

SNC-WR602C

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 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

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|-------------------------------|---|
| 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, |

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| 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 |

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| 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 |

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| 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 | Yes |
| 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

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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, 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 |

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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 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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| Card Slots | SD x 1 |
| Confirmed SD Card Type | Max. 64 GB |
| 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 |

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| 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 |

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| | 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

