SONY

Network Camera

SNC-RZ25N
SNC-RZ25P

INTRODUCTION

*Effective and Efficient Remote Network Monitoring –
The SNC-RZ25[*1] Offers MPEG-4 or JPEG Compression
and PTZ (Pan/Tilt/Zoom) in a Single Package*

*Introducing the Sony SNC-RZ25, MPEG-4/JPEG network camera with a PTZ capability
packaged in a sleek and stylish body. The SNC-RZ25 is ideal for web casting and remote-
monitoring applications used almost anywhere – from airports to train stations, factories to
supermarkets, and from street corners in small towns to big cities.*

*Remote monitoring over a network has never been easier. With the SNC-RZ25, set up is
simple, and more cost effective than conventional CCTV systems. This is because the
network infrastructure is often already in place or can be easily installed. Once the network
connection is established, images from the camera can be efficiently streamed over the
network. MPEG4 is well suited for streaming images over limited bandwidths. If higher-
quality still images are required, then the industry-standard JPEG compression is available.
The SNC-RZ25 also has a PTZ capability, allowing camera movements and the 18x optical
zoom to be controlled from a PC using a standard web browser. The viewer has a unique
feature that allows you to control the camera simply by clicking on the panorama image.*

*Packed full of features including, a "Day/Night" function, audio monitoring, network and
wireless, alarm functions and more, the SNC-RZ25 is the perfect MPEG-4 PTZ network
camera for your remote monitoring and web casting applications.*

[*1] Unless otherwise noted, "SNC-RZ25" in the following text refers to both the SNC-RZ25N and SNC-RZ25P.
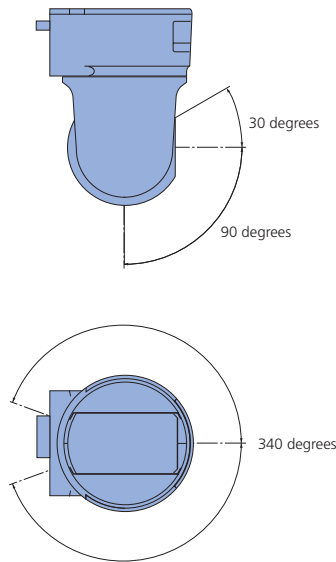
FEATURES

All-In-One PTZ Network Camera

The SNC-RZ25 is equipped with a 100Base-TX/10Base-T network interface and a built-in web server, allowing you to configure the unit in any TCP/IP network. To run the unit, all that is needed is a PC running a web browser[*2] and a network environment; no additional software is required. The SNC-RZ25 is PTZ-capable with a pan range of 340°, a tilt range of 120°, plus an 18x optical zoom capability.

[*2] Requires Microsoft® Windows® 98 or higher operating system and Microsoft Internet Explorer 5.5 or higher web browser.

Pan/Tilt Range

30 degrees

90 degrees

340 degrees

High-Quality Images

Employing the latest 1/4-type Exwave HAD CCD, the SNC-RZ25 delivers exceptional picture quality for your remote monitoring applications. Also, because the minimum illumination level is 0.7 lx at F 1.4, the SNC-RZ25 operates extremely well even in low-light conditions.

"Day/Night" Function

The SNC-RZ25 offers a "Day/Night" function to provide optimized sensitivity in both day and night environments. As the scene darkens, the infrared cut-filter is automatically replaced with a clear filter and the camera switches to B/W mode, requiring a minimum illumination of less than 0.01 lx. Three modes can be set: automatic, manual, or a timer mode.

Selectable MPEG-4 or JPEG Compression Formats

The SNC-RZ25 uses the MPEG-4 compression format to achieve high-compression ratios without sacrificing image quality. MPEG-4 allows smooth moving images to be streamed over a wide range of bandwidths so users can monitor high-quality moving images with a minimal delay even over limited bandwidths. The SNC-RZ25 also supports variable bit rates up to 2 Mb/s.

Transmission protocols (TCP or UDP) and image size can be selected to meet your network environment and application requirements. The following image sizes are selectable: 640 x 480, 480 x 360, 384 x 288, 320 x 240, 256 x 192, and 160 x 120.

If higher quality still images are preferred, then the industry-standard JPEG compression format can be selected from the setup menu.

High Frame Rate

The SNC-RZ25 produces images at a maximum frame rate of 30fps[*3] when the image size is 320 x 240 in both MPEG-4 and JPEG modes, producing clear and smooth-moving images. The frame rate can be fixed or set to a variable rate that automatically adjusts to the available bandwidth.

[*3] In order to view images at the maximum frame rate, adequate PC processing power and network bandwidth are required.

Bi-Directional Audio

The SNC-RZ25 supports both ITU-T G.711 and G.726 audio compression standards. Equipped with an external microphone jack, the SNC-RZ25 can be configured with a microphone so that audio, including sound from distant objects, can be monitored at the camera site. The unit is also equipped with an audio line output for active speakers. Using these speakers, users can send an alert or make an announcement, significantly expanding the possibilities for remote monitoring applications.

Network Features

Adaptive Rate Control
In order to control QoS (Quality of Service) levels over a network, the SNC-RZ25 employs an adaptive rate control function. This function automatically varies the video bit-transfer rate to meet changing network conditions. Adaptive rate control also selects the most appropriate frame rates, preventing audio and video breakup.

Simultaneous Access
Up to 20 users in JPEG mode or 10 users in MPEG-4 mode can simultaneously access the SNC-RZ25 and monitor images separately.

Multicasting Capability
The SNC-RZ25 has a built-in multicasting capability. When configured with a multicast router, the unit can efficiently stream video and audio to a large number of users.

Compact Flash™ (CF) Type Card Slot/Wireless Capability

A built-in expansion slot for Compact Flash cards is integrated into the SNC-RZ25, enabling you to store additional images on CF media as required. You can also opt to install the SNC-RZ25 in a wireless network to avoid unsightly wires, as the CF type card slot can accept the optional SNCA-CFW1 Wireless Card. This wireless card is IEEE 802.11b compliant.

Compact Flash™ (CF) Type Card Slot

Alarm Functions

Motion Detection/Alarm Trigger
The SNC-RZ25 is equipped with a built-in motion detection function that can generate an alarm through its alarm-output port or trigger another device to perform a variety of actions. The motion-detection function uses vector information so that unwanted noise components do not accidentally trigger the alarm. In addition to these features, the SNC-RZ25 is equipped with a sensor-input port that can receive a trigger from an external sensor.

Pre-/Post-Alarm Image Storage
With its built-in buffer memory, the SNC-RZ25 can store several seconds of pre-alarm and post-alarm images when the motion detector, the sensor input, or both trigger an alarm.

> **Maximum Image Storage Capacity (Definable from the Setup Menu)**
> MPEG-4 Compressed Images: Approx. 30 seconds* (pre-/post- 15 sec).
> * when image size is 320 x 240 at 30 fps and 512 kbps
>
> JPEG Compressed Images: Approx. 10 seconds* (pre-/post- 5 sec).
> * when image size is 320 x 240 at 15 fps and image quality is set to Level 3

Image transfer using FTP/SMTP[4]
All of the pre-/post-alarm images stored at the time of an alarm event can be transferred to an FTP server for later viewing. Also, a still image at the time of an alarm event can be sent to a designated e-mail address.

[4] All transferred images are in JPEG format. MPEG images are converted to JPEG before being transferred.

Network Security Features

IP Filtering
With IP filtering, access to the SNC-RZ25 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.

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

Analog Composite Video Output

The SNC-RZ25 can output an analog composite video signal via the BNC connector on the unit's rear panel.[5] This feature is ideal for sending signals to a local recording device or monitor.

[5] The SNC-RZ25N output is in NTSC format (525/60), and the SNC-RZ25P output is in PAL format (625/50).

Rear Panel

User-Friendly GUI

The SNC-RZ25 has a user-friendly GUI accessible via a PC running the Microsoft® Internet Explorer® browser software. Setup is very easy with the intuitive icons and pull-down menus. Directly pointing to and clicking on any part of the monitor image in the viewer will pan and tilt the camera so that the selected point is centered. Also, selecting an area on the image by holding down the left mouse button and dragging the mouse diagonally will enlarge and center the selected area in the monitor.

SNC-RZ25 Viewer   (simulated image)
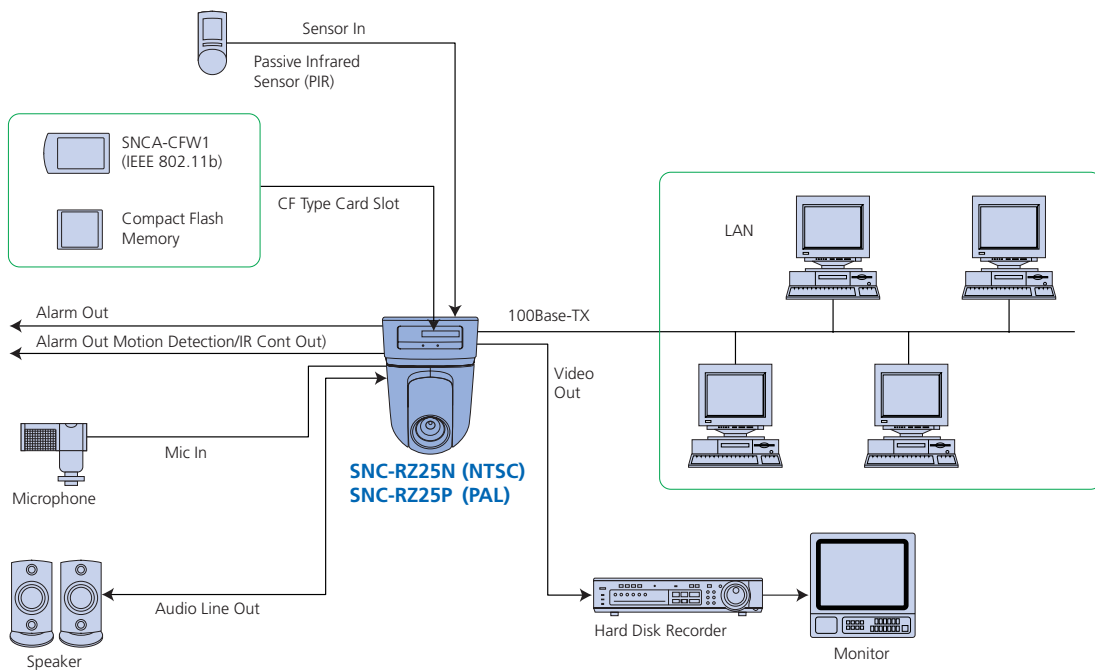
Direct Pointing in Panorama View

The SNC-RZ25 can also be controlled by clicking on the panorama[6] image. Selecting an area on the panorama view will center that area in the monitor.

[6] The panorama view is a still image. The SNC panorama creator (supplied software) must be run to generate the panorama image.

Flexible Installation (Desktop or Ceiling Mountable)

A unique feature that "flips" images enables the SNC-RZ25 to be placed on either a flat surface (desktop) or ceiling mounted. Images are output right-side-up regardless of the orientation of the unit. Unlike other products that require separate models for ceiling and desktop applications, this single model is all that is necessary when installing your network camera system.

SAMPLE SYSTEM CONFIGURATION

OPTIONAL ACCESSORIES

SNCA-CFW1
Wireless Card

SNCA-AN1
Wireless LAN Antenna
(for use with SNCA-CFW1
Wireless Card)

SPECIFICATIONS

	SNC-RZ25N	SNC-RZ25P
Camera		
Image device	$1/4$ type CCD imager (Exwave HAD Technology)	
No. of effective pixels	380,000 pixels 768 (H) x 494 (V)	440,000 pixels 752 (H) x 582 (V)
Zoom ratio	18x optical zoom (216x with digital zoom)	
Focal length	f=4.1 mm to 73.8 mm	
F-number	F1.4 (wide), F3.0 (tele)	
Iris	Auto/Manual (F1.4 to close)	
Minimum object distance	300 mm (wide), 800 mm (tele)	
Pan angle	-170 to +170 degrees	
Tilt angle	-90 to +30 degrees	
Other functions	Day/Night (Auto/Manual), Image Flip function Motion Detection	
Image		
Image size (both JPEG and MPEG-4)	640 x 480, 480 x 360, 384 x 288 320 x 240, 256 x 192, 160 x 120	
Compression format	MPEG-4/JPEG (selectable)	
Maximum frame rate	JPEG: 30 fps (320 x 240) 18 fps (640 x 480) MPEG-4: 30 fps (320 x 240) 15 fps (640 x 480)	JPEG: 25 fps (320 x 240) 18 fps (640 x 480) MPEG-4: 25 fps (320 x 240) 15 fps (640 x 480)
Audio		
Compression format (Audio IN/OUT)	G.726 (40,32,24, 16 Kb/s), G.711 (64 Kb/s)	
Network		
Protocols	IP(IPv4), ICMP, ARP, TCP/UDP, RTP/RTCP, SNMP (MIB-2) DHCP client, NTP client, DNS client, HTTP, FTP, SMTP client	
Number of clients	10 (MPEG-4), 20 (JPEG)	

	SNC-RZ25N	SNC-RZ25P
Interfaces		
Ethernet	10Base-T/100Base-TX (RJ-45)	
Serial interface	RS-232C (Transparency function or VISCA protocol)	
I/O ports	Sensor in x2, Alarm out x2	
Card slot	Compact Flash (for SNCA-CFW1 IEEE802.11b Wireless Card or Compact Flash memory card)	
Analog video output	BNC x1, composite video 1.0 Vp-p, 75Ω	
External microphone input	Mini-jack, 2.4 V DC plug-in power, 4.7 KΩ	
Audio line output	Mini-jack (mono), Max output level: 0.9 Vrms	
Analog Video Output		
Signal system	NTSC (Composite)	
Horizontal resolution	More than 470 TV lines	
S/N ratio	More than 50dB	
Min. illumination	Color: 0.7 lx (50IRE, F1.4: AGC on)	
General		
Mass	1.3 kg (2 lb 14 oz)	
Dimensions (W x H x D)	140 x 206 x 148 mm (5 $5/8$ x 8 $1/8$ x 5 $7/8$ inches)	
Power requirements	DC 12 V or AC 24V	
Power consumption	17 W max.	
Operating temperature	0 °C to + 40 °C (32 °F to 104 °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	Ceiling mount kit CD-ROM (user guide, application software) Installation manual	
System Requirements		
Operating system	Windows 2000/XP	
Browser	Microsoft Internet Explorer Ver 5.5/6.0	

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