

## SNC-WR602CL

Outdoor Unitised 720p/60 fps  
Rapid Dome Camera by IPELA  
ENGINE PRO - W Series



### Overview

**Optimised for critical outdoor surveillance applications, with superb image quality and advanced analytics, industry-leading pan speed and weather/vandal resistance.**

The SNC-WR602C is a high-performance rapid dome network camera that's ideal for wide-area surveillance in challenging environments – from airports, stadiums and urban areas to malls and perimeters.

The camera's sensitive, high-resolution Exmor™ CMOS sensor is teamed with Sony's IPELA ENGINE PRO™ processing platform, bringing on-board image processing to a new level at Full HD resolution.

IPELA ENGINE PRO delivers an extra-wide 130dB dynamic range at HD resolution to assure clear video images, even in harsh lighting environments where other cameras struggle with extremes of light and shade in the same scene. Frame rates as high as 60fps – double that of normal IP cameras – let operators recognise and assess split-second incidents in recorded footage with unprecedented precision. This advanced processing engine can even correct focal plane distortion from fast camera pans or moving objects in real time.

The SNC-WR602C allows continuous 360° PTZ operation, with the industry's fastest pan speed of 700°/s letting an operator quickly recall preset areas of interest in a single, seamless motion. A powerful 30x optical zoom offers wide area coverage, plus the ability to grab detailed close-ups without losing clarity.

Designed for dependable round-the-clock performance in demanding outdoor environments, the unitised camera can operate in temperatures from -40°C to +50°C on 24V AC power (-30°C to +50°C with HPOE+), and is IP66/IK10 rated to resist weather and unwelcome tampering by vandals. Suitability for external use is enhanced by a Defog Image Processing feature that reduces smog or haze, while the gyroscopic image stabiliser combats camera-shake caused by vibration on a windy mounting pole or road bridge.

**\*Product shown with housing accessory. Housing accessory not included.**

## Features

### **See more detail with HD quality**

The Exmor CMOS sensor captures crisply detailed HD video images (maximum resolution 1280 x 720), even in low light.

### **Powered by IPELA ENGINE PRO**

W Series security cameras employ Sony's IPELA ENGINE PRO platform that builds on powerful IPELA ENGINE signal processing. This provides a 130dB dynamic range at HD resolution while maintaining full frame rate up to 30 fps), or 90dB at up to 60fps and delivering a unique range of camera features. XDNR (Excellent Dynamic Noise Reduction) assures clear low-light images without motion blur, while Visibility Enhancer (VE) dynamically optimises brightness and colour reproduction on a pixel-by-pixel basis. Video analytics technologies are provided with DEPA Advanced analytics, tampering detection and face

detection – each of which can trigger alarms based on user-determined rules.

### **Capture smooth, fluid movement**

Video images can be captured at a high frame rate of 60fps, allowing precise analysis when stepping through recorded footage frame by frame. It's ideal for applications like city surveillance where it's essential to see what's happening with split-second accuracy.

### **Industry-leading pan performance and powerful 30x optical zoom**

An industry-leading pan speed of 700°/s enables the camera to pan quickly to areas of interest in a single, seamless motion. Powerful 30x optical zoom range allows smooth, rapid transition from wide-area coverage to high-magnification close-ups of distant subjects without sacrificing clarity.

### **Defog Image Processing**

Defog Image Processing feature uses powerful image processing to enhance pictures in fog, smog and haze conditions for clearer video images.

### **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.

### **Steadier, more stable images**

The on-board gyroscopic image stabiliser keeps video images steady and blur-free, even if the camera is subjected to buffeting from wind or traffic vibration on a pole, fence or road bridge.

### **Focal Plane Distortion Correction**

Compensates for image distortion generated in a scene by the CMOS sensor focal plane phenomenon.

### **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 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 remotely and adjust settings.

### **Built for tough environments, with protection against tampering, water and dust**

Ideal for use in outdoor areas, the camera is IK10-rated for vandal resistance and IP66-rated against ingress by water and dust. It can operate reliably in extreme temperatures from -40°C to +50°C on 24V AC power (-30°C to +50°C with HPoE+)

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

Support for ONVIF Profile-S 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.

## Specifications

### Camera

1/3-type progressive scan Exmor

Image Sensor	CMOS sensor
Number of Effective Pixels	Approx. 1.37 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.2 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.015 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.12 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.009 lx (F1.6, 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/Manual
Shutter Speed	1/1 s to 1/10,000 s
Exposure Control	Full auto, Shutter priority, Iris priority, Manual
	ATW, ATW-PRO, Indoor, Outdoor,

White Balance	Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual
Lens	Auto-focus zoom lens
Powered Zoom	Yes
Zoom Ratio	Optical zoom 30x Digital zoom 12x Total zoom 360x
Powered Focus	Yes
Auto Focus	Yes
Horizontal Viewing Angle	58.3° to 2.1°
Vertical Viewing Angle	34.8° to 1.2°
Focal Length	f = 4.3 mm to 129.0 mm
F-Number	F1.6 (Wide) to F4.7 (Tele)
Minimum Object Distance	300 mm
Pan/Tilt Angle (powered)	360° endless rotation/220°
Pan Speed	700°/s (max.) *1

Tilt Speed	700 °/s (max.) *1
Number of Preset Positions	256
Number of Tour Programs	5
<h2>Camera Features</h2>	
Day/Night	True D/N
Auto-rotation Mode	Yes
Wide-D	View-DR
Tone Correction	Visibility Enhancer
Defog Image Processing	Yes
Highlight Compensation	Yes
Noise Reduction	XDNR
Image Stabilizer	Electronic
Picture Mode	Yes
Privacy Masking (number)	24

Privacy Masking (shape)	Quadrangle
Privacy Masking (color/effect)	Opaque 14 colors (Black, White, Red, Green, Blue, Cyan, Yellow, Magenta, Gray (6 scales)), Mosaic
Edge Storage	No
Compatibility with Cloud Service	Yes
Voice Alert	Yes
Vandal Resistant	IK10
Ingress Protection	IP66
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,



Turkish, Polish

Smartphone viewer Yes

## Video

Resolution 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 (1280 x 720)  
JPEG: 60 fps (1280 x 720)

Bitrate Control Mode CBR/VBR (selectable)

Range of Bit Rate Setting 64 Kbps to 32 Mbps

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)
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## 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, RTSP over HTTP, SMTP, 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
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ONVIF Conformance	Profile S
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Authentication	IEEE802.1X
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## Interface

Analog Video Output	BNC x1, 1.0 Vp-p, 75 Ω, unbalance, sync negative 480 TV lines
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Microphone Input	Mini jack (monaural), MIC IN/LINE IN: 2.5 V DC plug-in power
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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)	x4, make contact, break contact
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Alarm Output	x2, AC 24V/DC 24V, 1 A (mechanical relay outputs electrically isolated from the camera)
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Serial Interface	RS-422/RS-485 (PELCO D protocol)
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## General

Power Requirements	HPoE+ system *2, AC 24 V
Power Consumption	Max. 30.0 W (AC 24 V/HPoE+, heater OFF) *2 Max. 80.0 W (AC 24 V, heater ON) Max. 55.0 W (HPoE+, heater ON) *2
Operating Temperature	-40°C to +50°C (AC 24 V) -30°C to +50°C (HPoE+) *2 -40°F to +122°F (AC 24 V) -22°F to 122°F (HPoE+) *2
Cold Start Temperature	-40°C to +50°C (AC 24 V) -30°C to +50°C (HPoE+) *2 -40°F to +122°F (AC 24 V) -22°F to 122°F (HPoE+) *2
Storage Temperature	-20 °C to + 60 °C -4 °F to + 140 °F
Operating Humidity	20 % to 80 %
Storage Humidity	20 % to 95 %
Built-in Heater	Yes
Heater Working Temperature	5 °C or less 41 °F or less
Dimensions *3	φ222.0 x 324.1 mm

	φ8 3/4 inches x 12 7/8 inches
Mass	Approx. 4.1kg 9 lb 0.6 oz
External Material	Dome cover: PC Top sunshade: PC Coupling: ADC12 Top cabinet: ADC12 Sun shade: PC Dome flange: ADC12
External Color	Top sunshade: 6.4GY 8.0/0.3 Coupling: 3.6GY 8.4/0.3 Top cabinet: 3.6GY 8.4/0.3 Sun shade: 6.4GY 8.0/0.3 Dome flange: 3.6GY 8.4/0.3
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

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Supplied Accessories	<p>CD-ROM (supplied programs) (1)</p> <p>Installation Manual (1)</p> <p>Dome cover (1)</p> <p>Top sunshade (1)</p> <p>Coupling (1)</p> <p>Wire-fixing belt (1)</p> <p>Wire bracket (1)</p> <p>Bolts (2)</p> <p>Power supply connector 3-pin (1)</p> <p>I/O harness 14-pin (1)</p> <p>Harness band (1)</p> <p>Band mount (1)</p> <p>Connection cord (with BNC) (1)</p>
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Optional Accessories	YT-LDR632S Dome Cover Smoked)
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## Notes

*1	Available when preset mode is On.
*2	Power supply is generated from PowerDsine® 9501G by using 4 wires.
*3	The values for dimensions are approximate.

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## Gallery

