 fps (30 fps x 4 channels) at 1280 x 720 at 2 Mbps Max. 135 fps (15 fps x 9 channels) at 1280 x 720 at 2 Mbps Max. 270 fps (30 fps x 9 channels) at 720 x 480/576 at 1 Mbps Max. 240 fps (15 fps x 16 channels) at 720 x 480/576 at 1 Mbps |
| Interface | |
| Monitor Output *4 | HDMI (x1), analog RGB (D-sub 15-pin) (x1) |
| Audio Output | 1 channel (HDMI) *5 |
| General | |
| Operating Temperature | 41°F to 104°F (5°C to 40°C) 20% to 80% |
| | 6 3/4 inches x 3 1/4 inches x 1 1/8 inches (170 mm x 80 mm x 27 mm) (exclusive projections) |
| | 5 oz (130 g) |
| | Analog RGB cable (for internal wiring) (1), Connector cover (1), Installation manual (1), Warranty booklet (1) |

*4: Either the HDMI or analog RGB interface can be used.
*5: When using the HDMI interface, the alarm sound (beep tone) may not be properly produced (this depends on the monitor connected).
If so, please use the NSR-500's audio line output.



Intelligent Monitoring Software

RealShot® Manager Advanced and RealShot Manager Lite



| | IMZ-NS101 | IMZ-NS104 | IMZ-NS109 | IMZ-NS116 | IMZ-NS132 | RSM Lite (Free Software) |
|---------------------------------------|--|-------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|---------------------------------|
| | RSM Advanced with 1 camera license | RSM Advanced with 4 camera licenses | RSM Advanced with 9 camera licenses | RSM Advanced with 16 camera licenses | RSM Advanced with 32 camera licenses | RSM Lite with 9 camera licenses |
| Specifications | | | | | | |
| Video Compression Format | H.264/MPEG-4/JPEG | | | | | |
| Audio Compression Format | G.711/G.726 | | | | | |
| Number of Clients (Recommendation) *1 | 10 | | | | | 3 |
| Number of Cameras Supported | 1 *2 | 4 *2 | 9 *2 | 16 *2 | 32 | 9 |
| Number of Audio Supported | 1 | 4 | 9 | 16 | 32 | 9-Sony cameras only |
| System Requirements | | | | | | |
| Operating System | Windows 7 Professional, Windows 7 Enterprise, Windows Vista® Business SP2 (32 bit), Windows Vista® Enterprise SP2 (32 bit), Windows® XP Professional SP3 (32 bit), Windows® Server 2003 Standard Edition SP2(32bit), Windows® Server 2008 Standard Edition SP2 (32 bit), Windows Server 2008 R2 Standard | | | | | |
| CPU | Intel Core™ 2Duo 2.0-GHz or higher | | | | | |
| Main Memory | 1 GB or more (2 GB Recommended) | | | | | |
| HDD | 2 GB spare capacity | | | | | |
| Video Card | 1024 x 768, 16/24 bit color | | | | | |
| Network Interface Card (NIC) | 100BASE-TX or higher | | | | | |
| Display Resolution | 1024 x 768 or higher | | | | | |
| Optional Accessories | RM-NS1000 (System Controller) | | | | | |

*1: The figures in the table are recommended numbers of clients to assure high performance. It is possible to connect more clients to a server, but such increase may deteriorate the overall performance.

*2: It is possible to combine multiple licenses.

Glossary and Warranty Info

IP66

The "IP" of IP66 stands for Ingress Protection, and its two-digit number shows the durability rating of equipment for outdoor use. The first digit of IP66 relates to the ingress protection against dust, and "6" means "dust tight". The second digit of IP66 relates to the ingress protection against water, and "6" means protected against "heavy jet sprays," such as conditions that can be encountered in hurricanes.

IK10

The IK rating system classifies the level of protection provided by electrical appliances against external impacts from the outside.

An IK10-rated camera can withstand the impact of 20 Joules, meaning the camera will withstand the impact of a 5 kg weight dropped on it from a height of 40 cm.

Day/Night

A day/night 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) 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.

Electrical D/N

Electrical D/N is a technology to make the image more visible in low-light conditions by removing the chroma signal to produce a B/W image.

Wide-D

State-of-the-art technologies to expand the video dynamic range of the camera to improve the visibility of images even in extremely high-contrast environments. Wide-D is a powerful feature to compensate for scenes with extremely poor contrast.

Visibility Enhancer (VE)

VE is one of Sony's new technologies that optimizes contrast and makes a scene more visible. It is ideal for scenes where objects are hard to recognize due to severe backlight or shadows. VE optimizes 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 the given dynamic range, which is different from Wide-D.

VE also contributes to the high sensitivity of the camera. 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.

View-DR® Technology



View-DR is Sony's latest 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). The full-capture Wide-D technology used in View-DR technology uses an electronic shutter to capture multiple images, to 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 is fully used by the imager, which is quite different from DynaView technology and some other Wide-D technologies in the industry that discard approximately 1/2 of the electrons. As a result, View-DR nearly doubles the sensitivity compared to conventional Wide-D technologies. To capture multiple HD resolution images at a very high speed, the "Exmor" CMOS sensor was adopted 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, the monitored images become very visible – sometimes even more than when viewed with our naked eyes.

XDNR® Technology (eXcellent Dynamic Noise Reduction)

XDNR is Sony's latest technology for noise reduction in IP security cameras. XDNR utilizes 2D and 3D noise reduction methods adaptively to scenes. Under low-light conditions, XDNR technology 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 challenge in any outdoor surveillance monitoring applications, such as in parking lots.

ONVIF® Software



ONVIF software 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.

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

PoE 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 savings in installation costs and can simplify the installation process.

HPoE (High PoE, IEEE 802.3at)

HPoE enables networked devices to receive power up to 25 W from hPoE-enabled equipment through the same Ethernet cable that transports data. HPoE is useful especially for PTZ/Rapid Dome cameras that require motor control.

HPoE+

HPoE+ enables networked devices to receive power in excess of 25W from HPoE-enabled equipment through the same Ethernet cable that transports data. HPoE is useful especially for outdoor PTZ/Rapid Dome cameras that require motor control plus heaters.

DEPA™ System



With a Sony DEPA system, DEPA-enabled cameras send not only video images but also related metadata, including object data (size and position) to the DEPA-enabled recorder. Since part of the image processing is done on the camera side, the load to the recorder can be 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. Enhancements also include a tamper alarm, shadow cancellation, a beam intrusion detector, and audio analysis. Since the 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.

3-Year Warranty for Network Cameras, Encoders, and Accessories

The Sony Security Products 3-year warranty covers labor and materials for repair of defective IPELA™ 'SNC' cameras, 'SNT' encoders, and 'UNI' accessories purchased within the United States on or after July 1, 2010. Offer excludes discontinued models and accessories for a period of three years from the date of purchase. For more details, please visit sony.com/security or contact your Sony Sales Representative.

1-Year Warranty for Security Accessories

The Sony Security 1-year warranty covers labor from date of purchase and covers YS, YT, SNCA, NSBK, RMM and SSMA accessories.

