

SONY

SNC-VB770

Fixed Type 4K Camera

Ultra High-Sensitivity 4K Network Camera
with 35mm Full-Frame Exmor® CMOS Sensor



4K

Product Highlights

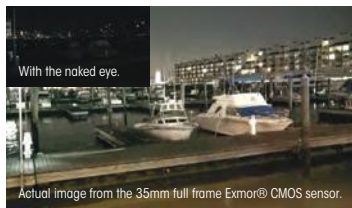
- 12 Megapixel 35mm Full Frame Exmor CMOS Sensor
- Ultra-high sensitivity: minimum illumination 0.004 lx @ 30 IRE, or 0.006 lx @ 50 IRE
- Sony's unique image processing engine achieves extremely high sensitivity and low noise at the same time
- E-mount lenses to optimize 4K high resolution and performance (sold separately)
- 4K or Full HD 30 fps smooth color video in near pitch-black conditions

- 4K (3840 x 2160) H.264 with dynamic or static regions of interest coding for bandwidth and storage efficiencies
- Intelligent Cropping and tracking, using built-in motion detection for up to 2 FHD or 4 VGA native resolution crops
- SD card slot
- 12MP evidence shot for greater detail analysis
- View-DR® Technology for wide dynamic range of 100 dB
- PoE, AC 24V or DC 12 V operation

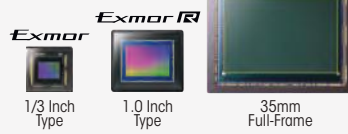
NEW FEATURES

Extraordinary sensitivity with 4K

The SNC-VB770 4K network camera achieves a minimum illumination of 0.004 lx by using its highly sensitive 35mm full-frame Exmor® sensor, optimized E-mount lenses (sold separately) to maximize the performance of the sensor, and its unique signal processing engine. This enables the camera to capture crisp, clear 4K/30 fps color video with much less noise in extreme low-light conditions.



Relative sensor size comparison



Automatic selection of picture settings



Intelligent Scene Capture to automatically adjust and adapt the picture's brightness and color, depending on time and day, weather and lighting conditions to achieve the best picture quality. To further support all of the varying conditions and picture preferences, manual setting modes are available, or predefined picture settings can be scheduled or recalled to record at specific times, or based on external triggers, or lighting conditions.

Bandwidth and storage efficiencies

When resolution goes up, bandwidth consumption also increases. This makes deploying 4K cameras more expensive and more challenging than deploying HD cameras. Sony's camera features address those concerns:

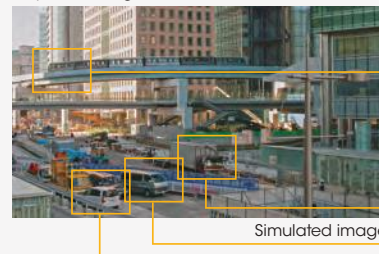
- Intelligent Coding to keep specific areas of interest in the scene clear and crisp, while lowering the image quality of the other parts using a high compression ratio, allowing the overall bitrate for the entire image to be reduced by up to 50% (4K/30fps, areas of interest 30%), therefore helping to minimize storage costs.
- Intelligent Cropping to simultaneously observe up to four specific areas of "regions" of interest in any captured images with a 4K-native resolution, while viewing the entire image in Full HD resolution. This allows the network bandwidth to be reduced by up to 50%, thus helping to minimize storage costs.

Intelligent Coding



Intelligent Cropping

Captured Image

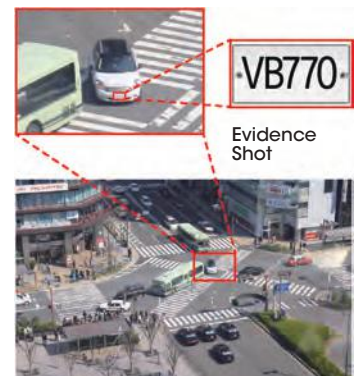


Overview FHD



Close-up 4K-native resolution, VGA x4

- Multi Tracking to automatically track objects specified by the Intelligent Coding or Intelligent Cropping function – a compelling alternative to conventional monitoring that normally requires multiple PTZ cameras to track several objects simultaneously.
- Evidence Shot for high-quality recording with 12 megapixel resolution to help examine the scene and produce evidence – ideal for collection and analysis of high-quality evidence in situations like city surveillance, parking lots and garages.



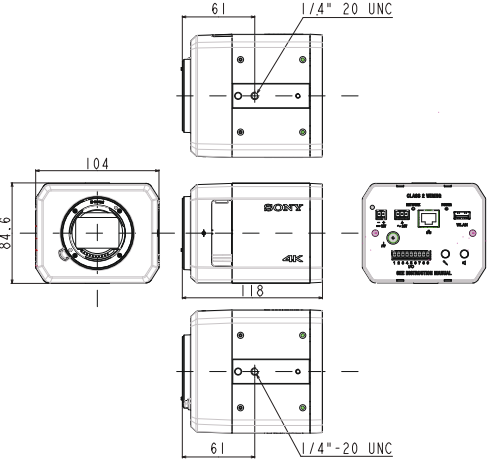
12 Megapixels (Simulated images)

SPECIFICATIONS

	SNC-VB770
Camera	
Image Sensor	35mm full frame Exmor® CMOS sensor
Number of Effective Pixels	Approx. 12.2 Megapixels
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	0.006 lx
	(ISO409,600 1/30s F1.4)
Minimum Illumination (30 IRE)	0.004 lx
	(ISO409,600 1/30s F1.4)
Dynamic Range	Equivalent to 100 dB with View-DR Technology
Gain	Auto/Manual (0 dB to +72 dB)
Shutter Speed	1/1 s to 1/10,000 s
Exposure Control	Exposure compensation, AGC, shutter speed, Iris
White Balance	ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual, Indoor, Outdoor
Lens	E-mount FE lens
Zoom Ratio	Clear image zoom 2.0x
	Digital zoom 2.0x
Easy Focus for Setup	Yes
Camera Features	
Day/Night	No
Wide-D	View-DR® Technology
Tone Correction	Visibility Enhancer
Defog Image Processing	Yes
Highlight Compensation	Yes
Flicker Reduction	Yes
Distortion Correction	Yes
Noise Reduction	XDNR® Technology
Image Stabilizer	No
Intelligent Scene Capture	Yes
Privacy Masking (number)	24
Privacy Masking (shape)	Quadrangle formed by any four corner points
Privacy Masking (color/effect)	Opaque 14 colors (Black, White, Red, Green, Blue, Cyan, Yellow, Magenta, Gray (6 scales), Mosaic
Edge Storage	Yes
Hours Meter	Yes
Superimpose Number	4 independent positions for characters (Codec, Date & Time, Event, Text [Max. 64 characters]),
	1 independent position for a logo mark
Superimpose Language	English
Menu Language	English, Japanese, Chinese (simplified), Chinese (traditional), French, Spanish, German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai, Turkish, Polish
Video	
Resolution	4240 x 2832, 3840 x 2160, 2880 x 2160, 1920 x 1080, 1440 x 1080, 1440 x 960, 1280 x 720, 960 x 720, 640 x 480, 640 x 360, 320 x 240, 320 x 180
Resolution via HDMI	3840 x 2160, 720 x 480, 720 x 576
Compression Format	H.264 (High/Main Profile), JPEG
	H.264 (B-picture) is supported for 3840 x 2160 and 2880 x 2160 resolution.
Maximum Frame Rate	H264: 30 fps (3840 x 2160) JPEG: 2.5 fps (4240 x 2832)
Bitrate Control Mode	CBR/VBR (selectable)
Range of Bit Rate Setting	64 Kbps to 32 Mbps
Intelligent Cropping (Mode)	Dynamic/Static
Intelligent Cropping (Number)	2 (1920 x 1080), 4 (640 x 480)
Intelligent Coding (Mode)	Auto/Manual
Intelligent Coding (Number)	Up to 8 (up to 4 for Auto mode)
Evidence Shot	12 Megapixels (4240 x 2832)
Multi streaming Capability	Yes (5)
Number of Clients	20
Intelligent Video/Audio Analytics	
Analytics Architecture	DEPA™ Advanced
Intelligent Motion Detection	Yes
Face Detection	Yes
Tamper Alarm	Yes
Scene Analytics	Intrusion, Passing, Existing, Disappearance,
	Capacity, Left object, Removed object
Multi Tracking	Up to 4

	SNC-VB770
Audio	
Compression Format	G.711 (bit rate: 64 kbps, sampling frequency: 8 kHz)
	G.726 (bit rate: 40, 32, 24, 16 kbps, sampling frequency: 8 kHz)
	AAC-LC (bit rate: 64 kbps, sampling frequency: 16 kHz)
	AAC-LC (bit rate: 128 kbps, sampling frequency: 48 kHz)
System Requirements	
Operating System	Windows® 7 (32/64 bit) Ultimate, Professional Edition
	Windows 8.1 Pro (32/64 bit)
	Windows 10 Pro (32/64 bit)
Processor	Intel Core i7 3.4GHz or higher* *For 4K (3840 x 2160) output at 30 fps, a GPU capable of 3840 x 2160 resolution and decoding 4K/H.264 is required.
Memory	8 GB or more
Web Browser	Microsoft Internet Explorer® Ver. 11.0
	Firefox Ver. 44.0
	Google Chrome® Ver. 48.0
SNC toolbox	Yes
SNC toolbox mobile	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, ICMPv6, IGMP*, MLD*, HTTP, DHCP, DHCPv6, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP (client), HTTPS, FTP (client), SNMP (v1, v2c, v3), TLS (v1.0)
	*SSM (Source Specific Multicast) is supported.
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF™ Conformance	Profile S
Wireless Network	Yes for setup (IEEE802.11b/g/n with optional IFU-WLM3)
Authentication	IEEE802.1X
Interface	
Analog Video Output	No
Digital Video Output	HDMI (type D) x1
Microphone Input	Mini jack (monaural, 2.2 kΩ, plug-in-power)
Line Input	Mini jack (monaural)
Line Output	No* * supported by future version-up
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x2, make contact, break contact
Alarm Output	x2, Max. AC 24 V/DC 12 V, 0.4 A
	(solid-state relay outputs electrically isolated from the camera)
Wireless LAN Terminal	Yes
Card Slots	SD x1
Confirmed SD Card Type	SDHC/SDXC (Max. 128 GB)
SD OFF Switch	Yes
General	
Power Requirements	IEEE 802.3af compliant (PoE) Class 3, DC 12 V ± 25 %, AC 24 V ± 20 %, 50/60 Hz
Power Consumption	Max. 16W (including E-mount lens)
Operating Temperature	-5 °C to +50 °C (23°F to 122°F)
Cold Start Temperature	0 °C to +50 °C (32°F to 122°F)
Storage Temperature	-20°C to +60°C (-4°F to 140°F)
Operating Humidity	20 % to 80 % (no condensation)
Storage Humidity	20 % to 80 % (no condensation)
Dimensions (W x H x D)	104 mm x 84.6 mm x 118 mm (4 1/8 inches x 3 3/8 inches x 4 3/4 inches (without lens))
Weight	Approx. 720g (Approx. 1 lb 9.4 Oz (without lens))
Supplied Accessories	Wire rope (1)
	Screw (M4 x 8) (1)
	9pin connector for I/O (1)
	2pin connector for DC12V (1)
	3pin connector for AC24V (1)
	Operating Instructions - Download site Information (1)
	Safety Regulations (1)
Optional Accessories	Warranty booklet (1-year) (1)
	Body cap (1)
	IFU-WLM3 (USB wireless LAN module)
	E-mount FE lens

DIMENSIONS



UNI-E2DG8 4K SECURITY CAMERA ENCLOSURE

- The UNI-E2DG8 is an IP66 rated, outdoor, vandal-resistant, fixed camera housing with a heater and blower
- Compatible with Sony's SNC-VB770 camera
- The blower runs continuously to provide airflow to keep the camera cool and the window virtually fog-free
- The heater automatically activates at 4.4°C (40°F) and deactivates at 15.5°C (60°F) with a thermal cut-off switch assuring safe heating operation
- The enclosure also includes a pole-mount adaptor as a standard accessory
- Compatible for a maximum combined camera and lens length of 317.5mm (12.5 inches)

