SONY

IP Fixed Cameras

Model name (*1)	SNC-P1	SNC-CS10	SNC-CS11	SNC-Z20N/P	SNC-CS20	SNC-CS50N/P	SNC-CM120	SNC-CH140	SNC-CH240
									
Video compression format	JPEG/MPEG-4			JPEG	JPEG/MPEG-4	JPEG/MPEG-4/H.264	JPEG/MPEG-4	JPEG/MPEG-4/H.264	
Codec Streaming Capability	Single streaming (JPEG/MPEG4 selectable)			Single streaming (JPEG)	Dual streaming (JPEG and MPEG-4 combination only)	Dual streaming (JPEG and MPEG-4 combination only)	Dual streaming (JPEG and MPEG-4 combination only)	Dual streaming (Any combination with JPEG/ MPEG-4/H.264, including multiple streams of the same format)	
HD/Megapixel (*2)	SD	SD	SD	SD	SD	SD	Megapixel	HD	HD Full HD 1080
Optical zoom ratio	Fixed focal lens (f=3.8 mm)	Lens not included	2.7x optical zoom	18x optical zoom	2.7x optical zoom	2.7x optical zoom	2.1x optical zoom	2.7x optical zoom	2.1x optical zoom
Lens mount	Built-in	CS mount	CS mount	Built-in	CS mount	CS mount	CS mount	CS mount	CS mount
Imager	1/4-type Progressive Scan CCD	1/4-type Progressive Scan CCD	1/4-type Progressive Scan CCD	1/4-type Exwave HAD CCD	1/4-type Progressive with ExwavePRO CCD	1/3-type SuperExwave CCD	1/3-type Progressive with ExwavePRO CCD	1/3-type progressive scan Exmor CMOS Sensor Exmor	1/2.8-type progressive scan Exmor CMOS Sensor Exmor
Minimum illumination	1.2 lx (AGC ON, F2.0, 30IRE)	1.7 lx (50 IRE, F1.0, AGC ON)	1.7 lx (50 IRE, F1.0, AGC ON)	Color: 0.7 lx, B/W: 0.01 lx (50 IRE, F1.4, Slow shutter OFF)	Color: 0.2 lx, B/W: 0.01 lx (50IRE, F1.0, AGC ON) 20 fps MPEG-4 at VGA	Color: 0.4 lx, B/W: 0.04 lx (50 IRE, F 0.95, AGC ON)	Color: 0.8 lx, B/W: 0.07 lx (50IRE, F1.3, AGC ON)/ Color: 0.2 lx, B/W: 0.01 lx (Light Funnel ON, 50IRE, F1.3, AGC ON)	Color: 0.2 lx, B/W: 0.1 lx (F1.2/View-DR OFF/ XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	TBD
Maximum frame rate (*3)	18 fps JPEG, 15 fps MPEG at VGA resolution	18 fps JPEG at VGA resolution, 15 fps MPEG-4 at VGA resolution	18 fps JPEG at VGA resolution, 15 fps MPEG-4 at VGA resolution	30/25 fps JPEG at VGA resolution	30 fps MPEG-4 at VGA resolution 30 fps JPEG at 768 x 576 resolution	30/25 fps JPEG/MPEG-4 at 704 x 480/704 x576 resolution, 10/8 fps H.264 at 704 x 480/704 x576 resolution	30 fps JPEG/MPEG-4 at VGA resolution (Light Funnel ON), 15 fps JPEG at 1280 x 960/MPEG-4 at VGA resolution	30 fps H.264/JPEG/ MPEG-4 at 1280 x 720	30 fps H.264/JPEG at 1920 x 1080 15 fps MPEG-4 at 1920 x 1080
Day/Night	No	No	No	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D, Visibility Enhancer	No	No	No	No	No	No	No	View-DR Visibility Enhancer	View-DR Visibility Enhancer
XDNR	No	No	No	No	No	No	No	XDNR	XDNR
Card slot(s)	No	No	No	PC card x1	No	PC card x1	No	CF card x1	CF card x1
Wireless Capability	No	No	No	Yes (option)	No	Yes (option)	No	Yes (option)	Yes (option)
Composite video output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA (Intelligence)	No	No	No	No	DEPA	DEPA (*4)	DEPA	DEPA Advanced	DEPA Advanced
ONVIF compliant	No	No	No	No	No	No	No	ONVIF	ONVIF
Power requirement	DC 12V	AC 24, DC 12 V	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE	AC 24, DC 12 V, PoE
Dimensions	Camera: 100 x 36 x 139 mm (4 x 1 7/16 x 5 1/2 inches) Stand: 120 x 142 x 150mm (4 3/4 x 5 5/8 x 6 inches)	70 x 57 x 116 mm (2 7/8 x 2 1/4 x 4 5/8 inches)	70 x 57 x 158 mm (2 7/8 x 2 1/4 x 6 1/4 inches)	80 x 77 x 177 mm (3 1/4 x 3 1/8 x 7 inches)	82.5 x 63 x 176.2 mm (3 1/4 x 2 1/2 x 7 inches)	84 x 69 x 196 mm (3 3/8 x 2 3/4 x 7 3/4 inches) excl. cover equipment 84 x 69 x 265 mm (3 3/8 x 2 3/4 x 10 1/2 inches) incl. cover equipment	82.5 x 63 x 187.5 mm (3 1/4 x 2 1/2 x 7 1/2 inches)	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8 inches)	TBD

(*1) When the model name includes "/" (slash) such as "SNC-CS50N/P"in this table, please read as "SNC-CS50N" (NTSC model) and "SNC-CS50P" (PAL model). (*2) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps (*3) When the frame rate includes "/" such as "30/25fps" in this table, please read as "30 fps"(NTSC model) and "25fps"(PAL model). (*4) DEPA Intelligent Object Detection is included in this model.

Connect Your Vision

IPELA™

Glossary

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.

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.

View-DR

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 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 and some other Wide-D technologies in the industry that discard approximately ½ 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.

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.

XDNR (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 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.

DEPA

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.

ONVIF

ONVIF 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 13.95W 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.

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