

## SNC-VB632D

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



### Overview

**Weather-resistant 'bullet type' fixed camera with IPELA ENGINE EX™ processing for superb Full HD quality and high sensitivity, image stabilisation and dual illumination system for night operation** The SNC-VB632D is a weather-resistant, easy to install 'bullet-type' fixed network camera. It's ideal for a wide range of round-the-clock security and surveillance tasks, from city centres, transport systems and retail centres to schools and colleges.

Sony's acclaimed Exmor CMOS sensor captures smooth, crisp Full HD pictures at 60 frames per second, with industry-leading sensitivity for clear, low-noise images in challenging low light conditions. The award-winning IPELA ENGINE EX platform uses unique signal processing to boost image quality in a wide range of operating environments, while state-of-the-art video analytics technologies offer more efficient security operations based on user-defined rules.

View-DR expands dynamic range to assist with identifying human faces and other objects in high-contrast and strongly backlit scenes, like sun-drenched office buildings or car park entrances. Visibility Enhancer (VE) dynamically fine-tunes image brightness and colours on a pixel-by-pixel basis, while XDNR (eXcellent Dynamic Noise Reduction) dramatically reduces noise, minimising motion blur in low light conditions. DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules.

The camera can see in conditions of complete darkness. Built-in IR (infrared) illumination is complemented by an additional white LED illuminator that can be triggered by movement, capturing clear colour footage and providing a visual warning to intruders. Advanced IR technology ensures that near and far-away objects are all evenly exposed.

The image stabiliser keeps images stable for crisper footage, even when the camera is subject to vibration on a mounting pole or bracket.

Designed for round-the-clock outdoor use, the unitised camera can operate in extreme temperatures from -40°C

to +60°C (IR and white-light illuminators: OFF) and is IP66 rated for resistance to water and dust. The unique mounting arm simplifies installation with flexible three-axis adjustment of viewing angle (when installed on the ceiling). For extra convenience, a built-in sunshade helps cut glare for improved picture quality and contrast on brightly-lit days.

Please be aware that features and specifications are subject to change without notice and can differ from country to country.

## Features

- **See every detail with Full HD quality and high frame rate**

The high-resolution 1/2.9-type Exmor CMOS sensor captures smooth, crisp Full HD video images (up to 1920 x 1080) at 60 frames per second for a clear view of split-second action. Class-leading sensitivity assures improved picture quality in low light conditions like dimly-lit car parks.

- **Advanced imaging performance with IPELA ENGINE EX**

Sony's powerful IPELA ENGINE EX processing platform combines several technologies that optimise Full HD picture quality. View-DR combines images taken at different shutter speeds, delivering a wide dynamic range up to 90 dB for excellent performance in high-contrast, strongly backlit environments. Visibility Enhancer (VE) dynamically optimises brightness and colour tone on a pixel-by-pixel basis, while XDNR (eXcellent Dynamic Noise Reduction) reduces noise, minimising motion blur under low illumination.

- **Don't miss that crucial moment with Intelligent Motion Detection and Face Detection**

Powerful DEPA Advanced video analytics enhances Intelligent Motion Detection and rule-based alarm triggers, providing alerts with object filters like 'passing' and 'intrusion' to reduce false alarms. Face Detection allows rapid indexing of recordings to find events where a human face is visible in the scene.

- **See in the dark with dual light system**

The built-in infrared (IR) illuminator allows crisp monochrome images to be seen in total darkness up to 30m from the camera. It's complemented by an additional white LED illuminator that can be triggered by movement, capturing colour images while providing a powerful visual deterrent to intruders.

- **Advanced IR**

Advanced IR accurately reproduces objects without overexposure – even close to the camera, where details are often bleached out and impossible to see clearly with conventional IR cameras.

- **Steadier, more stable video footage**

The built-in image stabiliser minimises the effects of camera shake – for example when the camera's subject to wind or traffic vibration. With clearer, more stable video images it's easy to see what's happening in any scene.

- **Better pictures, day or night**

True D/N (Day/Night) function automatically switches the camera to Day or Night mode, depending on ambient light levels.

- **Recording quality to suit your network**

Select CBR (constant bitrate), VBR (variable bitrate) or VBR-with-cap compression modes for optimised recording quality depending on IP network conditions.

- **Edge storage onto memory card**

Video can be automatically recorded onto an optional SD memory card up to 64 GB in the camera, in response to an alarm trigger or if a network connection is temporarily unavailable.

- **Adjustable sunshade**

An integrated sunshade protects the lens from direct sun glare, making the camera particularly suitable for outdoor use in direct sunlight. It also helps guard the lens cover from rain drops and splashes that can degrade picture quality.

- **Built to effortlessly handle tough conditions**

The camera can operate reliably over a wide -40 to +60°C (IR and white-light illuminators: OFF) temperature range, from scorching sunshine to freezing conditions. The camera's vandal-resistant design meets the IK08 standard (protection against mechanical impact). IP66-rated waterproof and dust-tight, the camera is ideal for outdoor surveillance.

- **Easy installation and set-up**

The unitised camera can be installed easily, with no need for an additional adaptor box. Setup is simplified with quick focus/zoom adjustment and flexible three-axis adjustment of viewing angle (when installed on the ceiling)

- **Reduce cabling costs with Power Over Ethernet (PoE)**

Power over Ethernet (PoE) allows the camera be powered using the same Ethernet cable that's for data transfer, reducing installation complexity and costs.

- **ONVIF (Open Network Video Interface Forum) compliance**

Support for ONVIF Profile-S simplifies integration with a wide range of video management solutions, providing video streaming and camera control. ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices, including automatic device discovery and video streaming.

## Technical Specifications

Camera	
● Image Sensor	1/2.9-type progressive scan
● 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, Iris
● White Balance	ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual
● Lens	Built-in varifocal lens
● Easy Zoom	Yes
● Zoom Ratio	Optical zoom 3x Digital zoom 4x Total zoom 12x
● Powered Focus	No
● Auto Focus	No
● 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

● e-Flip	No
● Wide-D	View-DR
● Tone Correction	Visibility Enhancer (VE)
● Defog Image Processing	No
● 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
● Image Memory	No
● Memory Size for Image Memory	No
● Memory Size for Pre/Post Buffer	No
● Compatibility with Cloud Service	No
● Voice Alert	No
● 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
● Image Cropping	No
● Solid PTZ	Yes
● Adaptive Rate Control	H.264

● Bandwidth Control	JPEG
● Multi streaming Capability	Triple streaming
● Number of Clients	20
● Letter Box	No

Intelligent Video/Audio Analytics	
● Analytics Architecture	DEPA Advanced
● Intelligent Motion Detection	Yes
● Face Detection	Yes
● Tamper Alarm	Yes
● Advanced Audio Detection	No
● Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
● Auto Tracking	No

Audio	
● Compression Format	G.711/G.726/AAC (16 kHz, 48 kHz)

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  *SSM (Source Specific Multicast) is supported.
● Number of IP Address/Mac ADDRESS	1
● QoS	DSCP
● Multicast Streaming Support	Yes
● ONVIF Conformance	Profile S
● Wireless Network	No
● Wi-Fi Certified	No
● Wi-Fi Protected Setup (WPS)	No
● Authentication	IEEE 802.1X

Interface	

● Analog Video Input	No
● Analog Video Output	BNC x1
● Analog Monitor Output for Setup	Phono jack x1
● Analog Video Output/SLOC Port	No
● SLOC Port	No
● Composite Buffered Through Out	No
● 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)
● Serial Interface	No
● Card Slots	SD Card x1
● Confirmed SD Card Type	Max 64 GB
● USB Slots	No

General	
● Power Requirements	12 V DC $\pm$ 10% 24 V AC $\pm$ 20%, 50 Hz/60 Hz IEEE802.3at compliant (PoE/PoE+ system)
● Power Consumption	Max. 21 W (AC 24 V/DC 12V ) Max. 17 W (IEEE802.3at (PoE+)) Max. 12.5 W (IEEE802.3af (PoE))
● Operating Temperature	-40°C to +60°C (LED OFF, PoE+, AC 24 V, DC 12 V) -40°C to +50°C (LED ON, PoE+, AC 24 V, DC 12 V) -10°C to +60°C (LED OFF, PoE) -10°C to +50°C (LED ON, PoE) -40°F to +140°F (LED OFF, PoE+, AC 24 V, DC 12 V) -40°F to +122°F (LED ON, PoE+, AC 24 V, DC 12 V) 14°F to +140°F (LED OFF, PoE) 14°F to 122°F (LED ON, PoE)
● Cold Start Temperature	-30°C to +60°C (LED OFF; PoE+, AC24V, DC 12 V) -30°C to +50°C (LED ON; PoE+, AC24V, DC 12 V) 0°C to +60°C (LED OFF, PoE) 0°C to +50°C (LED ON, PoE) -22°F to +140°F (LED OFF, PoE+, AC 24 V, DC12V) -22°F to +122°F (LED ON, PoE+, AC 24 V, DC 12 V) 32°F to +140°F (LED OFF, PoE) 32°F to 122°F (LED OFF, 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 (W x H x D)*1	93 mm x 93 mm x 180.9 mm 3 3/4 inches x 3 3/4 inches x 7 1/8 inches $\phi$ 140 mm x 313.4 mm (including arm) $\phi$ 5 5/8 inches x 12 3/8 inches (including arm)
	Approx. 1600 g



● Mass	Approx. 3 lb 8 oz
● External Material	Front Cover: PC Rear Case: ADC12 Arm/Stand: ADC12 Lens Cover: PC Sunshield: PC
● External Color	White 4.4BG 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)

## Notes

- \*1 The values for dimensions are approximate.