

SNC-WR602

Outdoor Unitized 720p/60
fps Rapid Dome Camera
Powered by IPELA ENGINE
EX™ - W Series



Overview

Optimised for critical outdoor surveillance applications, with 60p high frame rate, advanced analytics, industry-leading pan speed and weather/vandal resistance

The SNC-WR602 is a high-performance rapid dome network camera that's ideal for wide-area surveillance in challenging environments - from airports, stadiums, urban areas, malls and perimeters. The camera's sensitive, high-resolution Exmor™ CMOS sensor is teamed with Sony's latest-generation IPELA ENGINE PRO™ processing platform, delivering HD picture quality with powerful analytics for smarter surveillance. An extra-wide 130dB dynamic range assures 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.

The SNC-WR602 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 -40C to +50C, 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 gyroscopic image stabilizer combats camera-shake caused by vibration on a windy mounting pole or road bridge.

Features

See more detail with HD quality

The Exmor CMOS sensor captures crisply detailed HD video images (1280 x 720 60p), even in low light.

Introducing IPELA ENGINE PRO

W Series security cameras introduce 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 30fps) 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

On-board gyroscopic image stabilizer keeps video images steady and blur-free, even if the camera is subjected to being shaken in unfavourable environmental conditions.

Quick setting optimisation for ideal picture quality in a range of situations

A choice of selectable picture modes optimises camera settings for best picture quality in a wide range of applications and lighting environments.

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 VBR (variable bitrate) or CBR (constant bitrate) 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 control the camera's pan, tilt, and zoom functions.

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 -40C to +50C.

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.

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: 1.0 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0.03 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.4 lx (F1.6, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0.01 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 (-3 dB to +28 dB)
Shutter Speed	1/1 s to 1/10,000 s
Exposure Control	Full auto, Shutter priority, Iris priority, Manual
	ATW, ATW-PRO, Indoor,

White Balance	Outdoor, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual
Lens	Auto-focus zoom lens
Powered Zoom	Yes
Easy Zoom	No
Zoom Ratio	Optical zoom 30x Digital zoom 12x Total zoom 360x
Powered Focus	Yes
Auto Focus	Yes
Easy Focus for Setup	No
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
IR Illuminator	No
IR Working Distance	No
White-light LED Illuminator	No
LED Working Distance	No

Camera Features

Day/Night	True D/N
Day/Night linked with Easy Focus	No
e-Flip	No
Wide-D	View-DR
Tone Correction	Visibility Enhancer (VE)
Defog Image Processing	Yes
Noise Reduction	XDNR
Image Stabilizer	Yes
Picture Mode	Yes

Privacy Masking (number)	12
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
Image Memory	No
Memory Size for Image Memory	No
Memory Size for Pre/Post Buffer	No
Compatibility with Cloud Service	No
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
	English, Japanese, Chinese

Menu Language	(simplified), Chinese (traditional), French, Spanish, German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai
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Smartphone viewer	Yes
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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)
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Compression Format	H.264 (High/Main/Baseline Profile), JPEG
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Maximum Frame Rate	H.264: 60 fps (1280 x 720) JPEG: 60 fps (1280 x 720)
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Bitrate Compression Mode	CBR/VBR (selectable)
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Range of Bit Rate Setting	64 Kbps to 32 Mbps
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Image Cropping	No
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Solid PTZ	No
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Adaptive Rate Control	H.264
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Bandwidth Control	JPEG
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Multi streaming Capability	Triple streaming
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Number of Clients	20
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Letter Box	No
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Intelligent Video/Audio Analytics

Analytics Architecture	DEPA Advanced
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Intelligent Motion Detection	Yes
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Face Detection	Yes
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Tamper Alarm	Yes
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Advanced Audio Detection	No
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Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
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Auto Tracking	No
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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)
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	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)

Network

Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, FTP (client only), 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
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Wireless Network	No
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Wi-Fi Certified	No
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Wi-Fi Protected Setup (WPS)	No
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Authentication	IEEE 802.1X
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Interface

Analog Video Input	No
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Analog Video Output	BNC x1, 1.0 Vp-p, 75 Ω, unbalance, sync negative
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Analog Monitor Output for Setup	No
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Analog Video Output/SLOC Port	No
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SLOC Port	No
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Composite Buffered Through Out	No
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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
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	Vrms
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x4, make contact, break contact
Alarm Output	x2, 24 V AC/DC, 1 A (mechanical relay outputs electrically isolated from the camera)
Serial Interface	RS-422/RS-485 (PELCO D protocol)
Card Slots	SD Card x 1
Confirmed SD Card Type	4/8/16/32 GB SDHC (no support for SDXC)
USB Slots	No

General

Power Requirements	HPoE+ system *2, AC 24 V
Power Consumption	80.0 W max.
Operating Temperature	-40°C to +50°C (AC 24V) -5°C to +50°C (HPoE+)*2 -40°F to +122°F (AC 24V) 23°F to 122°F (HPoE+)*2
Cold Start Temperature	-40°C to +50°C (AC 24V) 0°C to +50°C (HPoE+)*2 -40°F to +122°F (AC 24V) 32°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
Dimensions (W x H x D)*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
Supplied Accessories	CD-ROM (supplied programs) (1) Installation Manual (1) Dome cover (1) Top sunshade (1) Coupling (1) Wire-fixing belt (1) Wire bracket (1) Bolts (2) Power supply connector 3-pin (1) I/O harness 14-pin (1) Harness band (1) Band mount (1) Connection cord (with BNC) (1)
Optional Accessories	YT-LDR632S Dome Cover Smoked)

Notes

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| *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. |

Gallery

