

## Fixed 1080p/60 fps Full HD Camera with Half-inch Exmor<sup>®</sup> CMOS Sensor Powered by IPELA ENGINE<sup>™</sup> EX Technology

- Maximum resolution of 1920 x 1080 pixels with the half-inch Exmor CMOS sensor
- CS mount, 5mm C mount adapter included
- Minimum illumination of 0.04 lx in Color mode and 0.03 lx in B/W mode at 50 IRE and 30 frames per second (fps)
- High frame rate of 60 fps
- Wide Dynamic Range equivalent to 90 dB achieved with View-DR<sup>®</sup> technology
- RS-485 interface for porting control to external device using camera's data transparency feature
- Operating temperature up to 140°F (60°C)



The camera does not include a lens.

### KEY FEATURES

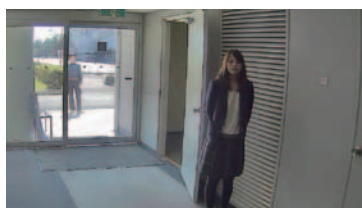
- IPELA ENGINE EX signal processing system developed based on Sony's unique signal processing and video analytics technologies to provide unique features such as a high frame rate, View-DR, XDNR<sup>®</sup>, and DEPA<sup>™</sup> Advanced technologies



- High frame rate of 60 fps to provide smoother and less blurry moving pictures
- View-DR - Sony's innovative wide dynamic range technology - to capture objects clearly under very harsh lighting conditions



OFF



ON

Actual Images

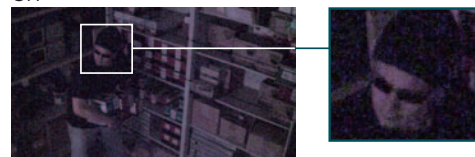
- Visibility Enhancer (VE) to help optimize the brightness and color reproduction of an image dynamically on a pixel-by-pixel basis while continuously adapting to the scene within the given dynamic range
- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules
- Picture mode to facilitate camera parameter settings to optimize picture quality



- XDNR (eXcellent Dynamic Noise Reduction) technology for clear images with virtually no motion blur under low illumination



OFF



ON

Actual Images

- True D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- VBR (variable bitrate) or CBR (constant bitrate) compression mode selectable to correspond with various network conditions
- Edge Storage function to record video and audio data with an SD/SDHC card attached to the camera
- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images
- RS-485 interface to transparently control camera peripherals such as powered zoom lenses and camera pedestals with pan and tilt functionalities; the camera converts control commands sent over the network to serial data and transfers this to devices via an RS-485 interface for easy and convenient operations
- Easy focus function for easy installation
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- Powered by either IEEE 802.3af-compliant (PoE system), AC 24 V  $\pm 20\%$ , or DC 12 V  $\pm 10\%$  for easy installation
- Smartphone viewer to display an image of the camera on the smartphone's screen and control the camera's pan, tilt, and zoom functions by simple touch-panel manipulation
- ONVIF<sup>™</sup> (Open Network Video Interface Forum) Profile S-conformance firmware that ensures greater interoperability and more flexibility in building multi-vendor systems



# SPECIFICATIONS

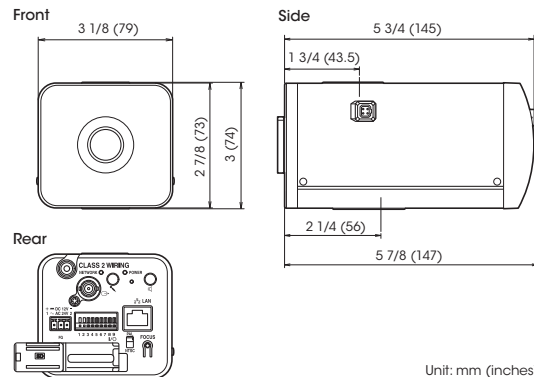
SNC-VB635	
<b>Camera</b>	
Image Sensor	1/1.9-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.38 Megapixels
Signal System	NTSC
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.04 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0.03 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.02 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0.01 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
Dynamic Range	Equivalent to 90 dB with View-DR technology
S/N Ratio (Gain 0 dB)	More than 50 dB
Gain	Auto
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
Lens	C-mount varifocal lens (option)
Easy Focus for Setup	Yes
<b>Camera Features</b>	
Day/Night	True D/N
Wide-D	View-DR
Tone Correction	Visibility Enhancer (VE)
Noise Reduction	XDNR
Image Stabilizer	Yes
Picture Mode	Yes
Privacy Masking (number)	20
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
Superimpose Number	3 independent positions for characters (Codec, Date & Time, Event, Text (max. 64 characters)), 1 independent position for logo marks
Superimpose Language	English
Menu Language	English, Japanese, Chinese (simplified), Chinese (traditional), French, Spanish, German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai
Smartphone viewer	Yes
<b>Video</b>	
Resolution	1920 x 1080, 1280 x 720, 1024 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 360, 352 x 288, 320 x 184 (H.264, JPEG)
Compression Format	H.264 (High/Main/Baseline Profile), JPEG
Maximum Frame Rate	H.264: 60 fps (1920 x 1080) JPEG: 60 fps (1280 x 720)
Bitrate Compression Mode	CBR/VBR (selectable)
Range of Bitrate Setting	64 Kbps to 32 Mbps
Solid PTZ	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi Streaming Capability	Triple streaming
Number of Clients	20
<b>Intelligent Video Analytics</b>	
Analytics Architecture	DEPA Advanced
Intelligent Motion Detection	Yes
Face Detection	Yes
Tamper Alarm	Yes
Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
<b>Audio</b>	
Compression Format	G.711/G.726/AAC (16 kHz, 48 kHz)
<b>System Requirements</b>	
Operating System	Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows 7 (32/64 bit) Ultimate, Professional Edition Windows 8 Pro (32/64 bit)
Processor	Intel Core i7 2.8 GHz or higher
Memory	2 GB or more
Web Browser	Microsoft Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver. 10.0 Firefox Ver. 19.02 (plug-in free viewer only) Safari Ver. 5.1 (plug-in free viewer only) Google Chrome Ver. 25.0 (plug-in free viewer only)
<b>Network</b>	
Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE 802.1X

SNC-VB635	
<b>Interface</b>	
Analog Video Output	BNC x1
Analog Monitor Output for Setup	Phono jack x1
Line Input	Mini jack (monaural)
Line Output	Mini jack (monaural)
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	Yes (x2)
Alarm Output	Yes (x2)
Serial Interface	RS485
Card Slots	SD Card x1
Confirmed SD Card Type	4/8/16/32 GB SDHC (no support for SDXC)
<b>General</b>	
Power Requirements	IEEE802.3af compliant (PoE system) 24 V AC ±20%, 50 Hz/60 Hz 12 V DC ±10%
Power Consumption	Max. 6 W
Operating Temperature	14°F to 140°F (-10°C to +60°C)
Cold Start Temperature	Higher than 32°F (0°C)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
Operating Humidity	20% to 80%
Storage Humidity	20% to 95%
Dimensions (W x H x D)	3 1/8 inches x 3 inches x 5 3/4 inches (79 mm x 74 mm x 145 mm)
Weight	1 lb 4 oz (570 g)
External Material	Top cover: SECC-CF Bottom cover: SECC-CF Front panel: ADC12 Rear panel: PC
External Color	Top cover: Munsell 3.6GY 8.4/0.3 Bottom cover: Munsell 3.6GY 8.4/0.3 Front panel: Munsell 3.6PB 2.2/0.4 Rear panel: Munsell 4.4BG 8.4/0.2
Fire Retardant	UL2044
Safety Regulations	JATE Technical Standard (LAN) UL2044, IEC60950-1 (CB) VCCI (Class A), FCC (Class A), IC (Class A) Emission: EN55022 (Class A) + EN50130-4 Immunity: EN55022 (Class A) + EN55024 Emission: AS/NZS CISPR22 (Class A) KCC
Supplied Accessories	EMC-TR CD-ROM (supplied programs) (1) Wire rope (1) Screw M4 x 8 (1) Installation Manual (1 set) Safety Regulations (1 set) C Mount Adaptor (1 set) DC 12 V/AC 24 V connector (1)

\*SSM (Source Specific Multicast) is supported.

Optional Mounts and Accessories	
<b>Model</b>	
SNC-UNIHB/1	Outdoor Enclosure with Wall Mount
SNC-UNI	Indoor Wall Mount with Enclosure
UNI-IF7C3 (clear); UNI-IF7I3 (tinted)	Indoor Flush/Recessed Plenum Enclosure

# DIMENSIONS



Unit: mm (inches)

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