

SNC-VL10P
Video Network Camera

CHANGING



THE WAY



BUSINESS



COMMUNICATES

**2AM. WATCHING HIS NEW PRODUCTION LINE.
10,000 MILES AWAY.**

www.sonybiz.net/netstation

CORPORATE COMMUNICATIONS | SURVEILLANCE | VIDEOCONFERENCING
BROADCAST | MEDICAL AND DIGITAL IMAGING | BUSINESS PRESENTATIONS

SONY

ANYWHERE, ANYTIME MONITORING

Building on its expertise in digital video technology, Sony highlights the exciting possibilities of networked video solutions with the introduction of the SNC-VL10P, an IP network camera for the broadband era, incorporating a networking device and a 1/3 Super HAD CCD™. Its first video camera to incorporate a built-in IP (Internet Protocol) server provides significant advantages over traditional camera systems, including easy, flexible installation and a familiar web-browser GUI (Graphical User Interface).

Compatible with a variety of networks such as Ethernet, xDSL, cable modem and PSTN, the SNC-VL10P can stream up to 25 frames per second of high quality colour images that are captured through its integrated varifocal lens. Pictures from the SNC-VL10P can be viewed via a standard web browser or suitable application software running on a PC connected to the network, with no need to install the costly cable runs that are required with traditional analogue video surveillance systems.

Equally suitable for surveillance, remote monitoring and the growing range of "web attraction" applications, the Sony SNC-VL10P Video Network Camera makes "any place, any time" networked video monitoring a reality.

Video monitoring over networks

The camera can be accessed by up to 100 users simultaneously who can monitor live images via a standard web browser such as Microsoft® Internet Explorer or Netscape® Navigator from any online client PC.

Applicable to various kinds of networks

The SNC-VL10P supports connectivity through multiple network interfaces including RJ-45 for Ethernet, cable modem and xDSL. The supported PPPoE/PPP protocol and incorporated USB port for xDSL and PSTN makes it possible to monitor remotely wherever a telephone line is available*.

*USB modem is required.

Easy installation and set-up

Supporting all standard network protocols, installing this camera is easy- simply connect the Ethernet cable to an existing network.

Set-up is quick and simple using the supplied set up programme, which provides easy configuration of IP addresses.

Wavelet compression

The Wavelet format provides high-quality images without block noise or mosquito noise, despite its high-compression rate (1/10 - 1/200). Thanks to the high scalability of Wavelet compression images, the resolution (number of pixels) or picture quality can be changed and a pre-determined part of the image can be enhanced.

Selectable image size

One of the advantages of using Wavelet is that picture size and resolution can be changed on each of the connected client PCs according to user requirements and network bandwidth. Five picture resolutions are selectable: 720 x 576, 720 x 288, 360 x 288, 188 x 144 and 90 x 72. Narrowband users can switch to Monochrome mode. Therefore, while one user can view a colour image with 720 x 576 resolution, another user can view the same image with 360 x 288 resolution in monochrome.

Focus-area setting

Users with high access authority can set a freely-sizeable focus area. This function is especially useful when an important part of a picture needs to be viewed in detail without losing the whole image. The image around the focus area can be set at five different levels according to the degree of masking transparency (including opaque grey). By masking the non-focus area, the file size decreases and creates faster image transmission.

Surveillance, remote monitoring and web attractions
-ideal applications for the SNC-VL10P
Video Network Camera



SNC-VL10P

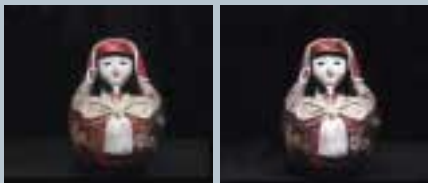


Normal



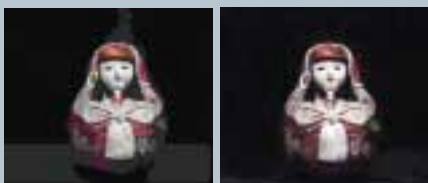
Focus area setting

Comparison between JPEG format and Wavelet format:



JPEG (1/25)

Wavelet (1/25)



JPEG (1/100)

Wavelet (1/100)

Alarm function

The SNC-VL10P is equipped with embedded activity detection, 1 sensor input and 2 sensor output ports, helping to ensure that no critical events are missed. When an alarm is triggered, the following responses are available:

- **Alarm indicator**

An alarm indicator automatically appears in the bottom-right corner of the PC screen to notify of alarm activity.

- **E-mail distribution by SMTP (Simple Mail Transfer Protocol)**

An e-mail message is sent to up to two pre-registered e-mail addresses, with an attached wavelet image (360 x 288 picture resolution) showing the alarm event.

- **Transfer to server by FTP (File Transfer Protocol)**

An image shot at the time of an alarm event is saved and automatically sent to a pre-determined server. You can define up to two servers of your choice.

Pre/post-alarm image storage

Thanks to the 16 MB of RAM embedded in the SNC-VL10P, up to 50 frames of pre-alarm and post-alarm images can be stored at an alarm input. You can define the number of pre-alarm images (up to 25 frames) and the number of post-alarm images (up to 25 frames) to be stored. These images can then be transferred via SMTP to pre-registered IP addresses as an e-mail attachment or via FTP to pre-determined servers. This makes it quick and easy to check what happened both before and after an alarm has been triggered.

Activity detection

The SNC-VL10P features embedded activity detection for unattended operation. When the internal video sensor detects a movement in the live video signal, the SNC-VL10P triggers an alarm and outputs the alarm signal automatically.



Warehouse : surveillance application



Production line : remote monitoring application

High picture quality

The combination of SONY 1/3 type Super HAD CCD and DSP (Digital Signal Processing) means excellent picture quality and high sensitivity.

The camera achieves a maximum picture resolution of 720 x 576 and a minimum illumination of 2.0 lx at F1.4, 50 IRE.

Wide-angle view lens

The SNC-VL10P incorporates a 2.3x Vari-focal lens (f=3.5 to 8.0 mm), which covers a wide viewing angle: 73.9° to 33.8° (H), 56.3° to 25.8° (V). The lens viewing angle, focus and iris are manually adjustable. The supplied lens can also be replaced with other CS-mount lenses – both manual and auto iris lenses are supported.

Simultaneous access for 100 users

Up to 100 people can simultaneously access the SNC-VL10P and monitor images separately.

Easy GUI-based operation

The built-in home page of the SNC-VL10P is designed for easy and quick access to all functions through the Graphical User Interface. The embedded flash memory of 4.5 MB allows you to customise the original GUI to suit your individual needs.

Security management

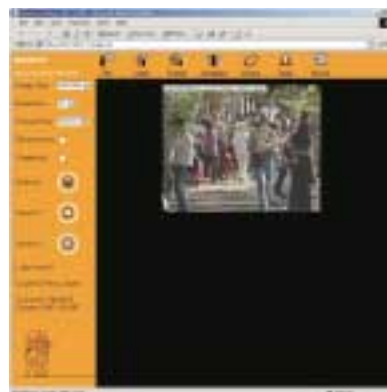
As well as allowing multi-user access, the SNC-VL10P also maintains security, managing access to each camera site with password protection. There are five levels of password settings available. Each user will be assigned one of the following passwords: Administrator, Camera & Sensor, Sensor, Guest (view only). In addition to password protection, the SNC-VL10P also features IP-filtering to allow access only from pre-determined client PCs and image encryption for added security.

Analogue video output

The SNC-VL10P is equipped with a composite video output (PAL) for connection to analogue video equipment allowing you to integrate this camera into existing CCTV systems. Focal adjustment is also simplified because the camera can connect to an analogue video monitor.

RS-232C/485 interface

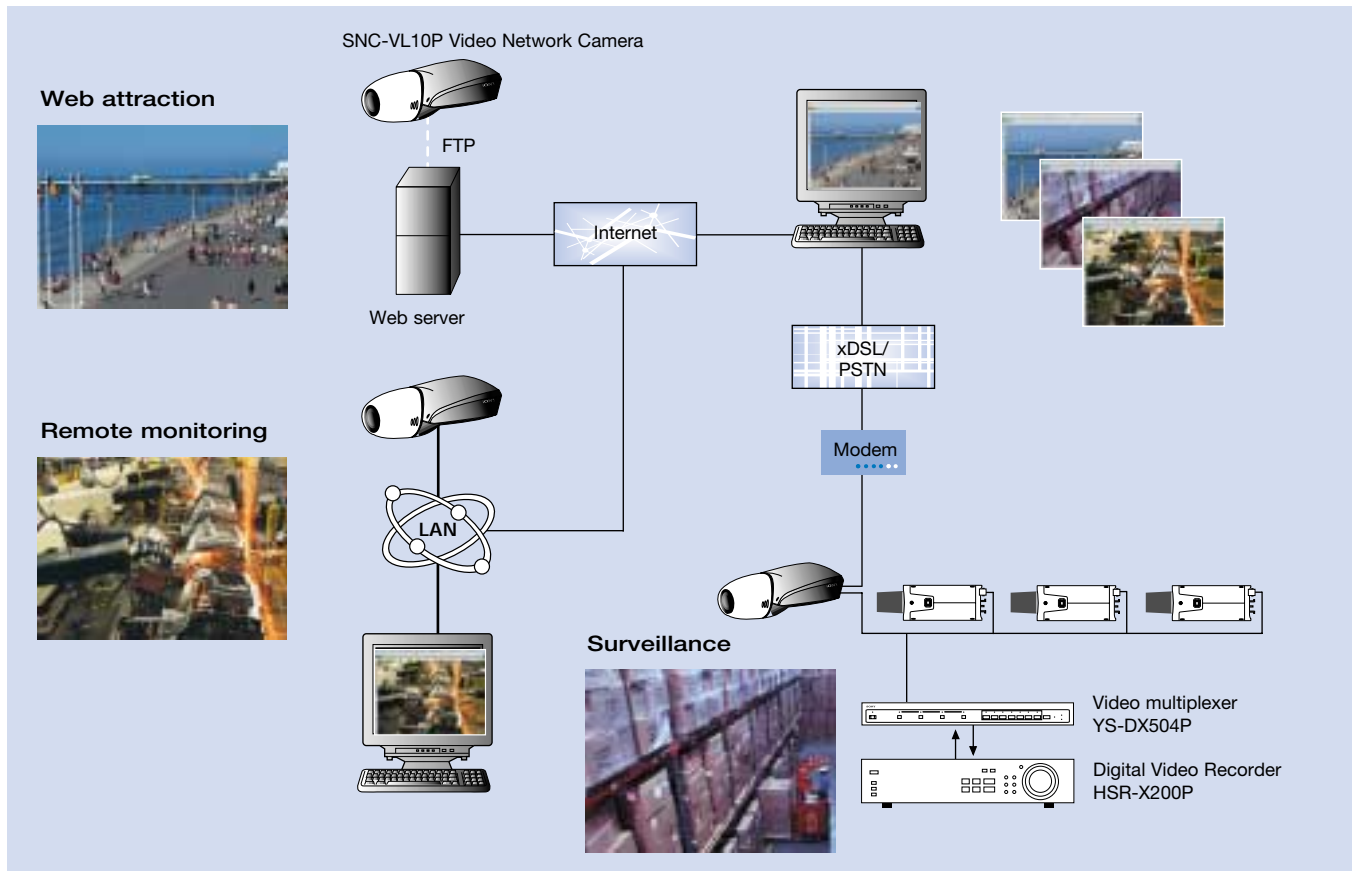
The RS-232C/485 transparent interface allows control of peripheral devices through the SNC -VL10P.



Easy GUI-based operation

SYSTEM CONFIGURATION

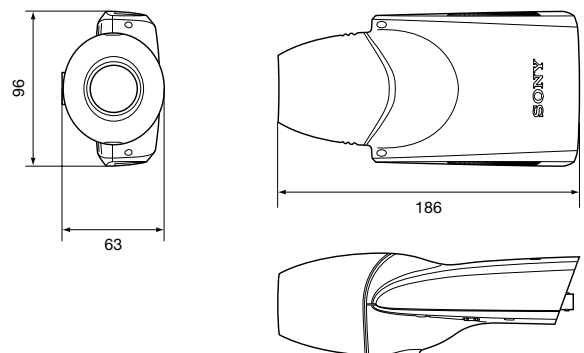
APPLICATION EXAMPLE



Rear Panel



Dimensions (mm)



PIN ASSIGNMENT

1. RS-232C/485



Pin No.	Signal
1	RS232-RXD
2	RS232-TXD
3	GND
4	RS485-A
5	RS485-B

2. SENSOR I/O



Pin No.	Signal	Signal
1	Sensor +	In +
2	Sensor -	In -
3	Sensor1 +	Out1 +
4	Sensor1 -	Out1 -
5	Sensor2 +	Out2 +
6	Sensor2 -	Out2 -
7	GND	GND

3. Auto Iris Lens connector



Pin No.	DC servo
1	Control [-]
2	Control [+]
3	Drive [+]
4	Drive [-] (GND)

SNC-VL10P SPECIFICATIONS

Hardware

CPU	32-bit RISC-Embedded processor
Flash memory	8 MB (Default home page area: 4.5 MB)
RAM	16 MB (Free area 6 MB)
OS	Embedded Linux

Image compression

Algorithm	Wavelet
Rate	10:1 to 200:1 (10 steps)

Performance

Transfer rate	Max. up to 120 fps (with 3 KB image)
Decoding rate	2 to 25 f/s
Local compression rate	Max 25 f/s

System requirements

OS	Web browser
Microsoft Windows® 98/Me/NT/2000	Internet Explorer version 5.0, 5.5 or 6.0 Netscape Navigator version 4.7 or 6.0* ¹
Macintosh/UNIX/Linux	Java Applet-enabled browser* ²

*¹ Only the Java Applet-enabled version 6.0 browser supports the SNC-VL10P

*² The SNC-VL10P may not perform to specifications when using this browser

Security

	Password-based user authentication
	IP-filtering (Secure Mode)
	Image encryption

Camera

CCD	1/3 type Super HAD CCD
Effective picture elements	752 x 582
Sensing area	4.8 mm x 3.6 mm
Horizontal resolution*	480 TV lines
Scanning system*	2:1 interlaced, 625 lines
Signal system*	PAL
Synchronization*	Internal
Output signal*	Standard composite signal 1 Vp-p composite video into 75 Ω
Minimum illumination*	2.0 lx at F1.4, 50 IRE

* In case of analogue output.

CCD iris	1/50 to 1/100,000
S/N ratio	More than 50 dB
AGC	Always on
White balance	ATW

Lens

Type	Vari-focal (focal length: 3.5 to 8.0 mm)
View angle	Wide 73.9° x 56.3° Tele 33.8° x 25.8°
Iris	Manual
Minimum object distance	0.5 m
Mount	CS

General

Dimensions (W x H x D)	96 x 63 x 186 mm (3 7/8 x 2 1/2 x 7 3/8 inches)
Mass	350 g (12 oz)
Power requirement	DC 12 V via AC adaptor (100 to 240 V)
Power consumption	6.8 W
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	-40 °C to +60 °C (-40 °F to 140 °F)
Operating humidity	20% to 80%, Non-condensing
Storage humidity	20% to 95%, Non-condensing

Connectors

	Video Out BNC (1)
	DC 12 V
	10BASE-T Ethernet
	USB modem
	RS-232C/485 (Transparency only)
	Sensor I/O

Supplied accessories

	AC adaptor, AC power cable,
	CD-ROM (containing Set-up program &
	Users manual), Quick reference,
	Cross cable

Sony address/contact details/dealer stamp

SONY®

www.sonybiz.net/netstation

SONY BROADCAST & PROFESSIONAL EUROPE

SONY IS A REGISTERED TRADEMARK OF THE SONY CORPORATION, JAPAN.

CA SNC-VL10P/GB-10/06/2002