

SONY

SNC-VB632D

Network Fixed Full HD Camera – V Series

Outdoor IP66 Dual-light Bullet 1080p/60 fps Camera Powered by IPELA ENGINE EX™

- Maximum resolution of 1920 x 1080 pixels with the Exmor™ CMOS sensor
- Dynamic range equivalent to 90 dB achieved with View-DR technology
- Dual Light system - Combination of white light and IR illuminators for effective surveillance and deterrence/safety
- Advanced IR technology for high-quality IR images
- IP66-rated water-resistant and dust-tight feature
- High frame rate of 60 frames per second (fps)
- Edge Storage for onboard recording with SD/SDHC cards
- Wide operating temperature ranging from -40°C to +60°C (-40°F to +140°F)*

* See Operating Temperature specs for details



IPELA

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 View-DR, XDNR, and DEPA™ Advanced technologies
- View-DR – 90 dB wide dynamic range, using Sony's innovative wide dynamic range technology – to capture objects clearly and adaptively even under very harsh, severe backlight or highlight conditions

- Advanced IR technology to provide high-quality IR images without overexposure, delivering clear B/W images of close and distant objects



Conventional IR technology
(cannot identify close objects due to overexposure)



Advanced IR technology
(can identify close and distant objects)

Actual images



OFF



ON

Actual images

- Visibility Enhancer (VE) to 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
- XDNR (eXcellent Dynamic Noise Reduction) technology for clear images without introducing motion blur under low illumination
- Built-in white-light illuminators to provide clear color images in the dark even under 0 lx or intimidate intruders by flashing the light
- Built-in IR (infrared) illuminators to assist capturing objects in the dark even under 0 lx, up to 30 m (98 feet, tentative) (50 IRE) away
- High frame rate of 60 fps to provide smoother and less blurry moving pictures
- 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
- IP66-rated water-resistant and dust-tight feature for outdoor surveillance and indoor where water ingress may pose an issue

- True D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- Picture mode settings to allow for easier camera parameter changes based on scene requirements
- Supports VBR (variable bit-rate) for best image quality; VBR with cap to reduce storage requirement or CBR (constant bit-rate) for balanced network load and image quality
- Unique camera arm design to easily install the camera and flexibly adjust the viewing angle
- Easy Zoom/Easy Focus for easy installation
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- Powered by either IEEE 802.3af/IEEE 802.3at-compliant (PoE/PoE+ system), AC 24 V ±20% or DC 12 V ±10% for easy installation
- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules, including intelligent motion detection, crossing line filter and object detection capabilities
- 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 (Open Network Video Interface Forum) Profile S-conformance firmware that ensures greater interoperability and more flexibility in building multi-vendor systems

IPELA
ENGINE EX

View-DR

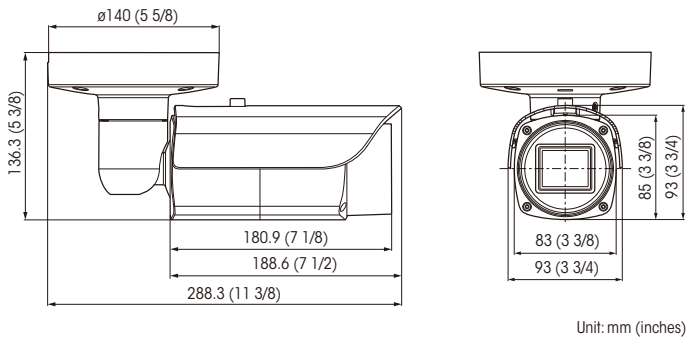
DEPA
Advanced

ONVIFS

SPECIFICATIONS

	SNC-VB632D
Camera	
Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.14 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.1 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR illuminator ON)
Minimum Illumination (30 IRE)	Color: 0.06 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR illuminator ON)
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
White Balance	ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual, Indoor, Outdoor
lens	Built-in varifocal lens
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x
Zoom Ratio	Digital zoom 4x
Zoom Ratio	Total zoom 12x
Easy Focus for Setup	Yes
Horizontal Viewing Angle	105.3° to 35.6°
Vertical Viewing Angle	56.9° to 20.1°
Focal Length	f = 3.0 mm to 9.0 mm
F-Number	F1.2 (Wide) to F2.1 (Tele)
Minimum Object Distance	300 mm
IR Illuminator	Yes (Wave length: 850 nm [typical], IR LED: 20 pieces)
IR Working Distance	30 m (50 IRE)
White-light LED Illuminator	Yes (White LED: 4 pieces)
LED Working Distance	5 m (50 IRE)
Camera Features	
Day/Night	True D/N
Day/Night linked with Easy Focus	Yes
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
Vandal Resistant	IK8
Ingress Protection	IP66
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, Turkish, Polish
Smartphone viewer	Yes
Video	
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 Bit Rate Setting	64 Kbps to 32 Mbps
Solid PTZ	Yes
e-Varifocal	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi streaming Capability	Triple streaming
Number of Clients	20
Intelligent Video/Audio Analytics	
Analytics Architecture	DEPA Advanced
Intelligent Motion Detection	Yes
Face Detection	Yes
Tamper Alarm	Yes
Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
Audio	
Compression Format	G.711/G.726/AAC (16 kHz, 48 kHz)

DIMENSIONS



System Requirements	
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), Windows 8.1 Pro (32/64 bit)
Processor	Intel Corei7 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, Ver. 11.0 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)
Network	
Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, SMTP, IPv6, HTTPS, SNMP (v1, v2c, v3), FTP (client only), SSL
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE 802.1X
Interface	
Analog Video Output	BNC x1
Analog Monitor Output for Setup	Phono jack x1
Microphone Input	Mini jack (monaural)
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)
Card Slots	SD Card x1
Confirmed SD Card Type	Max. 64 GB
General	
Power Requirements	DC 12 V $\pm$ 10% AC 24 V $\pm$ 20%, 50 Hz/60 Hz IEEE802.3af compliant (PoE/PoE+ system)
Power Consumption	Max. 21 W (AC 24 V/DC 12 V) Max. 17 W (IEEE802.3af (PoE+)) Max. 12.5 W (IEEE802.3af (PoE))
Operating Temperature	-40°C to +60°C (-40°F to +140°F) (LED OFF, PoE+, AC 24 V, DC 12 V) -40°C to +50°C (-40°F to +122°F) (LED ON, PoE+, AC 24 V, DC 12 V) -10°C to +60°C (14°F to +140°F) (LED OFF, PoE) -10°C to +50°C (14°F to 122°F) (LED ON, PoE)
Cold Start Temperature	-30°C to +60°C (-22°F to +140°F) (LED OFF, PoE+, AC 24 V, DC 12 V) -30°C to +50°C (-22°F to +122°F) (LED ON, PoE+, AC 24 V, DC 12 V) 0°C to +60°C (32°F to +140°F) (LED OFF, PoE) 0°C to +50°C (32°F to 122°F) (LED ON, PoE)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
Operating Humidity	20% to 90% (no condensation)
Storage Humidity	20% to 95% (no condensation)
Built-in Heater	Yes
Dimensions	93 mm x93 mm x 180.9 mm (3 3/4 inches x 3 3/4 inches x 7 1/8 inches) $\varnothing$ 140 mm x 313.4 mm ($\varnothing$ 5 5/8 inches x 12 3/8 inches) (including arm)
Mass	Approx. 1,600 g (3 lb 8 oz)
External Material	Front Cover: PC Rear Case: ADC12 Arm/Stand: ADC12 Lens Cover: PC Sunshield: PC
External Color	White 4.48G 8.4/0.2 Black 3.9PB 0.3/1.0
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 EMC-TR
Supplied Accessories	CD-ROM (supplied programs) (1) Template (1) Wrench (1) Waterproof Tape (1) Installation Manual (1 set) Safety Regulations (1 set)

*SSM (Source Specific Multicast) is supported.

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