

SNC-VB635

Box-type 1080p/60 fps Camera
with Half-inch Exmor™ CMOS
Sensor Powered by IPELA
ENGINE EX™ - V Series



Overview

Highly sensitive box camera with the half-inch Exmor CMOS sensor powered by IPELA ENGINE EX, with Full HD image quality, advanced analytics and high frame rate recording.

The SNC-VB635 is a high performance versatile fixed network camera that's ideal for a wide range of security and surveillance applications – from city centres, airports, traffic and transport systems to government and utilities.

This high-sensitivity box camera design is supplied without a lens, giving the freedom to select from a wide range of lenses to suit virtually any surveillance needs.

Full HD picture quality is assured by the sensitive, high-resolution Exmor™ CMOS sensor that's teamed with Sony's latest-generation IPELA ENGINE EX signal processing system. Every scene looks clearer, sharper and more detailed – even in challenging low-light conditions or with harsh backlighting where other cameras struggle. Extra intelligence is added by DEPA Advanced Intelligent Video Analytics that can intelligently trigger an alarm based on user-defined rules.

High frame rate recording captures fast-moving action at a smooth 60 frames per second, making it easier to review and

analyse footage with split-second accuracy.

On-board image stabilisation helps keep images crisp, clear and immune from mechanical vibration, even if the camera's buffeted by wind on an outdoor pole or overlooking a busy motorway.

PoE (Power over Ethernet) capability carries IP video and power over a single connection cable, while easy focus and zoom adjustment further reduces installation time and maintenance costs.

The SNC-VB635 is supplied without lens. Compatible lenses include :

- DV3.4x3.85A-SA1, DV10x8SR4A-SA1, and DV3.8x4SR4A-SA1 from Fujinon
- M12VG412 from Tamron
- HG5Z2518FC-MP and H3Z4518CS-MPIR from Computar

Features

See every detail with Full HD quality

The camera's sensitive, high-resolution Exmor CMOS sensor captures crisp, detail-packed Full HD (1920 x 1080) video images with a high frame rate (up to 60fps).

Latest generation imaging power

Class-leading imaging is assured by Sony's unique IPELA ENGINE EX signal processing platform. XDNR (Excellent Dynamic Noise Reduction) assures clear low-light images, while Visibility Enhancer (VE) dynamically optimises brightness and colour reproduction on a pixel-by-pixel basis. Extra intelligence is added by DEPA Advanced analytics with face detection that can trigger alarms based on user-determined rules.

Exceptional low-light sensitivity

The camera is capable of capturing clear images in extremely low

light conditions: minimum illumination of 0.04 lx in Colour mode and 0.03 lx in B/W mode (at 50 IRE and 30 fps).

Wide dynamic range

Innovative View-DR technology achieves a dynamic range equivalent to 90 dB, capturing objects clearly and adaptively – even with harsh backlighting or sun-drenched highlights.

Better pictures, day or night

True D/N (Day/Night) function automatically switches the camera between Day (colour) and Night (B/W) modes, depending on light levels. In Night mode, the IR-cut filter is removed, making the camera sensitive to near-IR light and capable of reproducing images not visible to the naked eye.

Capture smooth, fluid movement

Video images can be captured at a high frame rate of 60 fps: ideal for applications like casinos or banks where it's essential to see what's happening with split-second accuracy.

Steadier, more stable images

Mechanical vibration – caused by gusts of wind or a busy road bridge – can cause blurred, hard to see images. The in-built image stabiliser reduces the effects of camera shake for crisper, clearer images.

Flexible powering options with PoE

The camera can be powered by AC 24V or DC 12V to suit a wide range of installation requirements. In addition, support for Power over Ethernet (IEEE 802.3af/IEEE 802.3at-compliant (PoE/PoE+)) simplifies installation by eliminating the need for additional power cables.

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.

Automatic recording to memory card

Edge Storage allows automatic recording of video and audio directly to an optional micro SD/SDHC card for later analysis. Recording can be triggered in response to an alarm event, if there's an attempt to tamper with the camera or in the event of network connection being temporarily lost.

View with your smartphone

Securely access the camera using a smartphone or tablet (Android or iOS) to view images.

Multiple video and audio codecs

For easy integration with a range of VMS solutions the SNC-VB635 supports H.264 (High/Main/Baseline Profile) /JPEG video codecs and AAC (16 kHz/48 kHz)/G.726/G.711 audio codecs. This provides compatibility and choice to suit many applications.

Easy setup and IP network configuration

The Easy Focus feature provides quick, easy adjustment of focus, simplifying installation and reducing maintenance time. Easy Focus can be activated remotely, minimising the need for on-site periodic maintenance, and ensuring excellent images. Configuration of network settings is made simple with the supplied SNC Easy IP Setup application.

ONVIF (Open Network Video Interface Forum) compliance

Support for ONVIF simplifies integration with a wide range of VMS platforms and hardware, 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.

RS-485 interface

The RS-485 interface transmits serial data simplex redirection to camera peripherals for controlling functions such as powered

zoom of lenses and the Pan/Tilt function of external Pan/Tilt head enclosure.

Specifications

| Camera | |
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| Image Sensor | 1/1.9-type progressive scan Exmor CMOS sensor |
| Number of Effective Pixels | Approx. 2.38 Megapixels |
| Signal System | NTSC/PAL (switchable) |
| 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 |

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| 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 |
| Lens | C-mount varifocal lens (option) |
| Easy Focus for Setup | Yes |

Camera Features

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| 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 |

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| 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 |
| Voice Alert | 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

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

Adaptive Rate Control H.264

Bandwidth Control JPEG

Multi streaming Capability Yes (3)

Number of Clients 20

Intelligent Video/Audio Analytics

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| 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

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|--------------------|----------------------------------|
| Compression Format | G.711/G.726/AAC (16 kHz, 48 kHz) |
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System Requirements

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| 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 Core i7 2.8 GHz or higher |
| Memory | 2 GB or more |

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| 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

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| Protocols | IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, FTP (client), SNMP (v1, v2c, v3), SSL *SSM (Source Specific Multicast) is supported. |
| Number of IP Address/Mac ADDRESS | 1 |
| QoS | DSCP |

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| Multicast Streaming Support | Yes |
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| ONVIF Conformance | Profile S, Profile T |
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| Authentication | IEEE802.1X |
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Interface

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| Analog Video Output | BNC x1, 1.0 Vp-p, 75 Ω, unbalance, sync negative 700 TV lines (analog video) *1 |
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| Microphone Input | Mini jack (monaural) |
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| Line Input | Mini jack (monaural) |
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| Line Output | Mini jack (monaural) Maximum output level: 1 Vrms |
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| Network Port | 10BASE-T/100BASE-TX (RJ-45) |
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| Alarm Input (Sensor Input) | x2, make contact, break contact |
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| Alarm Output | x2, AC 24V/DC 24 V, 1 A (mechanical relay outputs electrically isolated from the camera) |
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| Serial Interface | RS-485 |
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| Card Slots | SD x 1 |
| Confirmed SD Card Type | 4/8/16/32 GB SDHC (no support for SDXC) |
| General | |
| Power Requirements | IEEE 802.3af compliant (PoE system), DC 12 V \pm 10%, AC 24 V \pm 20% |
| Power Consumption | 6.0 W max. |
| Operating Temperature | -10°C to +60°C 14°F to 140°F |
| Cold Start Temperature | 0°C to +60°C 32°F to 140°F |
| Storage Temperature | -20 °C to + 60 °C -4 °F to + 140 °F |
| Operating Humidity | 20 % to 80 % |
| Storage Humidity | 20 % to 95 % |
| Dimensions *2 | 79 mm x 74 mm x 145 mm (without lens) 3 1/8 inches x 3 inches x 5 3/4 inches (without lens) |
| | Approx. 570 g (without lens) |

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| Mass | Approx. 1 lb 4 oz (without lens) |
| 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 3.5PB 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 EMC-TR |
| | CD-ROM (supplied programs) (1) Installation Manual (1) |

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| Supplied Accessories | Wire rope (1) Screw (M4 × 8) (1) DC 12/AC 24V connector (1) Safety regulations (1) C Mount adaptor (1) |
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Notes

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| *1 | Monitor display ratio 4:3 |
| *2 | The values for dimensions are approximate. |

Related products



FWL-65W855C

65" BRAVIA
Professional Full HD
Colour LED Display



FWL-75W855C

75" BRAVIA
Professional Full HD
Colour LED Display



FWL-55W805C

55" BRAVIA
Professional Full HD
Colour LED Display



FWL-40W705C

40" BRAVIA
Professional Full HD
Colour LED Display



FWL-48W705C

48" BRAVIA
Professional Full HD
Colour LED Display



UNI-OPBC6

Pessurised
temperature
controlled vandal-
resistant security
camera housing



UNI-OTBC2

Temperature-
controlled vandal
resistant outdoor
security camera
housing

Gallery

