

SNC-WR630

Rapid Dome 1080p/60 fps
Camera Powered by IPELA
ENGINE PRO™ - W Series



Overview

Optimised for critical surveillance applications, with superb image quality and advanced analytics, industry-leading pan speed and powerful optical zoom

The SNC-WR630 is a high-performance rapid dome network camera that's ideal for wide-area surveillance in mission-critical indoor environments – from shopping malls to banks and casinos.

The camera's sensitive, high-resolution Exmor™ CMOS sensor is teamed with Sony's new 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 Full HD 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-WR630 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, the camera can operate in temperatures from -5°C to +50°C. Clear images are enhanced by a Defog Image Processing feature that reduces smog or haze, while the gyroscopic image stabiliser combats camera-shake caused by mechanical vibration.

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

Features

See every detail with Full HD quality

The high-resolution Exmor CMOS sensor captures crisp, detail-packed Full HD video images (maximum resolution 1920 x 1080), 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 Full 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 casinos or banking 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.

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 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.

Quick, easy installation

Easy installation and maintenance is assisted by a quick-release mechanism that allows the camera to be removed instantly from its mounting bracket at the press of a button. Set-up is further simplified with the supplied SNC Easy IP Setup application for configuration of network settings.

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.

Image Sensor	1/2.8-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.38 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.4 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: 0.24 lx (F1.6, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.018 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	63.7° to 2.3°
Vertical Viewing Angle	38.5° to 1.3°
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

Camera Features

Day/Night	True D/N
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	Yes
Compatibility with Cloud Service	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, Turkish, Polish
Smartphone viewer	Yes

Video

Resolution	1920 x 1080, 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 (1920 x 1080) 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

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
ONVIF Conformance	Profile S, Profile T
Authentication	IEEE802.1X

Interface

Analog Video Output	BNC x1, 1.0 Vp-p, 75 Ω , unbalance, sync negative 480 TV lines
Microphone Input	Mini jack (monaural), MIC IN/LINE IN: 2.5 V DC plug-in power
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)	x4, make contact, break contact
Alarm Output	x2, AC 24V/DC 24V, 1 A (mechanical relay outputs electrically isolated from the camera)
Serial Interface	RS-422/RS-485 (PELCO D protocol)
Card Slots	SD x 1
Confirmed SD Card Type	Max. 64 GB

General

Power Requirements	IEEE802.3at compliant (HPoE system), AC 24 V, DC 12 V
Power Consumption	25.0 W max.
Operating Temperature	-5 °C to +50 °C 23 °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	φ146.3 x 204.5 mm φ5 7/8 inches x 8 1/8 inches
Mass	Approx. 1.7 kg 3 lb 12 oz
External Material	Base cabinet: PC+ABS Camera cabinet: PC+ABS Side cabinet: PC+ABS
External Color	Base cabinet: 4.4BG 8.4/0.2 Camera cabinet: 3.9PB 0.3/1.0 Side cabinet: 3.9PB 0.3/1.0
	JATE Technical Standard (LAN)

Safety Regulations

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)
 Ceiling unit (1)
 Ceiling bracket (1)
 Fixing screws (M4 × 10) (3)
 3-pin power connector (1)
 BNC cable (1)
 I/O cable (1)
 Template (1)
 Cable clamp (1)
 Cable clamp fixing screws (M2.6 × 8, tapping screw) (2)

Optional Accessories

YT-LD124C (Dome Cover Clear)
 YT-LD124S (Dome Cover Smoked)
 YT-ICB630 (In-ceiling Bracket)

Notes

*1 Available when preset mode is On.

*2 The values for dimensions are approximate.

Gallery



