

# SONY®

Network Camera

## SNC-CS3N



## *Amazing picture quality in such an affordable and compact package – the ideal network camera for remote monitoring*

*Sony's new SNC-CS3N CS mount, fixed network color camera is the latest addition to Sony's growing line up of network cameras which are ideally suited for surveillance, remote monitoring, and web-casting applications. Designed specifically to meet the demand for a high-quality and affordable network camera, the SNC-CS3N combines high performance with many value added features such as built-in activity detection, all in a compact body. This new camera incorporates a 1/3 type IT CCD with Exwave HAD<sup>®</sup> technology for superb picture quality and high sensitivity- minimum illumination of 0.5 lx (at F1.0, 50 IRE). Just like Sony's other network cameras, the SNC-CS3N uses the industry-standard JPEG-compression format for efficient distribution over a network and features analog output for local monitoring and recording. The high maximum frame-rate transmission of 30 fps at VGA resolution (640 x 480) allows for smooth viewing of high-quality images.*

*The SNC-CS3N also features a CS mount that allows for the ability to change the lens to suit the various viewing requirements and comes equipped with an auto iris, vari-focal lens (f=3.0 to 8.0 mm, F1.0). In addition, its built-in web server allows images to be viewed and controlled from a PC running a standard web browser.*

*With its high performance and network capability, the Sony SNC-CS3N is the ideal choice where sensitivity and lens choices are required. The SNC-CS3N camera makes remote monitoring easy and affordable.*



## Remote Monitoring/Control Over Networks

The SNC-CS3N is equipped with a 100Base-TX/10Base-T (RJ-45) interface and a built-in web server. This allows a PC running a standard web browser to monitor live images and control the camera without the need for additional software or plug-ins (see Fig. 1). Up to 50 simultaneous users can access and monitor the images of a single SNC-CS3N camera.

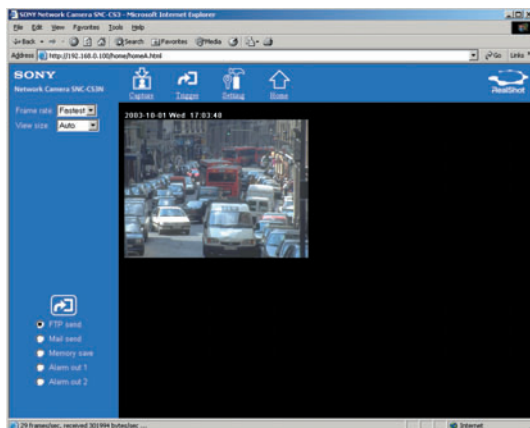


Fig. 1

## High Frame Rate

The SNC-CS3N produces images with a maximum frame rate of 30 fps, allowing for clear and smooth frame images to be viewed. The frame rate can be fixed or set to a variable rate that automatically adjusts to the available bandwidth.

## Network Security Features

### IP Filtering

Using the IP-filtering feature, access to the SNC-CS3N can be restricted to one or more groups of selected users. Up to ten different groups can be established by defining an IP-address range for each group. Setting these groups restricts access to the camera to the defined IP-address range, while denying access to all other addresses.

### Password Protection

User names and passwords can be assigned to allow four levels of access. The administrator has complete access/control of the camera, while the other three levels of access can be set to limit user privileges to functions such as viewing, trigger control, etc.

## High Picture Quality

The SNC-CS3N incorporates a 1/3 type IT (Interline Transfer) CCD with Exwave HAD technology that offers superb high picture quality with excellent sensitivity. The SNC-CS3N achieves a horizontal resolution of 480 TV lines and a minimum illumination of 0.5 lx (at F1.0, 50 IRE).

## Supplied High-Performance Vari-Focal Lens

The SNC-CS3N is supplied with a CS-mount, vari-focal lens with auto iris function, which covers the frequently used horizontal viewing angle of 91 to 36 degrees. The maximum aperture of F1.0 provides remarkable image quality even in low-light conditions. While this viewing range should cover a majority of application requirements, the user has the option of using a specific focal length to suit his or her viewing requirements with the CS mount.

## Selectable Image Quality and Size

The SNC-CS3N provides the flexibility to select image quality and image size according to network bandwidth. Employing the industry-standard JPEG-compression format, the SNC-CS3N has a selectable compression ratio within the range of 1/5 to 1/60. Also, the image size can be selected from four modes: 736 x 480, 640 x 480, 320 x 240, and 160 x 120.

## Backlight Compensation (BLC)

The Backlight Compensation (BLC) function helps to overcome severe backlighting situations, which often can cause the subject of an image to be cast into a shadow. The image brightness can be set to automatically compensate for adverse lighting conditions.

## Alarm Function

### Activity Detection/Alarm Trigger

The SNC-CS3N is equipped with built-in activity detection that can be set to generate an alarm output through alarm-output ports. If a change in luminance level is detected in the field of view, an alarm is automatically triggered. In addition, the SNC-CS3N is equipped with an alarm-input port that can receive a trigger from an external sensor.

### Pre-/Post-Alarm Image Storage

With the built-in 8MB buffer, the SNC-CS3N can store hundreds of pre-alarm and post-alarm still images at the time an alarm is triggered from the activity detection, the alarm input or both.

## Image Transfer using FTP/SMTP

The pre-/post-alarm images stored at the time of an alarm event can be transferred to an FTP server. A still image can also be sent as JPEG attachments to a specified e-mail address, enabling the user to see what happened when an alarm occurred.

## Versatile Interfaces (Fig. 2)

### Analog Composite Video Output

The SNC-CS3N has an analog composite video output from the BNC connector located on its rear panel. Like conventional analog cameras, the SNC-CS3N allows the camera images to be directly recorded or monitored by connecting video equipment such as time-lapse recorders, hard disk recorders, multiplexers, and monitors.

### RS-232C Interface

The SNC-CS3N has a transparency function available via the RS-232C interface. This allows external equipment or sensors connected to the RS-232C port of the SNC-CS3N network camera to be controlled or monitored from the PC over the network.

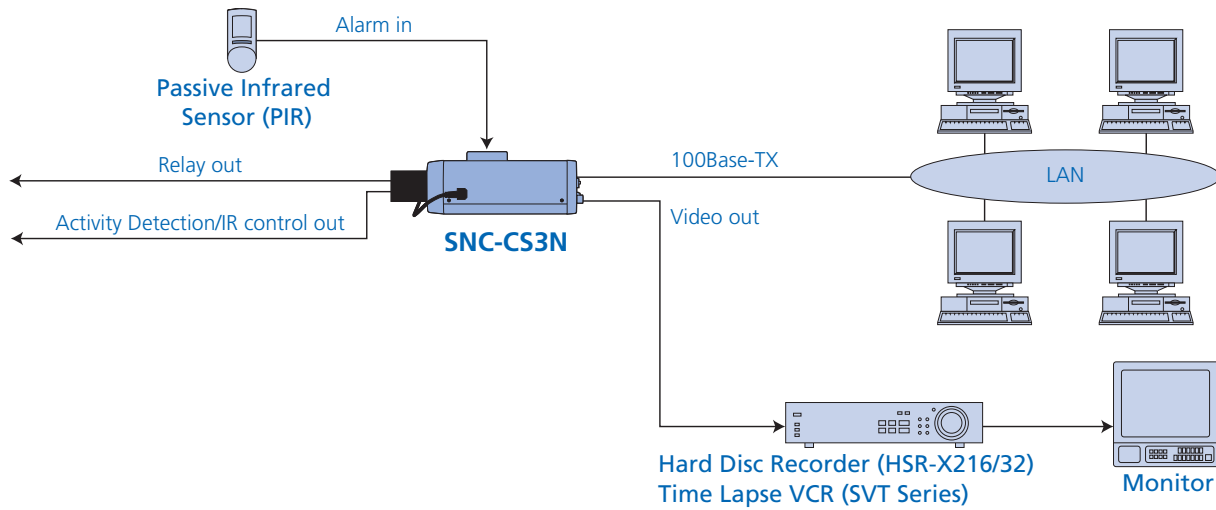
### AC 24 V or DC 12 V Operation

The SNC-CS3N offers a choice of two power supplies: AC 24 V or DC 12 V. The camera's power system automatically adapts to the supplied power.



Fig. 2 Rear Panel

# SAMPLE SYSTEM CONFIGURATION

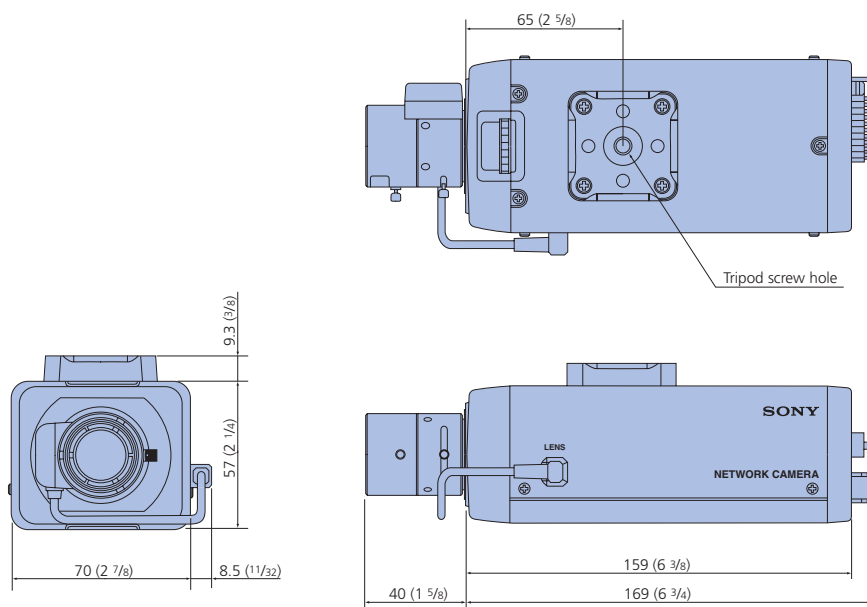


## SYSTEM REQUIREMENTS

### Operating System and Web Browser

Operating system	Microsoft® Windows® 98/98SE/ME/NT4.0/2000/XP
Processor	Intel® Pentium® III, 500 MHz or higher (Intel Pentium 4, 1 GHz or higher recommended)
Memory	128 MB RAM minimum
Web browser	Microsoft Internet Explorer version 5.5 or 6.0
Display	1024 x 768, true color or more

## DIMENSIONS



Unit: mm (inches)

# SPECIFICATIONS

SNC-CS3N	
<b>Camera</b>	
Image device	1/3 type Interline Transfer CCD with Exwave HAD technology
Number of effective pixels (H x V)	768 x 494
Electronic shutter	1/60 to 1/10,000 s
Exposure mode	Auto iris lens, CCD iris, Manual
White balance	Auto, ATW, Indoor, Outdoor, One-push, Manual
AGC	Normal/Turbo
Backlight compensation	ON/OFF
EV compensation	-1.75 to +1.75 EV (15 steps)
<b>Lens</b>	
Type	CS mount DC iris Vari-focal lens
Focal length	f = 3.0 mm to 8.0 mm
Horizontal viewing angle	91° to 36°
F-number	F1.0 to F1.4
Minimum object distance	200 mm
<b>System/Network</b>	
CPU	32-bit RISC processor
RAM	32 MB (includes 8 MB alarm buffer)
Flash memory	8 MB
Image size (H x V)	736 x 480, 640 x 480, 320 x 240, 160 x 120
Compression	JPEG
Compression ratio	1/5 to 1/60 (10 steps)
Frame rate	Max. 30 fps (640 x 480)
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP, SMTP, DHCP, DNS, NTP, and SNMP
<b>Interface</b>	
Ethernet	100Base-TX/10Base-T (RJ-45)
Video output	Analog composite (BNC x 1), 1.0 Vp-p, 75 Ω, unbalanced, sync negative
Sensor in	1
Alarm out	2
Serial interface	RS-232C (for transparency function)
<b>Analog Video Output</b>	
Signal system	NTSC
Sync system	Internal
Horizontal resolution	480 TV lines
S/N ratio	More than 50 dB (AGC OFF, Weight ON)
Minimum illumination	0.5 lx (F1.0, 50 IRE, Slow shutter OFF)
<b>General</b>	
Weight	1 lb 7 oz (650 g) including lens
Dimensions (W x H x D)	2 7/8 x 2 1/4 x 7 7/8 inches (70 x 57 x 199 mm) including lens
Power requirements	DC 12 V or AC 24 V
Power consumption	8 W
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity	20% to 80%, Non-condensing
Storage humidity	20% to 95%, Non-condensing
Supplied accessories	CD-ROM (x1, setup program and user's guide), Wire rope (x 1), Shoulder screw M4 (x 1), Installation manual (x 1), vari-focal lens (x 1)

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