



## SNC-Z20P

Video Network Camera with integrated 18x optical zoom lens

### Video Network Camera



The SNC-Z20P IP camera incorporates a highly sensitive 1/4 type CCD with Exwave HAD™ technology for superb picture quality. Equipped with an auto-focus 18x optical-zoom lens, this camera can zoom in on a small or distant object with exceptional clarity.

The frame rate can be set as high as 25 fps at VGA resolution to reproduce very smooth-moving images. Its built-in web server allows images to be viewed and controlled from a PC running a standard web browser or the optional Sony IMZ-RS Series Monitoring Software.

The SNC-Z20P also has sophisticated features such as Day/Night, Slow Shutter, and Activity Detection functions for further convenience in monitoring operations.

### Features

#### Remote Video Monitoring / Control Over Networks

The SNC-Z20P 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 its live images and control the

unit without the need for additional software or plug-ins. Up to 50 users can simultaneously access, monitor, and control the images of a single SNC-Z20P camera.

#### High Picture Quality and High Zoom Ratio

The SNC-Z20P incorporates a 1/4 type CCD with Exwave HAD technology, offering high resolution images with excellent sensitivity and achieves a horizontal resolution of 460 TV lines.

#### Built-in auto-focus 18x optical zoom lens

The built-in auto-focus 18x optical zoom lens enables the user to obtain clear images even when enlarged. A maximum 216x zoom ratio is available when the optical zoom and 12x digital zoom are used together. To cover a wide angle of view, an optional VCL-0637H Wide Conversion Lens can be attached.

#### High Frame Rate

The SNC-Z20P offers a maximum frame rate of 25 fps, allowing clear and smooth frame accurate images to be viewed. The frame rate can be set to a fixed or variable frame rate, which is automatically adjusted according to the available bandwidth.

#### PC Card Slot

A built-in PC card slot on the front panel of the SNC-Z20P enables you to increase the SNC-Z20P storage capacity for pre/post-alarm recording by adding either a flash ATA memory card or an ATA hard disk drive (HDD) card. IC recording media such as a Memory Stick™ media card with a Memory Stick/PC card adaptor can also be used.

### Wireless Network Operation

The SNC-Z20P is compatible with an IEEE 802.11b-compliant wireless PC card allowing wireless network operation.

### Day / Night Function

The SNC-Z20P offers a Day / Night function to provide optimised sensitivity in both day and night shooting scenarios. As the scene illumination reduces and the image darkens, the infrared filter is automatically removed and the camera switches to B/W mode, achieving a minimum illumination of 0.01 lx.

### Power-over-Ethernet Operation

The SNC-Z20P offers a choice of three different power supplies. AC 24 V or DC 12 V can be supplied through the standard power terminal. Power can also be supplied via an Ethernet CAT5 cable from an IEEE 802.3af-compliant power supply system allowing single cable operation. AC 24 V, DC 12 V, or PoE (Power over Ethernet) is automatically selected according to the power supplied.

### Pre- / Post-Alarm Image Storage

With the internal 8 MB buffer or a memory card installed in the PC card slot, the SNC-Z20P can store hundreds of pre-alarm and post-alarm still images at an alarm trigger received either from the activity-detection sensor or the alarm input.

### 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, and the still image can also be sent to a specified e-mail address as a JPEG attachment, enabling the user to see what happened before and after an alarm occurred.

### Compatible with IMZ-RS Series Monitoring software (RealShot Manager)

By installing the optional IMZ-RS Series Monitoring Software, up to 32 cameras can be simultaneously monitored and controlled from a single PC. The images from these cameras can also be recorded to the PC's hard drive.

### Mobile monitoring through PDA

Images can be viewed from a personal digital assistant (PDA) such as a Sony Clie or Pocket PC.

### IP Filtering (security)

Using the IP-filtering feature, access to the SNC-Z20P 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. Generally, the administrator has complete access/control of the camera, while the other three levels can be set to limit user privileges to functions such as zoom control, viewing, trigger control, etc.

### Selectable Image Quality and Size

The SNC-Z20P gives you the flexibility to select image quality and image size according to your network bandwidth. Employing the industry standard JPEG-compression format, the SNC-Z20P has a selectable compression ratio between 1/5 and 1/60. Also, the image size can be selected from four modes: 736 x 544, 640 x 480, 320 x 240, and 160 x 120.

### Slow Shutter

In addition, the slow shutter mode provides a remarkable enhancement in sensitivity by allowing the charge accumulation period of the CCD to be extended to a maximum of 1 second.

### Backlight Compensation (BLC)

The Backlight Compensation (BLC) function helps to overcome strong backlighting effects, which often cause the subject of the picture to be cast into shadow. The picture brightness can be adjusted automatically to allow for changes in lighting conditions, optimising the image intelligibility under very adverse lighting conditions.

### Alarm Function Activity Detection / Alarm Trigger

The SNC-Z20P is equipped with a built-in activity detection sensor that can be set to trigger an alarm or a switch 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 camera comes with an alarm input port to receive a trigger from an external sensor.

### Analogue Composite Video Output

The SNC-Z20P can output an analogue composite video signal from a BNC connector located on its rear panel. This allows recording or monitoring of the local image by connecting analogue video equipment. Images from the camera can be electrically reversed upside down – allowing the camera to be installed in a variety of locations and positions.

### RS-232C Interface (Transparency Function or VISCA™ Protocol)

The SNC-Z20P has a transparency function available via the RS-232C interface. This allows external equipment connected to the RS-232C port of the camera to be controlled from a PC over the network. Also, the SNC-Z20P can be controlled with the VISCA protocol from an external control device, allowing local control of zoom and camera settings.

## Benefits

### Access your video from anywhere at any time

The SNC-Z20P simply connects to your TCP/IP network allowing you to access the video from anywhere on the network.

### Excellent performance under low light conditions

Sony ExwaveHAD technology allows the SNC-Z20P to give outstanding performance in monitoring and surveillance applications dealing with very low light conditions.

### Easy installation

Supporting all standard network protocols, installing this camera is an easy task by simply connecting the Ethernet cable to any TCP/IP Network. The supplied set-up software makes it possible to

start monitoring within minutes after you installed the camera. Installation can be made even easier using a single cable for both power and data transmission.

### Wireless transmission

More installation flexibility is provided using an optional wireless PC card for wireless network operation.

### Capturing all picture detail required

The image quality is extremely high, making it the ideal camera for effective surveillance and monitoring providing you all the detail required even when enlarged using its 18x optical zoom lens.

### No bandwidth consumption thanks to local picture storage

The storage capacity of the SNC-Z20P can be increased by adding memory allowing you to store hundreds of images on the unit without having to consume bandwidth on the network.

### No separate monitoring software required

Using a standard web browser you can easily access the SNC-Z20P thanks to its built-in home page. This graphical user interface is designed for easy control and quick access to all functions.

### Limit camera access to relevant persons only

Security management allows you to limit the access to those who have permission only by password protection and IP-filtering.

### Unattended operation

The built-in activity detection function enables you to keep easily track of activity on site while not actively monitoring. The camera can be set to automatically store or send pictures when activity is being triggered.

## Technical Specifications

### Camera

Image device	1/4 type Interline Transfer CCD with Exwave HAD technology
Number of effective pixels (H x V)	752 x 582
Electronic shutter	1 to 1/10 000 s
Exposure	Auto [Full Auto (including backlight compensation), Shutter-priority, Iris-priority] and manual

White balance	Auto, ATW, Indoor, Outdoor, One-push, Manual
EV compensation	-1.75 to +1.75 EV (15 steps)
Iris	Auto/Manual (F1.4 to close)
Gain	Auto/Manual (-3 dB to +28 dB)
Focus mode	Auto/Manual (Near, Far, One-push, Auto-focus)

### Lens

Type	Auto-focus zoom lens
Zoom ratio	18x optical, 216x with digital zoom
Focal length	f = 4.1 mm to 73.8 mm
Horizontal viewing angle	48° (wide) to 2.7° (tele)
F-number	F1.4 (wide), F3.0 (tele)
Minimum object distance	10 mm (wide), 800 mm (tele)

### System/Network

CPU	32-bit RISC processor
RAM	32 MB (includes 8-MB alarm buffer)
Flash memory	8 MB
Image size (H x V)	736 x 544, 640 x 480, 320 x 240, 160 x 120
Compression	JPEG
Compression ratio	1/5 to 1/60 (10 steps)
Frame rate	Max. 25 fps (640 x 480)
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP, SMTP, DHCP, DNS, NTP, and SNMP (MIB-2)

### Interface

Ethernet	100Base-TX/10Base-T (RJ-45)
PC card slot	1 x PCMCIA Type II
Video output	Analogue composite (1 x BNC), 1.0 Vp-p, 75ohm, unbalanced, sync negative
Sensor in	1
Alarm out	2
Serial interface	RS-232C (transparency function or VISCA protocol)

### Analogue video output

Signal system	PAL
Sync system	Internal
Horizontal resolution	460 TV lines
S/N ratio	More than 50 dB (AGC OFF, Weight ON)
Minimum illumination	0.7 lx (F1.4, 50 IRE, Colour, Slow shutter OFF) 0.01 lx (F1.4, 50 IRE, B/W, Slow shutter OFF)

### General

Power requirements	DC 12 V, AC 24 V, or Power over Ethernet IEEE 802.3af
Power consumption	9 W
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
Mass	800 g (1 lb. 12 oz.)
Dimensions	80 x 77 x 177 mm: (W x H x D)

### System Requirements

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
Display	1024 x 768, true colour or more

### Supplied Accessories

Wire rope, Shoulder screw M4
Installation manual
CD-ROM (setup program and user guide)

## Accessories

### Mounting Hardware

**SNCA-HFIXED**

Outdoor fixed camera housing