

## SNC-EB602R

Outdoor IR Bullet 720p/ 30 fps  
Camera Powered by IPELA  
ENGINE EX™ – E Series



### Overview

**Weather-resistant ‘bullet type’ fixed camera with IPELA ENGINE EX™ processing for clear pictures and high sensitivity, plus image stabilisation and Advanced IR technology**

The SNC-EB602R is a weather-resistant, easy to install ‘bullet-type’ fixed network camera. It’s ideal for a wide range of outdoor security and surveillance tasks, from city centres, transport systems and retail centres to schools and colleges.

Sony’s acclaimed Exmor CMOS sensor captures crisp HD pictures, while industry-leading sensitivity delivers 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 offices 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, with built-in IR (infrared) illumination that's coupled with Advanced IR technology to capture near and far-away objects without overexposure.

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 -30°C to +50°C and is IP66 rated for resistance to water and dust. The unique mounting arm simplifies installation with flexible two-axis adjustment of viewing angle. For extra convenience, a built-in sunshade helps cut glare for improved picture quality and contrast on brightly-lit days.

## Features

### **See clearly with HD quality**

The high-resolution Exmor CMOS sensor captures crisp, HD video images (up to 1280 x 1024 at 30fps), even in low light. 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 HD picture quality. View-DR combines images taken at different shutter speeds, delivering a wide dynamic range up to 130 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 further reduce false alarms. Face Detection allows rapid indexing of recordings to find events where a human face is visible in the scene.

## **Advanced IR**

Built-in infrared (IR) illuminators assist with capturing objects in complete darkness, up to 25m (tentative) from the camera. View-DR technology ensures that clear black-and-white images can be seen both near and far from the camera without overexposure.

## **Steadier, more stable video footage**

The built-in image stabiliser minimises the effects of camera shake – for example when the camera's subject to vibration on a mounting pole or bracket. With clearer, more stable video images it's easier 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.

## **Flexible compression modes to suit your network**

Select VBR (variable bitrate), CBR (constant bitrate), or VBR with cap (variable bitrate with limit) compression modes for optimised network bandwidth control with given IP network conditions and recording storage capacity.

## **View and control with your smartphone**

Securely access the camera using a smartphone or tablet (Android or iOS) to view images remotely and control pan, tilt, and zoom functions. You don't even need to download a special app.

### **Adjustable sunshade**

The integrated sunshade protects the lens from direct sun glare, making the camera particularly suitable for outdoor use in direct sunlight.

### **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 two-axis adjustment of the camera's field of view.

### **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.

### **Dependable all-weather operation**

The camera can operate reliably over a wide -30 to +50°C temperature range. Ideal for outdoor use it is IP66 rated, water proof and dust tight.

## 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 lx (IR illuminator On)
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 lx (IR illuminator On)
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
	ATW, ATW-PRO, Fluorescent lamp,

White Balance	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
Horizontal Viewing Angle	92.9° to 31.8°
Vertical Viewing Angle	73.1° to 25.5°
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	25 m (50 IRE) 82 ft. (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
Ingress Protection	IP66
	3 independent positions for

Superimpose Number	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, Turkish, Polish
Smartphone viewer	Yes
<b>Video</b>	
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: 30 fps (1280 x 1024) JPEG: 30 fps (1280 x 1024)



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

## 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

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.
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Number of IP Address/Mac ADDRESS	1
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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

Analog Monitor Output for Setup	Phono jack x1
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Network Port	10BASE-T/100BASE-TX (RJ-45)
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## General

Power Requirements	IEEE 802.3af compliant (PoE system)
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Power Consumption	Max. 10.0 W (IEEE 802.3af(PoE))
Operating Temperature	-30°C to +50°C -22°F to +122°F
Cold Start Temperature	-20°C to 50°C -4°F to 122°F
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 × 160.9 mm 3 3/4 x 3 3/4 x 6 3/8 inches φ140 x 313.4 mm (including arm) φ5 5/8 x 12 3/8 inches (including arm)
Mass	Approx. 1450 g Approx. 3 lb 3 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.

## Gallery

