

## SNC-RH164

HD network PTZ dome camera, utilising state-of-the-art image enhancement and XDNR noise reduction.

With IP66 protection, an impact resistant dome cover and a unique integrated sunshine ventilation system, the SNC RH164 HD PTZ dome camera is specifically designed for heavy duty outdoor monitoring applications. The SNC-RH164 HD PTZ dome camera delivers excellent picture quality at HD resolution (1280x720, 30 fps) in 16:9 aspect ratio. This level of clarity combined with state-of-the-art image processing and a high speed panning capability makes the RH164 one of the most effective CCTV cameras on the market. With a total tilt range of 210° and a 360° endless high-speed panning capability, it can cover a wide monitoring area quickly and in a high level of detail. This capability makes it an obvious choice for mission critical CCTV applications including airport/border and traffic surveillance.

Installation and servicing time is reduced by a newly developed base, with a Quick Release Mechanism, which means the camera can be installed or detached quickly.

SNC-RH Series Cameras also feature ONVIF (Open Network Video Interface Forum) compliance for easy interoperability with IP monitoring products from a variety of manufacturers.

This product comes with the full PrimeSupport package. That's fast, hassle-free repairs, a helpline offering expert technical advice, and a free loan unit while yours is repaired. Plus the peace of mind that Sony is looking after your equipment – and your business.

## Features

### High Definition Picture Quality

Sony's HD CMOS image sensor provides excellent picture quality at HD resolution (1280 x 720 pixels) in 16:9 aspect ratio. The full potential of sharp, clear HD images is ensured thanks to XDNR noise reduction and visibility enhancer systems.

### Improved performance in challenging lighting conditions

Sony's Visibility Enhancer technology improves performance in challenging lighting conditions, for example high-contrast environments, such as casinos and highways, that had previously been difficult to monitor. The Visibility Enhancer's advanced system suppresses extreme whites and boosts dark areas in a scene simultaneously and dynamically, to produce clearer images on the screen.

### Clear low-light images

XDNR (Excellent Dynamic Noise Reduction) technology virtually eliminates image blur in low-light conditions, enabling users to clearly capture images that have not been easy to portray in the past. It also overcomes the problems associated with many competitor camera models. What's more, when both XDNR and Visibility Enhancer are turned on, the cameras can achieve four times the sensitivity compared to when they are off. This technology is ideal for any outdoor surveillance monitoring, such as in a car park at night.

### Powerful optical zoom

10x high quality optical zoom delivers greater flexibility in finding and tracking targets.

### Wider vertical viewing range

A 210° tilt angle allows a wider vertical viewing range, whilst 400°/sec pan/tilt speed and 360° continuous rotation allows users to find and track targets quickly and easily. The E-flip feature provides seamless viewing through the full tilt swing.

### Quick Release Mechanism

A new base design, incorporating a Quick Release Mechanism, makes installation and servicing faster and easier.

### Triple Codec Network Operation

This multi-codec camera supports three compression formats: JPEG, the best choice of high-quality still images; MPEG-4, the format that provides clear moving images efficiently over limited-bandwidth networks; and H.264, the alternative for severely limited-bandwidth networks, providing twice the efficiency of

MPEG-4. The camera can generate JPEG and MPEG-4 images simultaneously.

### ONVIF Compliant

The ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices including automatic device discovery, video streaming and intelligence metadata. Allows interoperability between network video devices.

### Tamper Alarm

When an attempt is made to tamper with the camera, such as spray-painting the lens, the SNC-RH Series detects this and triggers an alarm. This event can also be used to activate the camera relays, or even to start the Voice Alert function.

### Advanced Audio Detection

Unlike conventional audio detection where an alarm is triggered based on a preset audio level, the SNC-RH Series triggers its alarms based on ambient sound conditions as the threshold. The camera stores and updates ambient audio levels and frequencies, and when the threshold level based on this data, is surpassed, an alarm is triggered. (Available with version 1.1 or later software.)

### Audio Message Alert

The camera can store up to three pre-recorded audio alert messages which may be played via an active speaker upon manual or automatic initiation.

### Audio Echo Cancellation

This feature removes the echo frequently encountered between the operator and remote site audio systems when speakers and microphones are used.

### Support for IPv6

The SNC-RH Series supports Internet Protocol Version 6 (IPv6).

### Local Storage / Wireless Capability

The SNC-RH Series has a Compact Flash (CF) slot. This can be used either with a CF memory card for

local video storage, or for wireless capability. The SNCA-CFW5 (802.11b/g) CF type wireless LAN card is supported.

## Benefits

### Enhanced viewing range

An extended tilt range provides greater viewing flexibility, especially when viewing in zoom.

### Simple to install, easy to maintain

The camera can be installed or detached quickly and easily thanks to its newly developed base, which greatly reduces installation and servicing time and costs.

### Highly flexible network capability

Enjoy extraordinary operational flexibility using the ideal compression format for differing image and network types (JPEG for high-quality still images; MPEG-4 and H.264 for clear, moving images over bandwidth-limited networks).

### ONVIF compliance offers the optimum in system flexibility

Compliance with ONVIF (Open Network Video Interface Forum) ensures interoperability and maximum flexibility between a wide range of manufacturers' network video products.

### The perfect solution for use in all outdoor monitoring applications

IP66 protection and impact resistant dome cover technology combine with an integrated sunshine ventilation mechanism to deliver the optimum in all weather protection in arduous outdoor monitoring conditions.

## Technical Specifications

Camera	
Image device	1/3 HD CMOS
Minimum illumination	Day:2.1 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analogue) Night:0.19 lx (XDNR ON VE ON Slow Shutter OFF 50 IRE IP/Analogue)
Number of effective pixels (H x V)	Approx. 2 Megapixel
Electronic shutter speed	1/2 to 1/10,000 s
Auto gain control	Auto/Manual (-3 to +18 dB)

Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	10x
Horizontal viewing angle	5.4 to 50 degrees
Focal length	f=5.1 to 51mm
F-number	F1.8 (wide), F2.1 (tele)
Minimum object distance	10 mm (wide) to 800 mm (tele)
Pan angle	360 degrees endless rotation

Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)

### Camera Features

Visibility Enhancer	Yes
XDNR	Yes
Wide-D	No
Day/Night	Yes

### Image

Codec image size (H x V)	1280x720, 1024x576, 800x480, 768x576, 640x480, 640x368, 384x288, 320x240, 320x192
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4: 30 fps (1280 x 720) JPEG: 10 fps (1280 x 720)

### Audio

Audio compression	G.711/G.726
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### Scene analytics

Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Advanced audio detection	Yes

### Network

Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Wireless network	Yes (With Optional)
Number of clients	10
Authentication	IEEE802.1X

### Analogue video output

Signal system	NTSC/PAL
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Horizontal resolution	480 TVL
S/N ratio	more than 50 dB

### Interface

Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C, RS-422/RS-485 (PELCO D protocol)
Card slots	CF card x1
Analog video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms

### General

Mass	Approx. 4.3 kg (9 lb 8 oz)
Dimensions	238 x 344 mm (9 3/8 x 13 5/8 inches)
Power requirements	AC 24V
Power consumption	80 W max.
Operating temperature	-40 to +50 °C
Storage temperature	-20 to +60 °C

### System requirements

Operating system	Windows XP, Windows Vista
Processor	CPU: Intel Core2 Duo 2GHz or higher
Memory	1GB or more
Web browser	Microsoft Internet Explorer Ver 6.0, Ver7.0

### Supplied Accessories

Top sunshade, Rotate-and-lock coupling, Waterproof covers, Bolts, Installation manual, CD-ROM (User's guide, SNC toolbox), Wire fixing belt, Cables	
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## Accessories

### Network Connectivity

#### **SNCA-CW5**

Outdoor Antenna Cable Kit