

SNC-VB600

Box-type 720p/60 fps Camera
Powered by IPELA ENGINE EX™ -
V Series



Overview

The SNC-VB600 fixed network camera delivers a new range of features and level of performance for an HD surveillance camera, with a maximum resolution of 1280 x 1024 pixels and improved sensitivity, thanks to a new Exmor CMOS sensor.

The SNC-VB600 features the IPELA ENGINE EX signal processing system, providing advanced features such as high frame rate, and improved image processing with View-DR, XDNR and DEPA Advanced. The high frame rate mode – 60 fps and 50 fps – delivers smoother, more natural movement in the video. View-DR at 130 dB captures objects clearly, even under very harsh lighting conditions, such as strong backlight or high contrast conditions. XDNR (Excellent Dynamic Noise Reduction) delivers clear, low-noise, images in low light conditions. DEPA Advanced Intelligent Video and Audio Analytics triggers alarms according to user-defined rules. In-camera analytics are enhanced by additional features such as face detection, left object and removed object detection.

The camera SNC-VB600 offers a high sensitivity, with a minimum illumination of 0.05 lx in Colour mode and 0.04 lx in B/W mode. It can be powered by PoE (IEEE 802.3af-compliant), by AC 24 V +/- 20% or by DC 12 V +/- 10%, for easy installation.

Features

Excellent 720p/60 fps HD picture quality

Gain the huge surveillance benefits of excellent picture quality with 720p/60 fps HD, with up to 1280 x 1024 maximum resolution.

High quality and low noise images with Exmor CMOS sensor

Derived from Sony's broadcast range, the high resolution Exmor CMOS sensor improves image acquisition with its low noise characteristics.

Unique features from IPELA ENGINE EX signal processing system

IPELA ENGINE EX delivers high frame rate of up to 60 fps*, View-DR, XDNR (eXcellent Dynamic Noise Reduction) and DEPA Advanced Intelligent Video and Audio Analytics.

*Note: high frame-rate mode and ViewDR cannot be used at the same time.

DEPA delivers intelligent, customisable image capture and alarm triggering

The Sony DEPA platform offers intelligent video analytics, delivered through a combination of the intelligence built into the camera and the rules and filters that determine which images should be recorded and when an alarm should be triggered.

Operates at low minimum illumination

The SNC-VB600 operates at a minimum illumination of 0.05 lx in Colour mode (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) and 0.04 lx in B/W mode at 50 IRE and 30 fps.

Multiple video and audio codecs

The SNC-VB600 supports H.264 (High/Main/Baseline Profile) /JPEG video codecs and AAC (16 kHz/48 kHz)/G.726/G.711 audio codecs.

True Day/Night function for optimised images in all light conditions

Day/Night function automatically switches the camera between Day (colour) and Night (B/W) modes, depending on the light level. In Night mode, the IR-cut filter is removed so that the camera becomes sensitive to near-IR light and can reproduce images not visible to the naked eye.

ONVIF compliance for compatibility and confidence

The camera conforms to ONVIF (Open Network Video Interface Forum), the widely-accepted protocol for information exchange between network video devices, giving you confidence in its breadth and ease of compatibility.

Specifications

| Camera | |
|-------------------------------|--|
| Image Sensor | 1/3-type progressive scan Exmor CMOS sensor |
| Number of Effective Pixels | Approx. 1.37 Megapixels |
| Signal System | NTSC/PAL (switchable) |
| Sync System | Internal synchronization |
| Minimum Illumination (50 IRE) | Color: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.04 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) |

| | |
|----------------------------------|--|
| Minimum Illumination (30 IRE) | Color: 0.03 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.02 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) |
| Dynamic Range | Equivalent to 130 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 |
| Lens | CS-mount varifocal lens |
| Zoom Ratio | Optical zoom 2.9x Digital zoom 4x Total zoom 11.6x |
| Easy Focus for Setup | Yes |
| Horizontal Viewing Angle | 100.0° to 35.7° |

| | |
|-------------------------|-----------------------------|
| Vertical Viewing Angle | 78.1 ° to 28.6 ° |
| Focal Length | f = 2.8 mm to 8.0 mm |
| F-Number | F1.2 (Wide) to F1.95 (Tele) |
| Minimum Object Distance | 300 mm |

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 | Quadrangle formed by any four |

| | |
|-----------------------------------|--|
| (shape) | 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 a logo mark |
| 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

1280 x 1024, 1280 x 960, 1024 x 768,
1280 x 720, 800 x 600, 720 x 576, 720

| | |
|----------------------------|---|
| | x 480, 704 x 576, 640 x 480, 352 x 288, 320 x 240 (H.264, JPEG) |
| Compression Format | H.264 (High/Main/Baseline Profile), JPEG |
| Maximum Frame Rate | H.264: 60 fps (1280 x 1024) JPEG: 60 fps (1280 x 1024) |
| 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

| | |
|------------------------------|---------------|
| 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 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 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

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

Interface

| | |
|----------------------------|---|
| Analog Video Output | BNC x1, 1.0 Vp-p, 75 Ω, unbalance, sync negative 600 TV lines (analog video) *1 |
| Microphone Input | Mini jack (monaural) |
| Line Input | Mini jack (monaural) |
| Line Output | Mini jack (monaural) Maximum output level: 1 Vrms |
| Network Port | 10BASE-T/100BASE-TX (RJ-45) |
| Alarm Input (Sensor Input) | x2, make contact, break contact |
| Alarm Output | x2, AC 24 V/DC 24 V, 1 A (mechanical relay outputs electrically isolated from the camera) |
| 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 ± 10%, AC 24 V ± |
|--------------------|---|

| | |
|------------------------|--|
| | 20% |
| Power Consumption | 6.0 W max. |
| Operating Temperature | -10°C to +50°C 14°F to 122°F |
| Cold Start Temperature | 0°C to +50°C 32°F to 122°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 | 72 mm x 63 mm x 145 mm (without lens) 2 7/8 inches x 2 1/2 inches x 5 3/4 inches (without lens) 72 mm x 63 mm x 199 mm (with lens) 2 7/8 x 2 1/2 x 7 7/8 inches (with lens) |
| Mass | Approx. 565 g (with lens) Approx. 1 lb 4 oz (with lens) |
| External Material | Top cover: SECC-CF Bottom cover: SECC-CF Front panel: ADC12 |

| | |
|----------------------|---|
| | Rear panel: PC + ABS |
| External Color | <p>Top cover: Munsell 3.6GY 8.4/0.3</p> <p>Bottom cover: Munsell 3.6GY 8.4/0.3</p> <p>Front panel: Munsell 3.5PB 2.2/0.4</p> <p>Rear panel: Munsell 4.4BG 8.4/0.2</p> |
| Fire Retardant | UL2044 |
| Safety Regulations | <p>JATE Technical standard (LAN)</p> <p>UL2044, IEC60950-1 (CB)</p> <p>VCCI (Class A), FCC (Class A), IC (Class A)</p> <p>Emission: EN55022 (Class A) + EN50130-4</p> <p>Immunity: EN55022 (Class A) + EN55024</p> <p>Emission: AS/NZS CISPR22 (Class A)</p> <p>KCC</p> <p>EMC-TR</p> |
| Supplied Accessories | <p>CD-ROM (supplied programs) (1)</p> <p>Installation Manual (1)</p> <p>Wire rope (1)</p> <p>Screw M4 (1)</p> <p>DC 12/AC 24V connector (1)</p> <p>Safety regulations (1)</p> |

Notes

| | |
|----|--|
| *1 | Monitor display ratio 4:3 |
| *2 | Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format) |

Related products



SNCA-CEILING

Mounting coupling for pendant applications



SNCA-POLE30

Mounting pipe for pendant mount applications



UNI-WMB3

Wall mount bracket for PTZ dome mount security camera housings



UNI-XBS1/T

Silver bracket for SNC-CH110S and SNC-CH210S



UNI-OPL7C3

Outdoor Pressurized dome camera housing



UNI-OPBC6

Pessurised temperature controlled vandal-resistant security camera housing



UNI-OTBC2

Temperature-controlled vandal resistant outdoor security camera housing

Gallery

