

# 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



OFF ON Actual images



Conventional IR technology (cannot identify close objects due to overexposure) Advanced IR technology (can identify close and distant objects) 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

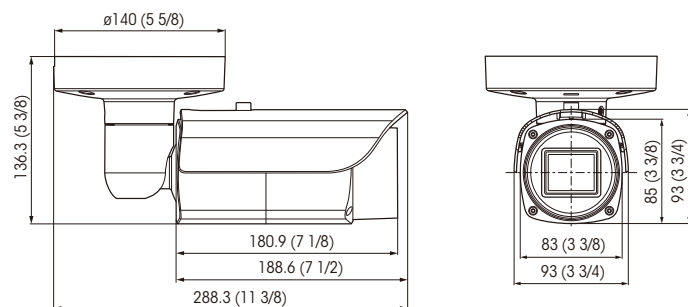
# SPECIFICATIONS

| SNC-VB632D                               |   |
|--|---|
| <b>Camera</b>                            |   |
| 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)<br>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)<br>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)  |
| <b>Camera Features</b>                   |   |
| 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   |
| <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)<br>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  |
| <b>Intelligent Video/Audio 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<br>Windows Vista (32 bit) Ultimate, Business Edition<br>Windows 7 (32/64 bit) Ultimate, Professional Edition<br>Windows 8 Pro (32/64 bit), Windows 8.1 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, Ver. 11.0<br>Firefox Ver. 19.02 (plug-in free viewer only)<br>Safari Ver. 5.1 (plug-in free viewer only)<br>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, 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  |
| <b>Interface</b>                |  |
| 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   |
| <b>General</b>                  |  |
| Power Requirements              | DC 12 V ±10%<br>AC 24 V ±20%, 50 Hz/60 Hz<br>IEEE802.3af compliant (PoE/PoE+ system)   |
| Power Consumption               | Max. 21 W (AC 24 V/DC 12 V )<br>Max. 1.7 W (IEEE802.3af (PoE+))<br>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)<br>-40°C to +50°C (-40°F to +122°F) (LED ON, PoE+, AC 24 V, DC 12 V)<br>-10°C to +60°C (14°F to +140°F) (LED OFF, PoE)<br>-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)<br>-30°C to +50°C (-22°F to +122°F) (LED ON, PoE+, AC 24 V, DC 12 V)<br>0°C to +60°C (32°F to +140°F) (LED OFF, PoE)<br>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 x 93 mm x 180.9 mm (3 3/4 inches x 3 3/4 inches x 7 1/8 inches)<br>ø140 mm x 313.4 mm (ø5 5/8 inches x 12 3/8 inches) (including arm)  |
| Mass                            | Approx. 1.600 g (3 lb 8 oz)  |
| External Material               | Front Cover: PC<br>Rear Case: ADC12<br>Arm/Stand: ADC12<br>Lens Cover: PC<br>Sunshield: PC   |
| External Color                  | White<br>4.48G 8.4/0.2<br>Black<br>3.9PB 0.3/1.0   |
| Fire Retardant                  | UL2044   |
| Safety Regulations              | JATE Technical Standard (LAN)<br>UL2044, IEC60950-1 (CB)<br>VCCI (Class A), FCC (Class A), IC (Class A)<br>Emission: EN55022 (Class A) + EN50130-4<br>Immunity: EN55022 (Class A) + EN55024<br>Emission: AS/NZS CISPR22 (Class A)<br>KCC<br>EMC-TR |
| Supplied Accessories            | CD-ROM (supplied programs) (1)<br>Template (1)<br>Wrench (1)<br>Waterproof Tape (1)<br>Installation Manual (1 set)<br>Safety Regulations (1 set)   |

\*SSM (Source Specific Multicast) is supported.

# DIMENSIONS



Unit: mm (inches)

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