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IP Surveillance Cameras / Encoders Linecard

IPELA

September 2012

Category	IP Fixed Cameras										
Sony Network Cameras											
Model name	SNC-CH110	SNC-CH210	SNC-EB520	SNC-CH120	SNC-CH140	SNC-CH220	SNC-CH240	SNC-CH160	SNC-CH180	SNC-CH260	SNC-CH280
Generation / Series	G5 / X Series	G5 / X Series	G5 / E Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series
Video compression format	JPEG/MPEG-4/H.264										
Codec streaming capability	Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format)										
Video format (*1)	HD	Full HD resolution 1080	SD	HD	HD	Full HD	Full HD	HD	HD	Full HD	Full HD
Maximum resolution (*2)	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	800 x 600	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)
Ingress protection	No	No	No	No	No	No	No	IP66	IP66	IP66	IP66
IR illuminators	No	No	No	No	No	No	No	IR	IR	IR	IR
Horizontal viewing angle	80.7°	88°	89.2 to 34.6	96.5° to 33.9°	96.5° to 33.9°	101.2° to 47.0°	101.2° to 47.0°	85.4° to 31.2°	85.4° to 31.2°	88.5° to 32.3°	88.5° to 32.3°
Optical zoom ratio	Fixed focal lens	Fixed focal lens	Optical 2.6x	2.9x optical zoom	2.9x optical zoom	2.1x optical zoom	2.1x optical zoom	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom
Focal length	f=2.34	f=3.3 mm	f=3.0 to 8.0 mm	f=2.8 to 8mm	f=2.8 to 8.0mm	f=2.8 to 6.0 mm	f=2.8 to 6.0 mm	f=3.1 to 8.9mm	f=3.1 to 8.9mm	f=3.1 to 8.9 mm	f=3.1 to 8.9 mm
Lens mount	Built-in	Built-in	CS mount	CS mount	CS mount	CS mount	CS mount	Built-in	Built-in	Built-in	Built-in
Imager	1/3.8-type progressive scan 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	1/3-type progressive scan Exmor CMOS Sensor	1/2.8-type progressive scan Exmor CMOS Sensor	1/2.8-type progressive scan Exmor CMOS Sensor	1/3-type progressive scan Exmor CMOS Sensor	1/3-type progressive scan Exmor CMOS Sensor	1/2.8-type progressive scan Exmor CMOS Sensor	1/2.8-type progressive scan Exmor CMOS Sensor
Minimum illumination	5.0 lx (AGC 30 dB/50 IRE [IP])	2.0 lx (AGC 38 dB/50 IRE [IP])	Colour: 0.47 lx, B/W: 0.27 lx (F1.0/Shutter 1/30 sec/AGC 42dB/50 IRE [IP])	Colour: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Colour: 0.2 lx, B/W: 0.1 lx (F1.2/ View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	Colour: 0.7 lx, B/W: 0.45 lx (F1.3/AGC 42 dB/50 IRE [IP]	Colour: 0.4 lx, B/W: 0.25 lx (F1.3/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	Colour: 0.5 lx, B/W: 0 lx (IR ON) (F1.2/ AGC 42 dB/50 IRE [IP])	Colour: 0.22 lx, B/W: 0 lx (IR ON) (F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	Colour: 0.7 lx, B/W: 0 lx (IR ON) (F1.2/AGC 42dB/ 50IRE [IP])	Colour: 0.4 lx, B/W: 0 lx (IR ON) (F1.2/ View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Maximum frame rate (*3)	30 fps H.264 MPEG-4/ JPEG at 1280 x 960/ 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/JPEG/ MPEG-4)	30 fps H.264/JPEG/ MPEG-4 at 1280 x 720	30 fps H.264/JPEG/ MPEG-4 at 1280 x 720	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264/JPEG/ MPEG-4 at 1280 x 720	30 fps H.264/JPEG/ MPEG-4 at 1280 x 720	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080
Day/Night	Electrical D/N	Electrical D/N	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D Visibility Enhancer (VE)	No	No	More than 60db	More than 60db	View-DR 130db VE	More than 60db	View-DR 90db VE	More than 60db	View-DR 130db VE	More than 60db	View-DR 90db VE
Noise reduction	Yes	Yes	Yes	Yes	Yes (XDNR)	Yes	Yes (XDNR)	Yes	Yes (XDNR)	Yes	Yes (XDNR)
Card slot(s)	No	No	No	No	CF card x1	No	CF card x1	No	CF card x1	No	CF card x1
Wireless capability	No	No	No	No	Yes (option)	No	Yes (option)	No	Yes (option)	No	Yes (option)
Composite video output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA (Intelligence)	Yes	Yes	Yes	Yes	Yes	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)
Power requirement	PoE (Class 1)	PoE (Class 1)	PoE (Class 2)	PoE (Class 2)	AC 24V, DC 12 V, PoE (Class 0)	PoE (Class 2)	AC 24V, DC 12 V, PoE (Class 0)	PoE (Class 0)	AC 24V, DC 12 V, PoE (Class 0)	PoE (Class 0)	AC 24V, DC 12 V, PoE (Class 0)
Power consumption	2.4 W max.	2.4 W max.	5 W max.	5 W max.	9 W max.	5 W max.	11.2 W max.	12.9 W max.	30 W max.	12.9 W max.	33 W max.
Dimensions	ø44 x 93 mm (1 3/4 x 3 3/4 inches)	ø44 x 93 mm (1 3/4 x 3 3/4 inches)	72 x 63 x 187.8 mm (2 7/8 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)	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8 inches)	72 x 63 x 197.3 mm (2 7/8 x 2 1/2 x 7 7/8 inches)	72 x 63 x 197.3 mm (2 7/8 x 2 1/2 x 7 7/8 inches)	ø93 x 186 mm (3 3/4 x 7 3/8 inches)	ø93 x 186 mm (3 3/4 x 7 3/8 inches)	ø93 x 186 mm (3 3/4 x 7 3/8 inches)	ø93 x 186 mm (3 3/4 x 7 3/8 inches)

(*1) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps.

(*2) When the Maximum resolution includes "/" such as "704 x 480/704 x 576" in this table, please read as "704 x 480" (NTSC) and "704 x 576" (PAL).

(*3) When the frame rate includes "/" such as "30/25 fps" in this table, please read as "30 fps" (NTSC model) and "25 fps" (PAL model).

All cameras in this sheet comply with UL2044.

Category	IP Rapid Dome and PTZ Cameras									
Sony Network Cameras										
Model name (*1)	SNC-RZ25N/P	SNC-RX530N/P	SNC-RX550N/P	SNC-RX570N/P	SNC-RS44N/P	SNC-RS46N/P	SNC-RS84N/P	SNC-RS86N/P	SNC-RH124	SNC-RH164
Generation / Series	G2	G3	G3	G3	G5	G5	G5	G5	G5	G5
Video compression format	JPEG/MPEG-4	JPEG/MPEG-4/H.264			JPEG/MPEG-4/H.264					
Codec streaming capability	Single streaming (JPEG/MPEG4 selectable)	Dual Streaming (JPEG and MPEG-4 combination only)			Triple 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)	
Video format (*2)	SD	SD	SD	SD	SD	SD	SD	SD	HD	HD
Maximum resolution (*3)	640 x 480	704 x 480 / 704 x 567	704 x 480 / 704 x 567	704 x 480 / 704 x 567	704 x 480 / 704 x 567	704 x 480 / 704 x 567	704 x 480 / 704 x 567	704 x 480 / 704 x 567	1280 x 720	1280 x 720
Ingress protection	No	No	No	No	No	No	IP66	IP66	No	IP66
Vandal resistant	No	No	No	No	No	No	IK10	IK10	No	IK10
Horizontal viewing angle	48° to 2.7°	48.0° to 2.8°	54.2° to 2.2°	57.8° to 1.7°	48.0° to 2.8°	57.8° to 1.7°	48.0° to 2.8°	57.8° to 1.7°	50° to 5.4°	50° to 5.4°
Optical zoom ratio	18x optical zoom	18x optical zoom	26x optical zoom	36x optical zoom	18x optical zoom	36x optical zoom	18x optical zoom	36x optical zoom	10x optical zoom	10x optical zoom
Focal length	f=4.1 to 73.8 mm	f=4.1 to 73.8 mm	f=3.5 to 91.0 mm	f=3.4 to 122.4 mm	f=4.1 to 73.8 mm	f=3.4 to 122.4 mm	f=4.1 to 73.8 mm	f=3.4 to 122.4 mm	f=5.1 to 51mm	f=5.1 to 51 mm
Imager	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/4-type Exwave HAD CCD sensor	1/3-type HD CMOS sensor	1/3-type HD CMOS sensor
Minimum illumination	Colour 0.7 lx, B/W: 0.06 lx (50 IRE, F1.4, AGC ON)	Colour: 0.7 lx (50 IRE, F1.4, AGC ON), B/W: 0.15 lx (50 IRE, F1.4, AGC ON)	Colour: 1 lx, B/W: 0.15 lx (50 IRE, F1.6, AGC ON)	Colour: 1.4 lx, B/W: 0.15 lx (50 IRE, F1.6, AGC ON)	(*4) Colour: 0.4 lx, B/W: 0.08 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	(*4) Colour: 0.7 lx, B/W: 0.08 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	(*5) Colour: 0.4 lx, B/W: 0.09 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	(*5) Colour: 0.8 lx, B/W: 0.09 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	Colour: 1.9 lx, B/W: 0.17 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	Colour: 2.1 lx, B/W: 0.19 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)
Maximum frame rate (*6)	18 fps JPEG or 15 fps MPEG-4 at VGA resolution; 30/25 fps JPEG or MPEG-4 at QVGA resolution	30/25 fps JPEG/ MPEG-4 at 704 x 480/ 704 x 576 resolution; 10/8 fps H.264 at 704 x 480/704 x 576 resolution	30/25 fps JPEG/ MPEG-4 at 704 x 480/ 704 x 576 resolution; 10/8 fps H.264 at 704 x 480/704 x 576 resolution	30/25 fps JPEG/ MPEG-4 at 704 x 480/ 704 x 576 resolution; 10/8 fps H.264 at 704 x 480/704 x 576 resolution	30/25 fps H.264/ MPEG-4/JPEG at 720 x 480/720 x 576 resolution	30/25 fps H.264/ MPEG-4/JPEG at 720 x 480/720 x 576 resolution	30/25 fps H.264/ MPEG-4/JPEG at 720 x 480/720 x 576 resolution	30/25 fps H.264 MPEG-4/JPEG at 720 x 480/720 x 576 resolution	30 fps H.264/MPEG-4/ JPEG at 1280 x 720	30 fps H.264/MPEG-4/ JPEG at 1280 x 720
Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D Visibility Enhancer (VE)	No	No	No	Dyna View	Dyna View VE	Dyna View VE	Dyna View VE	Dyna View VE	VE	VE
Noise reduction	No	Yes	Yes	No	Yes (XDNR)	Yes (XDNR)	Yes (XDNR)	Yes (XDNR)	Yes (XDNR)	Yes (XDNR)
Card slot(s)	CF card x1	PC card x1, Memory Stick x1	PC card x1, Memory Stick x1	PC card x1, Memory Stick x1	CF card x1	CF card x1	CF card x1	CF card x1	CF card x1	CF card x1
Wireless capability	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)	Yes (option)
Composite video output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA (Intelligence)	No	Yes (*7)	Yes (*7)	Yes (*7)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)
"Rapid Dome" or "PTZ"	PTZ	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome
Pan angle	340 degrees	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless	360 degrees endless
Tilt angle	0° to +120°	0° to -90°	0° to -90°	0° to -90°	-105° to +105° (210° tilt)	-105° to +105° (210° tilt)	-105° to +105° (210° tilt)	-105° to +105° (210° tilt)	-105° to +105° (210° tilt)	-105° to +105° (210° tilt)
"Quick Release" mechanism	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Power requirement	AC 24 V, DC 12 V	AC 24 V, DC 12 V	AC 24 V, DC 12 V	AC 24 V, DC 12 V	AC 24 V, DC 12 V, hPoE(Class 4) (*8)	AC 24 V, DC 12 V, hPoE (Class 4) (*8)	AC 24 V	AC 24 V	AC 24 V, DC 12 V, hPoE (Class 4) (*8)	AC 24 V
Power consumption	17 W max.	25 W max.	25 W max.	25 W max.	23 W max.	23 W max.	78 W max.	78 W max.	25 W max.	80 W max.
Dimensions	140 x 200 x 148 mm (5 5/8 x 8 7/8 x 5 7/8 inches)	160 x 160 x 230 mm (6 3/8 x 6 3/8 x 9 1/8 inches)	160 x 160 x 230 mm (6 3/8 x 6 3/8 x 9 1/8 inches)	160 x 160 x 230 mm (6 3/8 x 6 3/8 x 9 1/8 inches)	ø154 x 226 mm (6 1/8 x 9 inches)	ø154 x 226 mm (6 1/8 x 9 inches)	ø238 x 344 mm (9 3/8 x 13 5/8 inches)	ø238 x 344 mm (9 3/8 x 13 5/8 inches)	ø154 x 226 mm (6 1/8 x 9 inches)	ø238 x 346 mm (9 3/8 x 13 5/8 inches)

(*1) When the model name includes "/" (slash) such as "SNC-RX530N/P" in this table, please read as "SNC-RX530N" (NTSC model) and "SNC-RX530P" (PAL model).

(*2) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps.

(*3) When the Maximum resolution includes "/" such as "704 x 480/704 x 576" in this table, please read as "704 x 480" (NTSC) and "704 x 576" (PAL).

(*4) Min. Illumination of Analog Video Output of SNC-RS44N/P and SNC-RS46N/P is different from IP video output. Colour: 0.7 lx, B/W: 0.15 lx (50 IRE, Slow Shutter OFF).

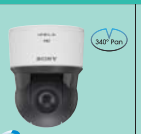
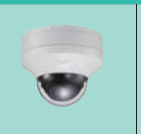
(*5) Min. Illumination of Analog Video of SNC-RS84N/P and SNC-RS86N/P is as follows. Colour: 1.4 lx, B/W: 0.15 lx (50 IRE, Slow Shutter OFF).

(*6) When the frame rate includes "/" such as "30/25 fps" in this table, please read as "30 fps" (NTSC) and "25 fps" (PAL). In the same manner, "704 x 480/704 x 576" means "704 x 480" (NTSC) and "704 x 576" (PAL).

(*7) DEPA Intelligent Object Detection is included in this model.

(*8) hPoE is available from the firmware version 1.2.

All cameras in this sheet comply with UL2044. (Except PAL models)

Category	IP Rapid Dome and PTZ Cameras						IP Mini Dome Cameras						
Sony Network Cameras													
Model name (*1)	SNC-EP520/EP521	SNC-ER520/ER521	SNC-EP550	SNC-ER550	SNC-EP580	SNC-ER580	SNC-DH110	SNC-DH210	SNC-EM520	SNC-DH120	SNC-DH140	SNC-DH220	SNC-DH240
Generation / Series	G5 / E Series	G5 / E Series	G5 / E Series	G5 / E Series	G5 / E Series	G5 / E Series	G5 / X Series	G5 / X Series	G5 / E Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series
Video compression format	JPEG/MPEG-4/H.264						JPEG/MPEG-4/H.264						
Codec 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)						
Video format (*2)	SD	SD	HD	HD	Full HD	Full HD	HD	Full HD resolution 1080	SD	HD	HD	Full HD	Full HD
Maximum resolution (*3)	720 x 480 / 720 x 576	720 x 480 / 720 x 576	1280 x 720	1280 x 720	1920 x 1080	1920 x 1080	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	800 x 600	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)
Ingress protection	No	No	No	No	No	No	No	No	No	No	No	No	No
Vandal resistant	No	No	No	No	No	No	No	No	No	No	No	No	No
IR illuminators	No	No	No	No	No	No	No	No	No	No	No	No	No
Horizontal viewing angle	57.8° to 1.7°	57.8° to 1.7°	55.9° to 2.1°	55.9° to 2.1°	55.4° to 2.9°	55.4° to 2.9°	80.7°	88°	85.4° to 31.2°	85.4° to 31.2°	85.4° to 31.2°	88.5° to 32.3°	88.5° to 32.3°
Optical zoom ratio	36X optical zoom	36X optical zoom	28X optical zoom	28X optical zoom	20X optical zoom	20X optical zoom	Fixed focal lens	Fixed focal lens	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom
Focal length	f=3.4 to 122.4 mm	f=3.4 to 122.4 mm	f=3.5 to 98 mm	f=3.5 to 98 mm	f=4.7 to 94 mm	f=4.7 to 94 mm	f=2.34	f=3.3	f=3.1 to 8.9mm	f=3.1 to 8.9mm	f=3.1 to 8.9mm	f=3.1 to 8.9 mm	f=3.1 to 8.9 mm
Imager	1/4-type EXview HAD CCD	1/4-type EXview HAD CCD	1/4-type Exmor CMOS	1/4-type Exmor CMOS	1/2.8-type Exmor CMOS	1/2.8-type Exmor CMOS	1/3.8-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	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor
Minimum illumination	Colour: 1.4 lx, B/W: 0.15 lx (F1.6, shutter 1/60sec/ 1/50sec (*5), AGC ON, 50 IRE [IP])	Colour: 1.4 lx, B/W: 0.15 lx (F1.6, shutter 1/60sec/ 1/50sec (*5), AGC ON, 50 IRE [IP])	Colour: 1.0 lx, B/W: 0.1 lx (F1.35, shutter 1/30s, AGC ON, 50 IRE [IP])	Colour: 1.0 lx, B/W: 0.1 lx (F1.35, shutter 1/30s, AGC ON, 50 IRE [IP])	Colour: 1.7 lx, B/W: 0.07 lx (F1.6, shutter 1/30sec, AGC ON, 50IRE[IP])	Colour: 1.7 lx, B/W: 0.07 lx (F1.6, shutter 1/30sec, AGC ON, 50IRE[IP])	5.0 lx (AGC 30 dB/50 IRE [IP])	2.0 lx (AGC 38dB)/50 IRE [IP])	Colour: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/ 50 IRE [IP])	Colour: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/ 50 IRE [IP])	Colour: 0.2 lx, B/W: 0.1 lx (F1.2 View-DR OFF/ XDNR ON-Middle/VE OFF/ AGC High/50 IRE [IP])	Colour: 0.7 lx, B/W: 0.45 lx (F1.2/AGC 42 dB/ 50 IRE [IP])	Colour: 0.4 lx, B/W: 0.25 lx (F1.2 View-DR OFF/ XDNR ON-Middle/VE OFF/ AGC High/50 IRE [IP])
Maximum frame rate (*4)	30/25 fps H.264/ MPEG-4/JPEG	30/25 fps H.264/ MPEG-4/JPEG	30 fps H.264/ MPEG-4/JPEG	30 fps H.264/ MPEG-4/JPEG	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264/MPEG-4/JPEG at 1280 x 960/ 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)	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 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080
Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Electrical D/N	Electrical D/N	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D Visibility Enhancer (VE)	DynaView 92db	DynaView 92db	DynaView 86db	DynaView 86db	DynaView 86db	DynaView 86db	No	No	More than 60db	More than 60db	View-DR 130db VE	More than 60db	View-DR 90db VE
Noise reduction	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (XDNR)	Yes	Yes (XDNR)
Card slot(s)	SD card x1	SD card x1	SD card x1	SD card x1	SD card x1	SD card x1	No	No	No	No	No	No	No
Wireless capability	No	No	No	No	No	No	No	No	No	No	No	No	No
Composite video output	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA (Intelligence)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)
"Rapid Dome" or "PTZ"	PTZ	Rapid Dome	PTZ	Rapid Dome	PTZ	Rapid Dome	No	No	No	No	No	No	No
Pan angle	340 degrees	360 degrees endless	340 degrees	360 degrees endless	340 degrees	360 degrees endless	No	No	No	No	No	No	No
Tilt angle	-15° to +90°	-105° to +105° (210° tilt)	-15° to +90°	-105° to +105° (210° tilt)	-15° to +90°	-105° to +105° (210° tilt)	No	No	No	No	No	No	No
"Quick Release" mechanism	No	No	No	No	No	No	No	No	No	No	No	No	No
Power requirement	AC 24 V, HPoE (Class 4)	AC 24 V, HPoE (Class 4)	AC 24 V, HPoE (Class 4)	AC 24 V, HPoE (Class 4)	AC 24 V, HPoE (Class 4)	AC 24 V, HPoE (Class 4)	PoE (Class 1)	PoE (Class 1)	PoE (Class 2)	PoE (Class 2)	AC 24V, DC 12V, PoE (Class 0)	PoE (Class 2)	AC 24V, DC 12V, PoE (Class 0)
Power consumption	25 W max.	25 W max.	25 W max.	25 W max.	25 W max.	25 W max.	2.4 W max.	2.4 W max.	6 W max.	6 W max.	10.2 W max.	6 W max.	10.2 W max.
Dimensions	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)	ø147.4 x 190.9mm (5 7/8 x 7 5/8 inches)	ø147.4 x 190.9mm 5 7/8 x 7 5/8 inches)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)	ø106 x 50.5 mm (4 1/4 x 2 1/8 inches)	ø106 x 50.5 mm (4 1/4 x 2 1/8 inches)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)

(*1) When the model name includes "/" (slash) such as "SNC-EP520/SNC-EP521" in this table, please read as "SNC-EP520" (NTSC model) and "SNC-EP521" (PAL model).

(*2) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps.

(*3) When the Maximum resolution includes "/" such as "704 x 480/704 x 576" in this table, please read as "704 x 480" (NTSC) and "704 x 576" (PAL).

(*4) When the frame rate includes "/" such as "30/25 fps" in this table, please read as "30 fps" (NTSC) and "25 fps" (PAL). In the same manner, "704 x 480/704 x 576" means "704 x 480" (NTSC) and "704 x 576" (PAL).

(*5) 1/60sec is for NTSC model and 1/50sec is for PAL model.

All cameras in this sheet comply with UL2044.

Category	IP Mini Dome Cameras (Vandal Resistant, IK10)										
Sony Network Cameras											
Model name	SNC-DH110T	SNC-DH210T	SNC-EM521	SNC-DH120T	SNC-DH140T	SNC-DH220T	SNC-DH240T	SNC-DH160	SNC-DH180	SNC-DH260	SNC-DH280
Generation / Series	G5 / X Series	G5 / X Series	G5 / E Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series	G5 / E Series	G5 / V Series
Video compression format	JPEG/MPEG-4/H.264										
Codec streaming capability	Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format)										
Video format (*1)	HD	Full HD resolution 1080	SD	HD	HD	Full HD	Full HD	HD	HD	Full HD	Full HD
Maximum resolution (*2)	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	800 x 600	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)
Ingress protection	No	No	No	No	No	No	No	IP66	IP66	IP66	IP66
Vandal resistant	IK10	IK10	IK10	IK10	IK10	IK10	IK10	IK10	IK10	IK10	IK10
IR illuminators	No	No	No	No	No	No	No	IR	IR	IR	IR
Horizontal viewing angle	79°	86°	85.4° to 31.2°	85.4° to 31.2°	85.4° to 31.2°	88.5° to 32.3°	88.5° to 32.3°	85.4° to 31.2°	85.4° to 31.2°	88.5° to 32.3°	88.5° to 32.3°
Optical zoom ratio	Fixed focal lens	Fixed focal lens	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	2.9x optical zoom
Focal length	f=2.34	f=3.3	f=3.1 to 8.9mm	f=3.1 to 8.9mm	f=3.1 to 8.9 mm	f=3.1 to 8.9 mm	f=3.1 to 8.9 mm	f=3.1 to 8.9mm	f=3.1 to 8.9mm	f=3.1 to 8.9 mm	f=3.1 to 8.9 mm
Imager	1/3.8-type progressive scan 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	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/3-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor
Minimum illumination	5.5 lx (AGC 30 dB/50 IRE [IP])	2.3 lx (AGC 38 dB/50 IRE [IP])	Colour: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Colour: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Colour: 0.2 lx, B/W: 0.1 lx (F1.2 View-DR OFF/ XDNR ON-Middle/ VE OFF/AGC High/50 IRE [IP])	Colour: 0.7 lx B/W: 0.45 lx (F1.2/AGC 42 dB/50 IRE [IP])	Colour: 0.4 lx, B/W: 0.25 lx (F1.2 View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	Colour: 0.5 lx, B/W: 0 lx (IR ON) (F1.2/ AGC 42 dB/50 IRE [IP])	Colour: 0.2 lx, B/W: 0 lx (IR ON) (F1.2 View-DR OFF/XDNR ON-Middle/ VE OFF/AGC High/ 50 IRE [IP])	Colour: 0.7 lx, B/W: 0 lx (IR ON) (F1.2/ AGC 42dB/ 50IRE [IP])	Colour: 0.4 lx, B/W: 0 lx (IR ON) (F1.2/ View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Maximum frame rate (*3)	30 fps H.264/MPEG-4/ JPEG at 1280 x 960/ 1280 x 720	30 fps H.264/MPEG-4/ JPEGat 1280 x 720; 15 fps H.264/MPEG-4/ JPEG at 1920 x 1080	30 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 H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 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 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 16 fps JPEG at 1920 x 1080
Day/Night	Electrical D/N	Electrical D/N	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D Visibility Enhancer (VE)	No	No	More than 60db	More than 60db	View-DR 130db VE	More than 60db	View-DR 90db VE	More than 60db	View-DR 130db VE	More than 60db	View-DR 90db VE
Noise reduction	Yes	Yes	Yes	Yes	Yes (XDNR)	Yes	Yes (XDNR)	Yes	Yes (XDNR)	Yes	Yes (XDNR)
Card slot(s)	No	No	No	No	No	No	No	No	No	No	No
Wireless capability	No	No	No	No	No	No	No	No	No	No	No
Composite video output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA (Intelligence)	Yes	Yes	Yes	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)	Yes	Yes (DEPA Advanced)
Power requirement	PoE (Class 1)	PoE (Class 1)	PoE (Class 2)	PoE (Class 2)	AC 24V, DC 12V, PoE (Class 0)	PoE (Class 2)	AC 24 V, DC 12 V, PoE (Class 0)	PoE (Class 0)	AC 24V, DC 12V, PoE(Class 0)	PoE (Class 0)	AC 24V, DC 12V, PoE (Class 0)
Power consumption	2.4 W max.	2.4 W max.	6 W max.	6 W max.	8 W max.	6 W max.	10.2 W max.	12.9 W max.	28 W max.	12.9 W max.	29 W max.
Dimensions	ø106 x 56.5 mm (4 1/4 x 2 1/4 inches)	ø106 x 56.5 mm (4 1/4 x 2 1/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)	ø166 x 119 mm (6 5/8 x 4 3/4 inches)	ø166 x 119 mm (6 5/8 x 4 3/4 inches)	ø166 x 119 mm (6 3/4 x 4 3/4 inches)	ø166 x 119 mm (6 3/4 x 4 3/4 inches)

(*1) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps.

(*2) When the Maximum resolution includes "/" such as "704 x 480/704 x 576" in this table, please read as "704 x 480" (NTSC) and "704 x 576" (PAL).

(*3) When the frame rate includes "/" such as "30/25 fps" in this table, please read as "30 fps" (NTSC) and "25 fps" (PAL). In the same manner, "704 x 480/704 x 576" means "704 x 480" (NTSC) and "704 x 576" (PAL).

All cameras in this sheet comply with UL2044.

Hybrid Camera Solutions

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

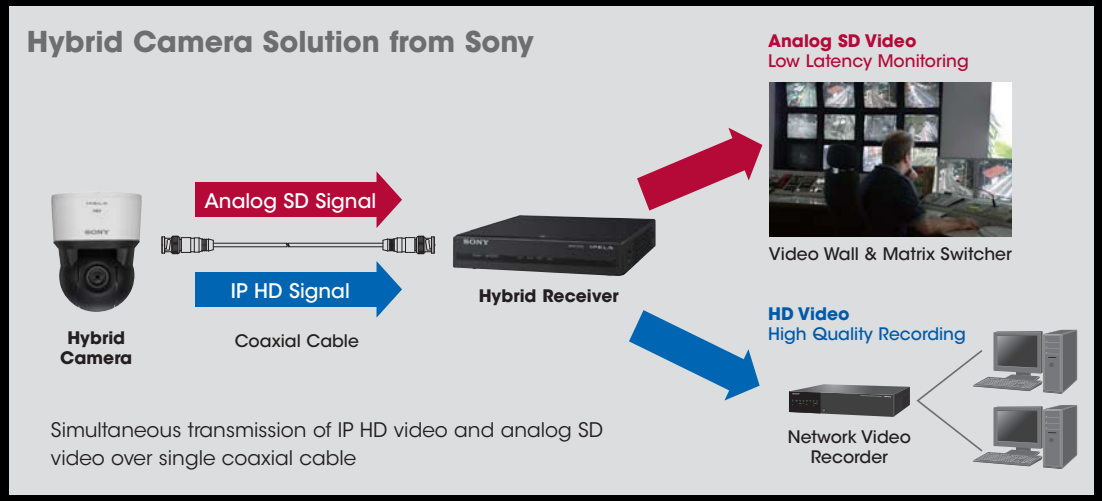
Sony offers a new video surveillance technology that can simultaneously transmit both IP and analog signals on a single coaxial cable. It allows customers to easily migrate to HD IP video surveillance systems with minimal investment, utilizing their existing analog infrastructure. Based on this technology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

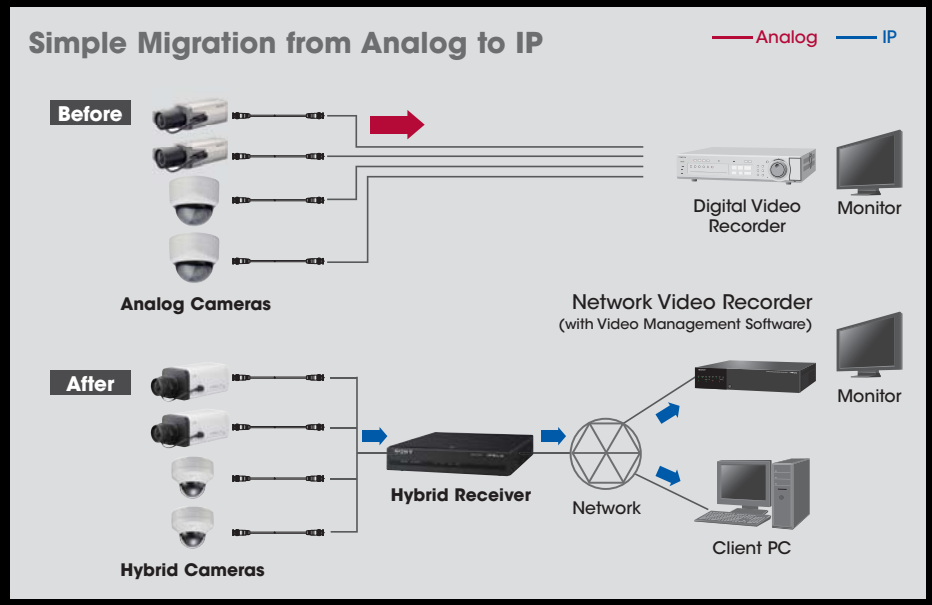
These unique solutions deliver the following advantages:

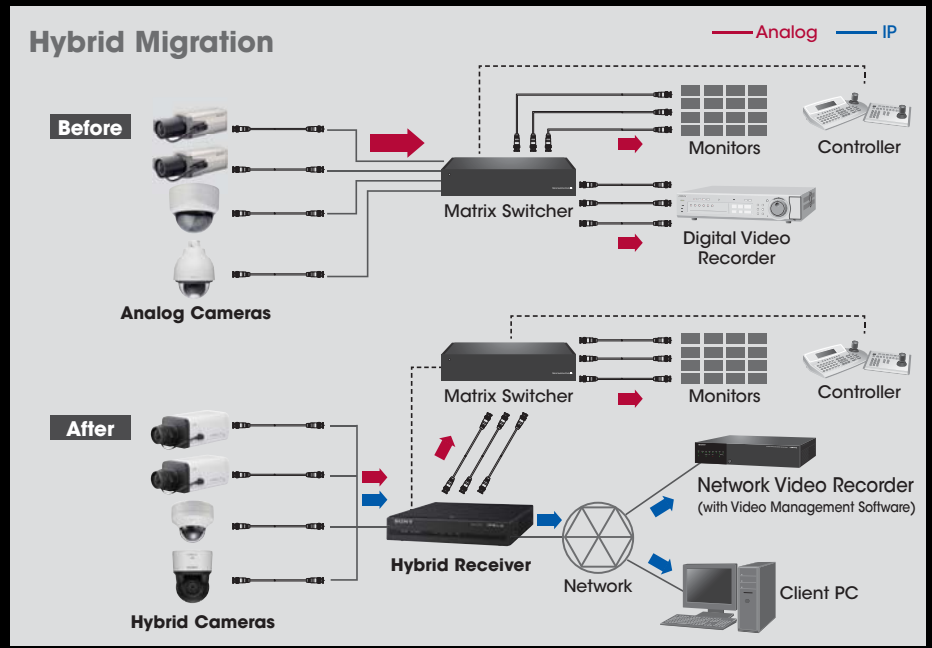
- Cost-effective and environmentally-friendly surveillance systems that can be easily migrated from an analog CCTV system to an IP network-based system, making the most of any existing surveillance infrastructure (e.g. coaxial cables, local power supplies, matrix switchers, controllers, and video wall monitors)
- Simultaneous transmission of IP HD video and analog SD video
- Utilization of the advanced features and functionalities offered by IP network cameras
- Maximum cable length of 300 m (1,000 feet) 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 Sony office.
*3 Cable length varies according to cable grade and quality.







Hybrid Cameras (G5 Z Series)

Model name	SNC-ZB550	SNC-ZM551	SNC-ZM550	SNC-ZR550	SNC-ZP550
	Hybrid Fixed Camera	Hybrid Vandal Mini Dome Camera	Hybrid Mini Dome Camera	Hybrid Rapid Dome Camera	Hybrid PTZ Camera
					
Video compression format	H.264/MPEG-4/JPEG				
Codec streaming capability	Dual streaming (Any combination with H.264/MPEG-4/JPEG, including multiple streams of the same format) (*1)				
Computer display format	HD (*2)	HD (*2)	HD (*2)	HD (*2)	HD (*2)
Maximum resolution (IP)	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1280 x 720	1280 x 720
Signal system	NTSC colour system/PAL colour system (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 8.0 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 type	CS mount lens	Built-in variable focal lens	Built-in variable focal lens	Auto-focus zoom lens	Auto-focus zoom lens
Image sensor	1/3-type Exmor CMOS sensor	1/3-type Exmor CMOS sensor	1/3-type Exmor CMOS sensor	1/4-type Exmor CMOS sensor	1/4-type Exmor CMOS sensor
Minimum illumination	Colour: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB, 50 IRE [IP])	Colour: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB, 50 IRE [IP])	Colour: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 s, AGC 42 dB, 50 IRE [IP])	Colour: 1.00 lx, B/W: 0.10 lx (F1.35, shutter 1/30 s, AGC ON, 50 IRE [IP])	Colour: 1.00 lx, B/W: 0.10 lx (F1.35, shutter 1/30 s, AGC ON, 50 IRE [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	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Wide-D	More than 60db	More than 60db	More than 60db	DynaView 86db	DynaView 86db
Noise reduction	Yes	Yes	Yes	Yes	Yes
Card slots	No	No	No	SD/SDHC card x 1	SD/SDHC card x 1
Wireless capability	No	No	No	No	No
DEPA (Intelligence)	Yes (DEPA)	Yes (DEPA)	Yes (DEPA)	Yes (DEPA)	Yes (DEPA)
ONVIF	Yes	Yes	Yes	Yes	Yes
"Rapid Dome" or "PTZ"	No	No	No	Rapid Dome	PTZ
Pan angle	No	±180 degrees	±180 degrees	360 degrees endless rotation	340 degrees
Tilt angle	No	0 to 70 degrees	0 to 70 degrees	-105° to +105° (210° tilt)	-15° to +90°
Power requirements	AC 24 V, DC 12 V	AC 24 V, DC 12 V	AC 24 V, DC 12 V	hPoE, AC 24 V (*3)	hPoE, AC 24 V (*3)
Power consumption	6 W max.	7 W max.	7 W max.	25 W max.	25 W max.
Dimensions	72 x 63 x 197 mm with lens, not including projecting parts	ø140 x 119 mm (ø5 5/8 x 4 3/4 inches)	ø140 x 118 mm (ø5 5/8 x 4 3/4 inches)	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8 inches)	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8 inches)

(*1) Dual streaming is available when analog output settings for the SLOC port are OFF.

(*2) Definition of HD: More than 720p with H.264 streaming capability of more than 30/25 fps.

(*3) When selecting the IP and Analog-over-Coax mode, the power supply supports only AC 24 V.

All cameras in this sheet comply with UL2044.

Hybrid Camera Receivers

Model name	SNCA-ZX104	eBridge 1CR	eBridge 16CR
	4CH Hybrid Camera Receiver	1CH Hybrid Camera Receiver	16 CH Hybrid Camera Receiver
			
Number of supported hybrid camera	4	1	16
Camera input	BNC x 4	BNC x 1	BNC x 16
Analog video output	BNC x 4	BNC x 1 (Pigtail)	BNC x 16
Network port	RJ45 x 1 (100Base-TX/10Base-T)	RJ45 x 1 (100Base-TX/10Base-T)	RJ45 x 16 (100Base-TX/10Base-T)
Multicast Streaming Support	No	Yes	Yes
Serial Interface Input (for analog system controller)	RS-485 x 1	-	-
Supported Serial PTZ control protocol	Pelco-D	-	-
Power requirements	DC 12 V (AC adapter Included)	DC 12V (175mA), DC 24V (90mA), AC 12V (325mA), or AC 24V (175mA)	DC 12V (2.8A), DC 24V (5.2A), AC 12V (5.2A), or AC 24V (2.8A)
Installation Type	Stand-Alone	Stand-Alone	Rack-Mount
Dimensions (W x H x D)	210 x 44 x 250 mm	63.5 x 25.4 x 96.52 mm	486 x 41.27 x 216 mm

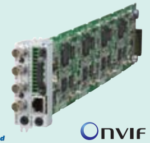
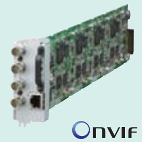
Hybrid Camera Accessory

Video Transformer

WAA-7075M

Impedance	75 Ω to 75 Ω
Frequency characteristics	50 Hz to 50 MHz ±1.0 dB
Input level	1.0 Vp-p
Connection terminal	BNC – BNC
Operating temperature	-20 °C to +60 °C
Operating humidity	10% to 80% (without condensation)
Storage temperature	-20 °C to +60 °C
Storage humidity	0% to 98%
Mass	Less than 150 g
Dimension (w x h x d)	48 x 35 x 40 mm (without projecting parts) 77 x 35 x 40 mm (including projecting parts)

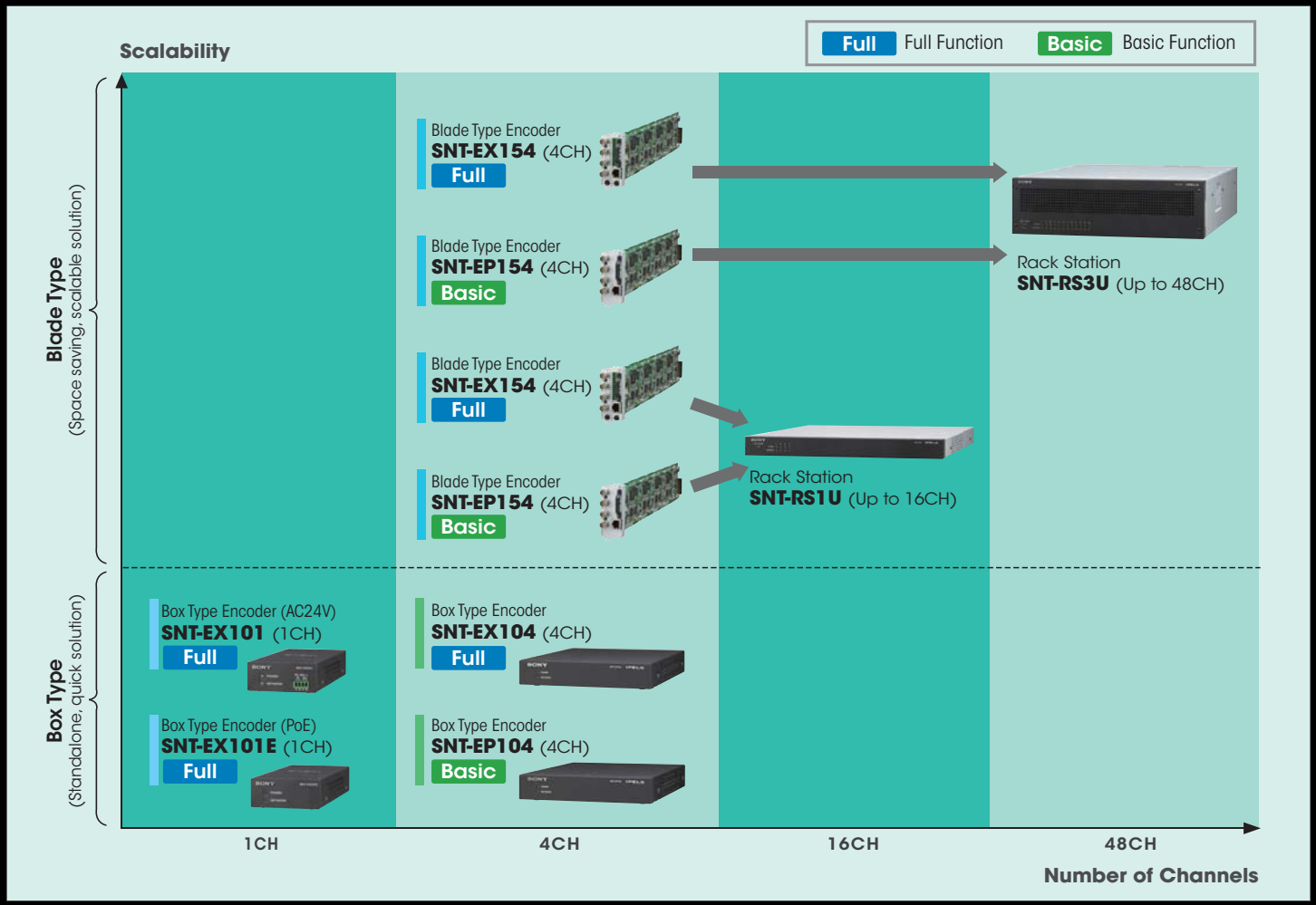
Surveillance Video Encoders

	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, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)	D1 (NTSC: 720 x 480, PAL: 720 x 576), 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
Codec streaming capability (per channel)	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 (per channel)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)	H.264/MPEG-4/JPEG: 30fps (NTSC: 720 x 480, PAL: 720 x 576)
PTZ control	Yes	Yes	Yes	Yes	No	No
Visibility Enhancer	Yes	Yes	Yes	Yes	Yes	Yes
Noise reduction	XDNR	XDNR	XDNR	XDNR	XDNR	XDNR
Coaxitron® control	Yes	Yes	Yes	Yes	No	No
Serial interface	RS-422/RS-485	RS-422/RS-485	RS-485	RS-485	-	-
USB memory slots	x 1(*1)	x 1(*1)	x 4(*1)	-	-	-
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	Yes - Full Duplex	Yes - Full Duplex	Yes - Full Duplex	Yes - Full Duplex	No	No
DEPA Advanced (Intelligence)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	Yes (DEPA Advanced)	No	No
Dimensions (W x H x D)	73 × 34 × 155 mm (2 7/8 ×1 3/8 × 6 1/8 inches)	73 × 34 × 155 mm (2 7/8 ×1 3/8 × 6 1/8 inches)	210 × 44 × 250 mm (8 3/8 × 1 3/4 × 9 7/8 inches)	78 × 34 × 382 mm (3 1/8 × 1 3/8 × 15 1/8 inches)	210 × 44 × 250 mm (8 3/8 × 1 3/4 × 9 7/8 inches)	78 × 34 × 382 mm (3 1/8 × 1 3/8 × 15 1/8 inches)
Power requirements	AC 24V in, with loop through output Input: AC 24V, +/- 20%	PoE (Class 2)	DC12 V	From Rack Station	DC12 V	From Rack Station

(*1) 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/)

All encoders in this sheet comply with UL60950-1. (Except SNT-EP154/EX154/)



Key Features	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
XDNR	●	●	●	●	●	●
Visibility Enhancer (VE)	●	●	●	●	●	●
DFI	●	●	●	●	●	●
Super-Impose	●	●	●	●	●	●
Privacy Masking	●	●	●	●	●	●
DEPA Advanced	●	●	●	●		
Voice Alert	●	●	●	●		
Local Storage	●	●	●			
PTZ Control	●	●	●	●		
RS422	●	●				
RS485	●	●	●	●		
Coaxitron	●	●	●	●		
AC24V power	●					
PoE		●				

Optional Accessory

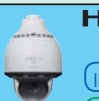
Rack Station

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

SNTA-RP1
Redundant Power Supply Unit
(for SNT-RS3U only)

Sony G5 IP Camera Line-up quick reference

		Box	Bullet	Indoor Minidome	Indoor Vandal Minidome	Outdoor Minidome	PTZ (340° Pan)	Rapid Dome (RPD) (Endless 360° Pan)	
V series View-DR DEPA Advanced	Full HD 1080	 CH240	 CH280 IR IP66	 DH240	 DH240T IK10	 DH280 IR IP66 IK10		 RH124 HD	 RH164 HD IP66 IK10
	HD	 CH140	 CH180 IR IP66	 DH140	 DH140T IK10	 DH180 IR IP66 IK10		 RS44/RS46 SD DynaView	 RS84/RS86 SD IP66 IK10 DynaView
Z series (Hybrid Camera)	HD	 ZB550		 ZM550	 ZM551 IK10		 ZP550 DynaView	 ZR550 DynaView	
E series	Full HD 1080	 CH220	 CH260 IR IP66	 DH220	 DH220T IK10	 DH260 IR IP66 IK10	 EP580 DynaView	 ER580 DynaView	
	HD	 CH120	 CH160 IR IP66	 DH120	 DH120T IK10	 DH160 IR IP66 IK10	 EP550 DynaView	 ER550 DynaView	
	SD	 EB520		 EM520	 EM521 IK10		 EP521 / EP520 DynaView	 ER521 / ER520 DynaView	
X series	Full HD 1080	 CH210/B* CH210/S*		 DH210/B* DH210/W*	 DH120T/B* DH120T/W* IK10			360 degree panoramic  CH140P360 CH240P360	
	HD	 CH110/B CH110/S		 DH110/B DH110/W	 DH110T/B DH110T/W IK10				

*Full HD resolution 1080

Sony IP camera / Encoder model and function matrix chart

Generation	Series	Model name	Full HD	720 HD	SD	Box	Bullet	Minidome	Rapid Dome (RPD)	PTZ	Encoder	View DR (Best WDR)	Dynaview (WDR)	VE (e WDR)	Dynamic Range (DR) Value	XDNR (Excellent Dynamic Noise Reduction)	Noise Reduction (NR)	IK10 (Vandal resistant)	IP66 (Ingress protection)	Adaptive IR illuminator	Optical D/N	Electrical D/N	Local(Edge) Storage	DEPA Advanced	DEPA	Tampering Alarm	Analog Video Out	Two way Audio	Voice alert	Audio Detection	Smart Phone viewer	Image Stabilizer	IPoC (Hybrid)	Wireless option	ONVIF	DC12V	AC24V	PoE	hPoE
G5	V series	SNC-CH140		●		●						●	–	●	130db	●		–	–	–	●	–	●(CF)	●	●	●	●	●	●	●	●	–	–	●	●	●	●	●	–
		SNC-CH240	●			●						●	–	●	90db	●		–	–	–	●	–	●(CF)	●	●	●	●	●	●	●	●	–	–	●	●	●	●	●	–
		SNC-CH180		●			●					●	–	●	130db	●		–	●	●	●	–	●(CF)	●	●	●	●	●	●	●	●	–	–	●	●	●	●	●	–
		SNC-CH280	●				●					●	–	●	90db	●		–	●	●	●	–	●(CF)	●	●	●	●	●	●	●	●	–	–	●	●	●	●	●	–
		SNC-DH140		●				●				●	–	●	130db	●		–	–	–	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
		SNC-DH240	●					●				●	–	●	90db	●		–	–	–	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
		SNC-DH140T		●				●				●	–	●	130db	●		●	–	–	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
		SNC-DH240T	●					●				●	–	●	90db	●		●	–	–	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
		SNC-DH180		●				●				●	–	●	130db	●		●	●	●	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
		SNC-DH280	●					●				●	–	●	90db	●		●	●	●	●	–	–	●	●	●	●	●	●	●	●	–	–	–	●	●	●	●	–
	E series	SNC-EP521/520			●					●(36x)		–	●	–	92db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	●	–	–	●	–	●	–	●
		SNC-EP550		●						●(28x)		–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	–	–	–	●	–	●	–	●
		SNC-EP580	●							●(20x)		–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	–	–	–	●	–	●	–	●
		SNC-ER521/520			●				●(36x)			–	●	–	92db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	●	–	–	●	–	●	–	●
		SNC-ER550		●					●(28x)			–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	–	–	–	●	–	●	–	●
		SNC-ER580	●						●(20x)			–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	–	●	●	–	●	–	–	–	●	–	●	–	●
		SNC-CH160		●			●					–	–	–	more than 60db	–	●	–	●	●	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-CH260	●				●					–	–	–	more than 60db	–	●	–	●	●	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-CH120		●		●						–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-CH220	●			●						–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH120		●				●				–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH120T		●				●				–	–	–	more than 60db	–	●	●	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH220	●					●				–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH220T	●					●				–	–	–	more than 60db	–	●	●	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH160										–	–	–	more than 60db	–	●	●	●	●	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH260	●									–	–	–	more than 60db	–	●	●	●	●	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-EB520			●	●						–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-EM520			●			●				–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-EM521			●			●				–	–	–	more than 60db	–	●	●	–	–	●	–	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
	X series	SNC-CH110		●		●						–	–	–		–	●	–	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-CH210	●			●						–	–	–		–	●	–	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH110		●				●				–	–	–		–	●	–	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH210	●					●				–	–	–		–	●	–	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH110T		●				●				–	–	–		–	●	●	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
		SNC-DH210T	●					●				–	–	–		–	●	●	–	–	–	●	–	–	●	●	▲	–	–	–	●	–	–	–	●	–	–	●	–
	Z series	SNC-ZB550		●		●						–	–	–	more than 60db	–	●		–	–	●	–	–	–	●	●	●	–	–	–	●	–	●	–	●	●	●	●	–
		SNC-ZM551		●				●				–	–	–	more than 60db	–	●	●	–	–	●	–	–	–	●	●	●	–	–	–	●	–	●	–	●	●	●	●	–
		SNC-ZM550		●				●				–	–	–	more than 60db	–	●	–	–	–	●	–	–	–	●	●	●	–	–	–	●	–	●	–	●	●	●	●	–
		SNC-ZR550		●					●(28x)			–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	●	●	●	–	●	–	●	–	●	–	●	–	●
		SNC-ZP550		●						●(28x)		–	●	–	86db	–	●	–	–	–	●	–	●(SD)	–	●	●	●	●	●	–	●	–	●	–	●	–	●	–	●
	Encoder	SNC-RS44			●				●(18x)			–	●	●		●		–	–	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	●	●	–	●
		SNC-RS46			●				●(36x)			–	●	●		●		–	–	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	●	●	–	●
		SNC-RS84			●				●(18x)			–	●	●		●		●	●	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	–	●	–	–
		SNC-RS86			●				●(36x)			–	●	●		●		●	●	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	–	●	–	–
		SNC-RH124		●					●(10x)			–	–	●		●		–	–	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	●	●	–	●
		SNC-RH164		●					●(10x)			–	–	●		●		●	●	–	●	–	●(CF)	●	–	●	●	●	●	●	–	–	●	●	●	●	–	–
		SNT-EX101			●						●	–	–	●		●		–	–	–	–	–	●(USB)	●	–	●	●	●	●	●	–	–	●	●	–	●	–	–
		SNT-EX101E			●						●	–	–	●		●		–	–	–	–	–	●(USB)	●	–	●	●	●	●	●	–	–	●	●	–	–	●	–
		SNT-EX104			●						●	–	–	●		●		–	–	–	–	–	●(USB)	●	–	●	▲	●	●	●	–	–	●	●	–	–	–	–
		SNT-EX154			●						●	–	–	●		●		–	–	–	–	–	–	●	–	●	▲	●	●	●	–	–	●	●	–	–	–	–
		SNT-EP104			●						●	–	–	●		●		–	–	–	–	–	–	●	–	●	▲	–	–	●	–	–	●	●	–	–	–	–
		SNT-EP154			●						●	–	–	●		●		–	–	–	–	–	–	●	–	–	▲	–	–	●	–	–	●	●	–	–	–	–
G3		SNC-RX530			●				●(18x)			–	–	–		–	●	–	–	–	–	–	▲(MS)	–	●	–	●	●	●	–	–	●	–	●	–	●	●	–	–
		SNC-RX550			●				●(26x)			–	–	–		–	●	–	–	–	–	–	▲(MS)	–	●	–	●	●	●	–	–	●	–	●	–	●	●	–	–
		SNC-RX570			●				●(36x)			–	●	–		–		–	–	–	–	–	▲(MS)	–	●	–	●	●	●	–	–	●	–	●	–	●	●	–	–
G2		SNC-RZ25			●					●(18x)		–	–	–		–		–	–	–	●	–	▲	–	–	–	●	●	–	–	–	–	●	–	●	●	–	–

Type / Category

Features / Function

●: Available

▲: Available with condition

–: Not available

Glossary

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

IK10

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 (Colour) 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.
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

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 colour 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.

hPoE (High PoE, IEEE 802.3at)

hPoE enables networked devices to receive power up to 25W 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.

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BP000549-092012-M-V6 Printed in Singapore