SONY

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 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.

Specifications

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	Color: 0.06 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)

(30 IRE)	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, 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	Built-in varifocal lens
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x Digital zoom 4x 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 (typical): 850 nm , IR LED: 20 pieces)
IR Working Distance	30 m (50 IRE) 98 ft. (50 IRE)
White-light LED Illuminator	Yes (4 pieces)
LED Working Distance	5 m (50 IRE)

Camera Features

Day/Night	True D/N
Day/Night linked with Easy Focus	Yes
Image rotate	90°, 270°
Mirroring	Yes
Wide-D	View-DR

Tone Correction	Visibility Enhancer
Noise Reduction	XDNR
Image Stabilizer	Electronic
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
Compatibility with Cloud Service	Yes
Voice Alert	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 Control 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	Yes (3)
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)

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)
SNC toolbox	Yes
SNC toolbox mobile	Yes

Network

	IPv4, TCP, UDP, ARP, ICMP, IGMP*,

Protocols	HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, SMTP, IPv6, HTTPS, SNMP (v1, v2c, v3), FTP (client), SSL *SSM (Source Specific Multicast) is supported.
Number of IP Address/Mac ADDRESS	1
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S, Profile T
Authentication	IEEE802.1X

Interface

Analog Video Output	BNC x1 700 TV lines
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)	x2
Alarm Output	x2 (mechanical relay outputs electrically isolated from the camera)
Card Slots	SD x 1
Confirmed SD Card Type	Max. 64 GB

General

Power Requirements	12 V DC ±10% 24 V AC ±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	-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)

Temperature	-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 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 *1	93 mm ✕ 93 mm ✕ 180.9 mm 3 3/4 inches x 3 3/4 inches x 7 1/8 inches φ140 mm x 313.4 mm (including arm)

	φ5 5/8 inches x 12 3/8 inches (including arm)
Mass	Approx. 1600 g 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
	CD-ROM (supplied programs) (1)

Supplied Accessories	Template (1)
	Wrench (1)
	Waterproof tape (1)
	Installation Manual (1)
	Safety regulations (1)

Notes

*1	The values for dimensions are approximate.

Gallery