

# IP Fixed Cameras

Model Name	SNC-P1	SNC-CS10	SNC-CS11	SNC-CS20	SNC-CS50N	SNC-CM120	SNC-CH120	SNC-CH140	SNC-CH220	SNC-CH240	SNC-CH160	SNC-CH180	SNC-CH260	SNC-CH280	SNC-CH110	SNC-CH210	
Video Compression Format	JPEG/MPEG-4			JPEG/MPEG-4		JPEG/MPEG-4/H.264		JPEG/MPEG-4		JPEG/MPEG-4/H.264							
Codec Streaming Capability	Single streaming (JPEG/MPEG4 selectable)			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 (*)	SD	SD	SD	SD	SD	Megapixel	HD	HD	Full HD 1080	Full HD 1080	HD	HD	Full HD 1080	Full HD 1080	HD	Full HD 1080	
Maximum Resolution (**)	640 x 480	640 x 480	640 x 480	768 x 576	704 x 480	1280 x 960 (1.3 Mega)	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)	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	
IP66	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	
IR Illuminators	No	No	No	No	No	No	No	No	No	No	IR	IR	IR	IR	No	No	
Horizontal Viewing Angle	53.4°	66.6° to 26.9°	66.6° to 26.9°	66.6° to 27.0°	94° to 35°	100.7° to 47°	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°	101.2° to 47.0°	80.7°	88°	
Optical Zoom Ratio	Fixed focal lens (f = 3.8 mm)	Lens not included	2.7x optical zoom	2.7x optical zoom	2.7x optical zoom	2.1x optical zoom	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	2.1x optical zoom	Fixed focal lens (f = 2.34 mm)	Fixed focal lens (f = 3.3 mm)	
Lens Mount	Built-in	CS mount	CS mount	CS mount	CS mount	CS mount	CS mount	CS mount	CS mount	CS mount	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	
Imager	1/4-type Progressive Scan CCD	1/4-type Progressive Scan CCD	1/4-type Progressive Scan 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	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	1/3.8-type progressive scan CMOS sensor	1/2.8-type progressive scan Exmor CMOS Sensor	
Minimum Illumination	1.2 lx (AGC ON, F2.0, 30 IRE)	1.7 lx (50 IRE, F1.0, AGC ON)	1.7 lx (50 IRE, F1.0, AGC ON)	Color: 0.2 lx, B/W: 0.01 lx (50 IRE, 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 (50 IRE, F1.3, AGC ON); Color: 0.2 lx, B/W: 0.01 lx (Light Funnel ON, 50 IRE, F1.3, AGC ON)	Color: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.2 lx, B/W: 0.1 lx (F1.2/View-DR™ ON/Middle/VE OFF/AGC High/50 IRE [IP])	Color: 0.7 lx, B/W: 0.45 lx (F1.3/AGC 42 dB/50 IRE [IP])	Color: 0.4 lx, B/W: 0.25 lx (F1.3/View-DR OFF/XDNR ON/Middle/VE OFF/AGC High/50 IRE [IP])	Color: 0.5 lx, B/W: 0 lx (IR ON) (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.22 lx, B/W: 0 lx (IR ON) (F1.2/View-DR OFF/XDNR ON/Middle/VE OFF/AGC High/50 IRE [IP])	Color: 0.7 lx, B/W: 0 lx (IR ON) (F1.2/AGC 42dB 50IRE [IP])	Color: 0.4 lx, B/W: 0 lx (IR ON) (F1.2/View-DR OFF/XDNR ON/Middle/VE OFF/AGC High/50 IRE [IP])	5.0 lx (AGC 30 dB/50 IRE [IP])	2.0 lx (AGC 38 dB/50 IRE [IP])	
Maximum Frame Rate (**)	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 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 x 576 resolution; 10/8 fps H.264 at 704 x 480/704 x 576 resolution	30 fps JPEG/MPEG-4 at VGA resolution (Light Funnel ON); 15 fps JPEG at 1280 x 960/MPEG-4 of VGA resolution	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; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	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; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264/JPEG/MPEG-4 at 1280 x 960	30 fps H.264/MPEG-4/JPEG at 1280 x 720; 15 fps H.264/MPEG-4/JPEG at 1920 x 1080	
Day/Night	No	No	No	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Electrical D/N	
Wide-D Visibility Enhancer (VE)	No	No	No	No	No	No	No	View-DR VE	No	View-DR VE	No	View-DR VE	No	View-DR VE	No	No	
Noise Reduction	No	No	No	No	No	No	Yes	XDNR technology	Yes	XDNR technology	Yes	XDNR technology	Yes	XDNR technology	Yes	Yes	
Card Slot(s)	No	No	No	No	PC card x1	No	No	CF card x1	No	CF card x1	No	CF card x1	No	CF card x1	No	No	
Wireless Capability	No	No	No	No	Yes (option)*	No	No	Yes (option)*	No	Yes (option)*	No	Yes (option)*	No	Yes (option)*	No	No	
Composite Video Output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DEPA™ (Intelligence)	No	No	No														
ONVIF™ Software	No	No	No	No	No	No	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	ONVIF	
Power Requirement	DC 12V	AC 24V, DC 12V	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	AC 24V, DC 12V, PoE	
Dimensions	Camera: 4 x 1 7/16 x 5 1/2 inches (100 x 36 x 139 mm) Stand: 4 3/4 x 5 5/8 x 6 inches (120 x 142 x 150 mm)	2 7/8 x 2 1/4 x 4 5/8 inches (70 x 57 x 116 mm)	2 7/8 x 2 1/4 x 6 1/4 inches (70 x 57 x 158 mm)	3 1/4 x 2 1/2 x 7 inches (82.5 x 63 x 176.2 mm)	3 3/8 x 2 3/4 x 7 3/4 inches (84 x 69 x 196 mm) excl. cover equipment	3 1/4 x 2 1/2 x 7 inches (82.5 x 63 x 187.5 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 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)	ø 3 3/4 x 7 3/8 inches (93 x 186 mm)	ø 3 3/4 x 7 3/8 inches (93 x 186 mm)	ø 3 3/4 x 7 3/8 inches (93 x 186 mm)	ø 3 3/4 x 7 3/8 inches (93 x 186 mm)	ø 3 3/4 x 7 3/8 inches (93 x 186 mm)	ø 1 3/4 x 3 3/4 inches (44 x 93 mm)	ø 1 3/4 x 3 3/4 inches (44 x 93 mm)























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

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

"F" such as "30/25 fps" in this table, please read as "30 fps" (NTSC model) and "25 fps" (PAL model). (\*\*\*\*) DEPA Intelligent Object Detection is included in this model. (\*\*\*\*) SNCA-CFW5 802.11 g/b card.

# IP Rapid Dome and PTZ Cameras

P/T/Z: Pan/Tilt/Zoom

Model Name	SNC-P5	SNC-RZ25N	SNC-RZ50N	SNC-RX530N	SNC-RX550N	SNC-RX570N	SNC-RS44N	SNC-RS46N	SNC-RS84N	SNC-RS86N	SNC-RH124	SNC-RH164	
													
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)		
HD/Megapixel (*1)	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	<b>HD</b>	<b>HD</b>	
Maximum Resolution (*2)	640 x 480	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	704 x 480 / 704 x 567	1280 x 720	1280 x 720	
IP66	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	
Vandal Resistant	No	No	No	No	No	No	No	No	IK10	IK10	No	IK10	
Horizontal Viewing Angle	55.8° to 20°	48° to 2.7°	42.0° to 1.7°	48.0° to 2.8°	54.2° to 2.2°	57.8° to 1.7°	48.0° to 2.8°	48.0° to 2.8°	48.0° to 2.8°	48.0° to 2.8°	50° to 5.4°	50° to 5.4°	
Optical Zoom Ratio	3x optical zoom	18x optical zoom	26x 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	
Imager	1/4-type progressive scan CCD sensor	1/4-type Exwave™ HAD CCD sensor	1/4-type Super 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	3.5 lx (30 IRE, AGC ON)	Color: 0.7 lx, B/W: 0.06 lx (50 IRE, F1.4, AGC ON)	Color: 2.2 lx, B/W: 0.3 lx (50 IRE, F1.6, AGC ON)	Color: 0.7 lx (50 IRE, F1.4, AGC ON), B/W: 0.15 lx (50 IRE, F1.4, AGC ON)	Color: 1 lx, B/W: 0.15 lx (50 IRE, F1.6, AGC ON)	Color: 1.4 lx, B/W: 0.15 lx (50 IRE, F1.6, AGC ON)	(*3) Color: 0.4 lx, B/W: 0.08 lx (50 IRE, XDNR™ ON, VE ON, Slow Shutter OFF)	(*3) Color: 0.4 lx, B/W: 0.08 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	(*4) Color: 0.7 lx, B/W: 0.08 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	(*4) Color: 0.7 lx, B/W: 0.08 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	Color: 1.9 lx, B/W: 0.17 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	Color: 2.1 lx, B/W: 0.19 lx (50 IRE, XDNR ON, VE ON, Slow Shutter OFF)	
Maximum Frame Rate (*5)	18 fps JPEG or 15 fps MPEG-4 at VGA resolution; 30 fps JPEG or MPEG-4 at QVGA resolution	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 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 at 1280 x 720	30 fps H.264 at 1280 x 720	
Day/Night	No	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	No	No	<b>DynaView™</b>	<b>DynaView VE</b>	<b>DynaView VE</b>	<b>DynaView VE</b>	<b>DynaView VE</b>	<b>VE</b>	<b>VE</b>	
Noise Reduction	No	No	Yes	Yes	Yes	No	XDNR technology	XDNR technology	XDNR technology	XDNR technology	XDNR technology	XDNR technology	
Card Slot(s)	CF card x1	CF card x1	PC card x1, 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)*	Yes (option)*	Yes (option)*	
Composite Video Output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DEPA™ (Intelligence)	No	No	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	 (*6)	
ONVIF™ Software	No	No	No	No	No	No	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	
Rapid Dome or PTZ	PTZ	PTZ	PTZ	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	Rapid Dome	
Pan Angle	-60° to +60°	-170° to +170°	-170° to +170°	360° endless	360° endless	360° endless	360° endless	360° endless	360° endless	360° endless	360° endless	360° endless	
Tilt Angle	-65° to +10°	-90° to +120°	0° to +115°	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	No	No	Quick Release	Quick Release	Quick Release	Quick Release	Quick Release	Quick Release	
Power Requirement	DC 12 V	AC 24 V, DC 12 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 (*7)	AC 24 V, DC 12 V, hPoE (*7)	AC 24 V	AC 24 V	AC 24 V, DC 12 V, hPoE (*7)	AC 24 V	
Dimensions	Camera: 5 1/8 x 5 1/8 x 4 3/8 inches (130 x 130 x 110 mm) Stand: 5 1/8 x 7 1/8 x 5 5/8 inches (130 x 178 x 142 mm)	5 5/8 x 8 7/8 x 5 7/8 inches (140 x 200 x 148 mm)	5 5/8 x 6 5/8 x 5 5/8 inches (140 x 166 x 142 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 (160 x 160 x 230 mm)	6 3/8 x 6 3/8 x 9 1/8 inches (160 x 160 x 230 mm)	ø 6 1/8 x 9 inches (154 x 226 mm)	ø 6 1/8 x 9 inches (154 x 226 mm)	ø 9 3/8 x 13 5/8 inches (238 x 344 mm)	ø 9 3/8 x 13 5/8 inches (238 x 344 mm)	ø 6 1/8 x 9 inches (154 x 226 mm)	ø 9 3/8 x 13 5/8 inches (238 x 346 mm)

(\*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) Min. Illumination of Analog Video Output of SNC-RS44N/P and SNC-RS46N/P is different from IP video output. Color: 0.7 lx, B/W: 0.15 lx (50 IRE, Slow Shutter OFF). (\*4) Min. Illumination of Analog Video of SNC-RS84N/P and SNC-RS86N/P is as follows. Color: 1.4 lx, B/W: 0.15 lx (50 IRE, Slow Shutter OFF). (\*5) 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). (\*6) DEPA Intelligent Object Detection is included in this model. (\*7) hPoE is available from the firmware version 1.2. (S) SNCA-CFWS 802.11 g/b card.















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

# IP Mini Dome Cameras

Model Name	SNC-DH120	SNC-DH140	SNC-DH220	SNC-DH240	SNC-DH110	SNC-DH210	SNC-DH120T	SNC-DH140T	SNC-DH220T	SNC-DH240T	SNC-DH160	SNC-DH180	SNC-DH260	SNC-DH280	SNC-DH110T	SNC-DH210T	
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)																
HD/Megapixel (*)	HD	HD	Full HD 1080	Full HD 1080	HD	Full HD 1080	HD	HD	Full HD 1080	Full HD 1080	HD	HD	Full HD 1080	Full HD 1080	HD	Full HD 1080	
Maximum Resolution (**)	1280 x 1024 (1.3 Mega)	1280 x 1024 (1.3 Mega)	1920 x 1440 (3 Mega)	1920 x 1440 (3 Mega)	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	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)	1280 x 960 (1.3 Mega)	2048 x 1536 (3 Mega)	
IP66	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No	
Vandal Resistant	No	No	No	No	No	No	IK10	IK10	IK10	IK10	IK10	IK10	IK10	IK10	Yes, IK6 (Tentative)	Yes, IK6	
Built-in IR Illuminators	No	No	No	No	No	No	No	No	No	No	Yes, IR	Yes, IR	Yes, IR	Yes, IR	No	No	
Horizontal Viewing Angle	85.4° to 31.2°	85.4° to 31.2°	88.5° to 32.3°	88.5° to 32.3°	80.7° (Tentative)	88°	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°	80.7° (Tentative)	88°	
Optical Zoom Ratio	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom	2.9x optical zoom	Fixed focal lens (f = 2.34 mm / Tentative)	Fixed focal lens (f = 3.3 mm)	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	Fixed focal lens (f = 2.34 mm / Tentative)	Fixed focal lens (f = 3.3 mm)	
Imager	1/3-type progressive scan Exmor™ CMOS sensor <b>Exmor</b>	1/3-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3.8-type progressive scan CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	1/3.8-type progressive scan CMOS sensor	1/2.8-type progressive scan Exmor CMOS sensor <b>Exmor</b>	
Minimum Illumination	Color: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.2 lx, B/W: 0.1 lx (F1.2 View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	Color: 0.7 lx, B/W: 0.45 lx (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.4 lx, B/W: 0.25 lx (F1.2 View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	5.0 lx (AGC 30 dB / 50 IRE [IP]) (Tentative)	2.0 lx (AGC 38dB) / 50 IRE [IP]	Color: 0.5 lx, B/W: 0.3 lx (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.2 lx, B/W: 0.1 lx (F1.2 View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	Color: 0.7 lx, B/W: 0.45 lx (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.4 lx, B/W: 0.25 lx (F1.2 View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	Color: 0.5 lx, B/W: 0 lx (IR ON) (F1.2/AGC 42 dB/50 IRE [IP])	Color: 0.2 lx, B/W: 0 lx (IR ON) (F1.2 View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	Color: 0.7 lx, B/W: 0 lx (IR ON) (F1.2 / AGC 42dB / 50IRE [IP])	Color: 0.4 lx, B/W: 0 lx (IR ON) (F1.2 / View-DR OFF / XDNR ON-Middle / VE OFF/AGC High/50 IRE [IP])	5.0 lx (AGC 30 dB / 50 IRE [IP]) (Tentative)	2.0 lx (AGC 38dB) / 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 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 / MPEG-4 / JPEG at 1280 x 960 (Tentative)	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	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; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 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 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 at 1920 x 1080; 20 fps MPEG-4 at 1920 x 1080; 15 fps JPEG at 1920 x 1080	30 fps H.264 / MPEG-4 / JPEG at 1280 x 960 (Tentative)	30 fps H.264 / MPEG-4 / JPEG at 1280 x 720; 15 fps H.264 / MPEG-4 / JPEG at 1920 x 1080
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	Day/Night	Day/Night	Day/Night	Electrical D/N	Electrical D/N	
Wide-D Visibility Enhancer (VE)	No	<b>View-DR VE</b>	No	<b>View-DR VE</b>	No	No	No	<b>View-DR VE</b>	No	<b>View-DR VE</b>	No	<b>View-DR VE</b>	No	<b>View-DR VE</b>	No	No	
Noise Reduction	Yes	<b>XDNR™ technology</b>	Yes	<b>XDNR technology</b>	Yes	Yes	Yes	<b>XDNR technology</b>	Yes	<b>XDNR technology</b>	Yes	<b>XDNR technology</b>	Yes	<b>XDNR technology</b>	Yes	Yes	
Card Slot(s)	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Wireless Capability	No	No	No	No	No	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	Yes	Yes	Yes	Yes	Yes	
DEPA™ (Intelligence)	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	<b>DEPA</b>	
ONVIF™ Software	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	<b>ONVIF</b>	
Power Requirement	PoE	AC 24 V, DC 12 V, PoE	PoE	AC 24 V, DC 12 V, PoE	PoE	PoE	PoE	AC 24 V, DC 12 V, PoE	PoE	AC 24 V, DC 12 V, PoE	PoE	AC 24 V, DC 12 V, PoE	PoE	AC 24 V, DC 12 V, PoE	PoE	PoE	
Dimensions	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 4 1/4 x 2 1/8 inches (106 x 51 mm)	ø 4 1/4 x 2 1/8 inches (106 x 51 mm)	ø 5 5/8 x 4 3/4 inches (140 x 119 mm)	ø 5 5/8 x 4 3/4 inches (140 x 119 mm)	ø 5 5/8 x 4 3/4 inches (140 x 119 mm)	ø 5 5/8 x 4 3/4 inches (140 x 119 mm)	ø 6 5/8 x 4 3/4 inches (166 x 119 mm)	ø 6 5/8 x 4 3/4 inches (166 x 119 mm)	ø 6 3/4 x 4 3/4 inches (166 x 119 mm)	ø 6 3/4 x 4 3/4 inches (166 x 119 mm)	ø 4 1/4 x 2 1/4 inches (106 x 57 mm)	ø 4 1/4 x 2 3/8 inches (106 x 57 mm)	

(\*) Definition of HD: More than 720p with H.264 streaming capability at more than 30/25 fps. (\*\*) When the Maximum resolution includes "i" such as "704 x 480/704 x 576" in this table, please read as "704 x 480" (NTSC) and "704 x 576" (PAL). (\*\*\*) When the frame rate includes "i" 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. (Except PAL models)

Model Name	SNC-DF50N	SNC-DF80N	SNC-DF85N	SNC-DS10	SNC-DS60	SNC-DM110	SNC-DM160
							
Video Compression Format	JPEG/MPEG-4/H.264			JPEG/MPEG-4			
Codec Streaming Capability	Dual streaming (JPEG and MPEG-4 combination only)			Dual streaming (JPEG and MPEG-4 combination only)			
HD/Megapixel (*)	SD	SD	SD	SD	SD	Megapixel	Megapixel
Maximum Resolution	704 x 480	704 x 480	704 x 480	768 x 576	768 x 576	1280 x 960 (1.3 Mega)	1280 x 960 (1.3 Mega)
IP66	No	Yes	Yes	No	Yes	No	Yes
Vandal Resistant	No	<b>IK10</b>	<b>IK10</b>	No	<b>IK10</b>	No	<b>IK10</b>
IR Illuminators	No	No	No	No	No	No	No
Horizontal Viewing Angle	100.8° to 27.7°	100.8° to 27.7°	100.8° to 27.7°	73° to 20°	73° to 20°	100.3° to 29°	100.8° to 27°
Optical Zoom Ratio	3.6x optical zoom	3.6x optical zoom	3.6x optical zoom	3.6x optical zoom	3.6x optical zoom	3.6x optical zoom	3.6x optical zoom lens
Imager	1/3-type CCD with DynaView™	1/3-type Super Exwave CCD	1/3-type CCD with DynaView	1/4-type Progressive Scan CCD with ExwavePRO™	1/4-type Progressive Scan CCD with ExwavePRO	1/3-type Progressive Scan CCD with ExwavePRO	1/3-type Progressive Scan CCD with ExwavePRO
Minimum Illumination	0.7 lx (50 IRE, F1.3, AGC ON)	Color: 0.6 lx, B/W: 0.06 (50 IRE, F1.3, AGC ON)	Color: 0.6 lx, B/W: 0.06 (50 IRE, F1.3, AGC ON)	0.15 lx (50 IRE, F1.3, AGC ON)	Color: 0.15 lx, B/W: 0.01 lx (50 IRE, F1.3, AGC ON)	0.4 lx (50 IRE, F1.3, AGC ON) / 0.1 lx (Light Funnel ON, 50 IRE, F1.3, AGC ON)	Color: 0.4 lx, B/W: 0.08 lx (50 IRE, F1.3, AGC ON) / Color: 0.1 lx, B/W: 0.01 lx (Light Funnel ON, 50 IRE, F1.3, AGC ON)
Maximum Frame Rate	30 fps JPEG/MPEG-4 at 704 x 480 resolution; 10/8 fps H.264 at VGA resolution	30 fps JPEG/MPEG-4 at 704 x 480 resolution; 10/8 fps H.264 at VGA resolution	30 fps JPEG/MPEG-4 at 704 x 480 resolution; 10/8 fps H.264 at VGA resolution	30 fps MPEG-4 at VGA resolution; 30 fps JPEG at 768 x 576 resolution	30 fps MPEG-4 at VGA resolution; 30 fps JPEG at 768 x 576 resolution	30 fps JPEG/MPEG-4 at VGA resolution (Light Funnel ON); 15 fps 1280 x 960 resolution	30 fps JPEG/MPEG-4 at VGA resolution (Light Funnel ON); 15 fps 1280 x 960 resolution
Day/Night	No	Day/Night	Day/Night	No	Day/Night	No	Day/Night
Wide-D Visibility Enhancer (VE)	No <b>DynaView</b>	No	No <b>DynaView</b>	No	No	No	No
Noise Reduction	No	No	No	No	No	No	No
Card Slot(s)	No	CF card x1	CF card x1	No	No	No	No
Wireless Capability	No	No	No	No	No	No	No
Composite Video Output	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DEPA™ (Intelligence)							
ONVIF™ Software	No	No	No	No	No	No	No
Power Requirement	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE	AC 24 V, DC 12 V, PoE
Dimensions	ø 5 x 5 5/8 inches (126 x 140.5 mm)	ø 7 x 5 5/8 inches (177.5 x 141.5 mm)	ø 7 x 5 5/8 inches (177.5 x 141.5 mm)	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 6 5/8 x 4 3/4 inches (166 x 119 mm)	ø 5 5/8 x 4 3/4 inches (140 x 118 mm)	ø 6 5/8 x 4 3/4 inches (166 x 119 mm)

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

## Glossary

### IP66

The "IP" of IP66 stands for Ingress Protection, and its two-digit number shows the durability rating of equipment for outdoor use. An IP66-rated camera is dust-tight and protected against heavy jet sprays.

### IK10

The IK rating system classifies the level of protection provided by electrical appliances against external impact. An IK10-rated camera can withstand the impact of a 5-kg weight dropped on it from a height of 40 cm.

### Day/Night

A camera with Day/Night mode can switch 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 reproduces images even in darkness.

### 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

Wide Dynamic Range technology expands the video dynamic range of the camera to improve image visibility even in extremely high-contrast environments.

### DynaView™ Technology

### DynaView

This is one of Sony's Wide-D technologies. With DynaView technology, the camera captures two images for each frame using an electronic shutter – the first image is taken with a standard exposure time and the second image is taken with a very short exposure time. The dark areas in the scene are clearly reproduced in the first image, and the bright areas are reproduced without being "washed out" in the second image. The two images are then combined into one using an advanced DSP LSI to reproduce high-contrast images.

### View-DR™ Technology

### View-DR

This is Sony's latest Wide-D technology. HD 720p cameras with View-DR reproduce clear pictures by composing the image from a total of four images, using different electronic shutter speeds – including a full-frame image (1/30 second exposure time) – for each video frame. In HD 1080p cameras with View-DR technology, two images – including a full-frame image – are combined. The inclusion of full-frame images contributes to high camera sensitivity. During the process, the image quality of each frame is enhanced by Visibility Enhancer (VE) pixel-by-pixel adaptive tone optimization. Since View-DR technology requires a very high-speed readout capability and low-noise characteristics, this type of camera adopts Sony's Exmor™ CMOS sensor.

### Visibility Enhancer (VE)

VE is one of Sony's new technologies that optimizes contrast and makes a scene more visible. In any video camera, even those with a wide dynamic range, the original video signal needs to be mapped to fit the limited dynamic range of the transmission environment (such as 48 dB for H.264) when the signal is streamed. When VE is activated, the brightness and color reproduction of an image are optimized dynamically on a pixel-by-pixel basis, while continuously adapting to each scene. This way, the video signal is effectively mapped to the limited dynamic range of the transmission environment but without compromising major elements of visibility, such as image clarity.

### XDNR™ Technology (eXcellent Dynamic Noise Reduction)

XDNR technology 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.

### DEPA™ System



With a DEPA system from Sony, 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.

### 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. Other enhancements include a tamper alarm, shadow cancellation, a beam intrusion detector, and audio analysis.

### 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.

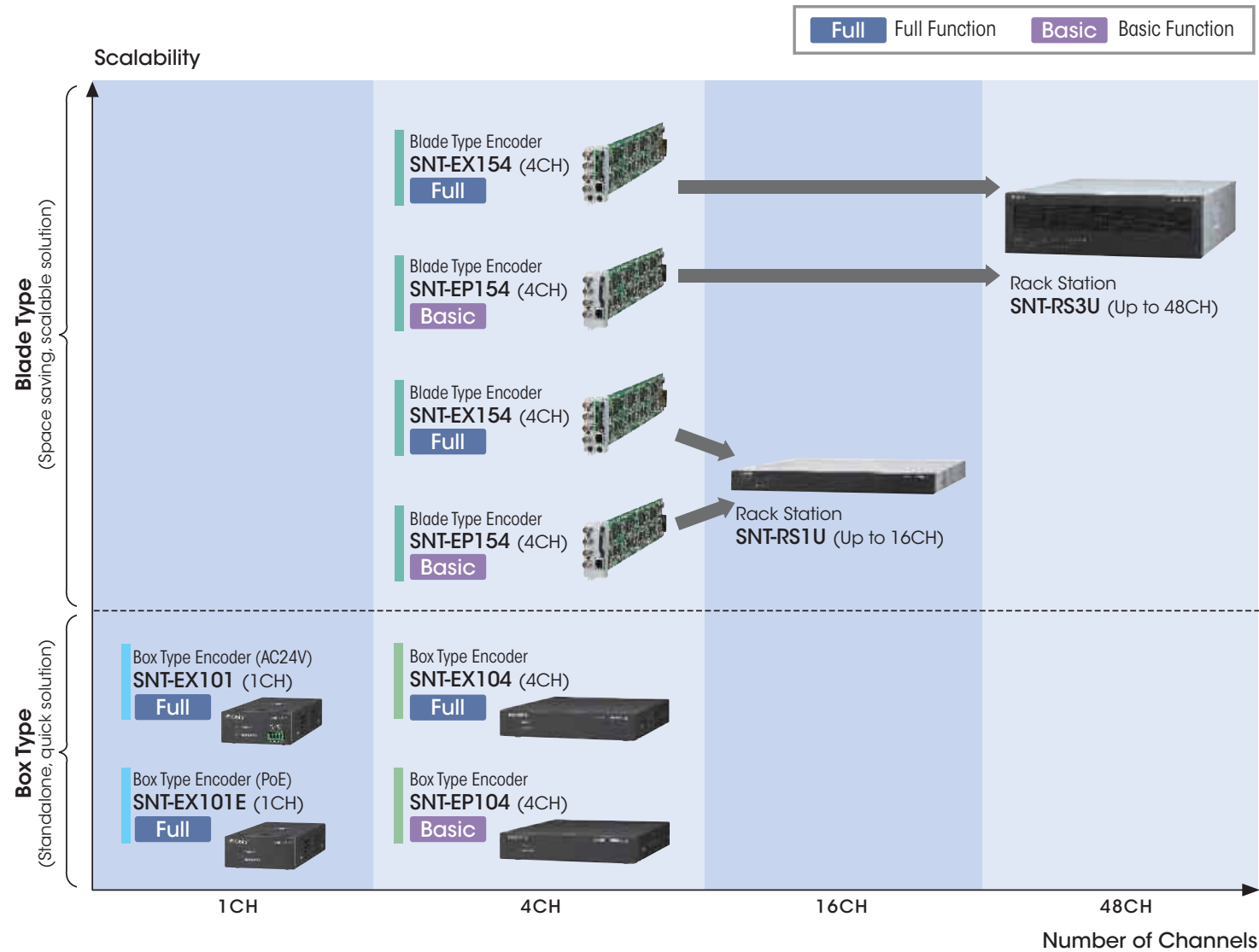
### PoE (Power-over-Ethernet, IEEE 802.3af)

PoE enables networked devices to receive power up to 13.95 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 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.

# Surveillance Video Encoders



## Rack Stations



**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
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)	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
Visibility Enhancer	Yes	Yes	Yes	Yes	Yes	Yes
Noise Reduction	<a href="#">XDNR™ technology</a>	<a href="#">XDNR technology</a>	<a href="#">XDNR technology</a>	<a href="#">XDNR technology</a>	<a href="#">XDNR technology</a>	<a href="#">XDNR technology</a>
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)					No	No
Dimensions (WHD)	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 (IEEE802.3af)	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/>)

# Network Surveillance Servers

	NSR-1200/4T	NSR-1100/2T	NSR-1050H/1T	NSR-S10/1T	NSR-S10 (Without HDD)
					
<b>Video/Recording</b>					
Number of Cameras Supported	Max. 64 (IP/Analog total)	Max. 32 (IP/Analog total)	Max. 20 (IP/Analog total)	Max. 4	
Number of Analog Cameras	Max. 16 with optional NSBK-A16 or NSBK-A16H			Max. 16	None
Video Compression (IP Camera)	H.264/MPEG-4/JPEG*4				
Video Compression (Analog Camera)	H.264 or MPEG-4 (with NSBK-A16H or NSBK-A16)			MPEG-4	No
Recording Rate (at MPEG-4, VGA, 1Mbps)	1200fps (40 cameras x 30fps)	960fps (32 cameras x 30fps)	600fps (20 cameras x 30fps)	120fps (4 cameras x 30fps)	
Hard Disk Drives (Physical Capacity)	4TB (1TB x4)	2TB (1TB x2)	1TB (1TB x1)	1TB (1TB x1)	No HDD
Hard Disk Drives (RAID Level)	RAID 5, 1+0, 0	RAID 0, 1	No	No	
Optical Disc Drive	DVD/CD Drive x1				No
Expansion Storage	Supports NSRE-S200, iSCSI storage				eSATA
<b>Video Output</b>					
Monitor OUT 1	HDMI (Type A) x1 and D-sub 15-pin x2 (Front and Rear) *1			D-sub15-pin x1	
Monitor OUT 2	HDMI (Type A) x1 or D-sub 15-pin x1 (Rear) *1			No	
<b>Audio Output</b>					
Audio Line OUT	Phono jack L/R x1 Stereo Pair			Terminal connector x1	
<b>Sensor Input/Alarm Output</b>					
Sensor Input	Terminal connector x8			Terminal connector x4	
Alarm Output	Terminal connector x8			Terminal connector x1	
<b>Other Interfaces</b>					
Ethernet	1000BASE-T/100BASE-TX/10BASE-T x4 *2			1000BASE-T/100BASE-TX/10BASE-T x2	
USB	USB2.0 x3 (Front), USB2.0 x3 (Rear)			USB 2.0 x1 (Front), USB 2.0 x2 (Rear)	
Serial Interface (for UPS)	RS-232C : D-sub 9-pin x1			No	
Serial Interface (for analog camera control)	RS-232C : D-sub 9pin x1, RS-422/RS-485 x1 *3			No	
<b>General</b>					
Dimensions (WHD)	17 x 3 1/2 x 16 1/2 inches (430 x 87 x 417 mm) excluding protrusions			9 3/4 x 2 1/8 x 6 3/8 inches (245 x 53 x 160 mm)	
Weight	Approx. 29 lb 12 oz (13.5 kg)	Approx. 26 lb 7 oz (12 kg)	Approx. 25 lb 6 oz (11.5kg)	3.1lb (1.4 kg)	1.8lb (0.8 kg)
Power Requirements	AC 100V to 127V/ 200V to 240V (50/60Hz)				AC 100V to 127V/ 200V to 240V (50/60Hz)
Power Consumption	Approx. 265 W (typical) (Max. 350 W)	Approx. 185 W (typical) (Max. 350 W)	Approx. 175 W (typical) (Max. 350 W)	Approx. 36W	
Operating Temperature	41 to 104°F (5 to 40°C)				
Operation Humidity	20 to 80%				

\*1: More than one connector cannot be used at a time. \*2: Port #1 is for network connection. Port #2 is for connecting clients. Port #3 and #4 are for iSCSI storage.  
\*3: VISCA and Pelco-D are supported. \*4: NSR-1000 Series supports 3rd party cameras. NSR-S10 supports select Sony cameras. Please refer to the release notes at [sony.com/security](http://sony.com/security).

The NSR-1000 Series comply with UL60950-1.

## NSR-1000 Series Optional Accessories



**RM-NS1000**  
System Controller



**NSRE-S200/4T**  
HDD Expansion Unit  
(4TB)



**NSBK-A16**  
Analog Encoding Kit  
(MPEG-4)



**NSBK-A16H**  
Analog Encoding Kit  
(H.264)



**NSR-RM1**  
Rack Mount Kit

# 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
<b>Specifications</b>						
Video Compression	H.264/MPEG-4/JPEG					
Audio Compression	G.711/G.726					
Number of Clients to be Connected (Recommendation) *1	10					3
Number of Cameras to be Supported	1 *2	4 *2	9 *2	16 *2	32 *2	9
Number of Audio to be Supported	1	4	9	16	32	9 - Sony cameras only
Open Platform (3rd Party Camera Support) *3	Yes					No
Central Server Mode (Master/Slave) *4	Yes					No
Video Motion Detection (Camera)	Yes					Yes
Video Motion Detection (Recorder)	Yes					No
Video Motion Filter (Motion Detection Using Metadata)	Yes					No
Object Search *5	Yes					No
Alarm Output	Yes					No
Manual Action	Yes					No
<b>System Requirements</b>						
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 technically possible to connect more clients to a server, but such increase may deteriorate the overall performance.

\*2: It is possible to connect more than 32 cameras to a server by installing a corresponding number of licenses on the server, but such addition is not recommended to assure high performance. Please also note that display and recording performance basically depends on the server.

\*3 RealShot Manager Lite also does not support other devices from other manufacturers. If you want to use audio devices from other manufacturers, for example, use RealShot Manager Advanced.

\*4 This function is used when you want to perform common user management operations with multiple servers (NSR-1000 series and RealShot Manager Advanced (Server)), or when you want to connect from RealShot Manager Advanced (Client).

\*5 This search function uses the Video Motion Detection (Recorder) and Video Motion Filter functions to search images that have already been recorded