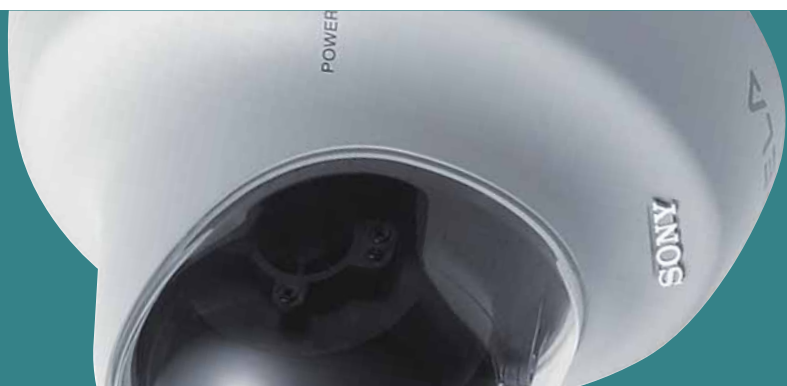**SONY**®

Changing your point of view…

IPELA
INTEGRATED VISUAL COMMUNICATION

SNC-P5®
Sony Network Camera

www.sonybiz.net/networkvideo

To meet the growing demand for high quality,

affordable remote monitoring systems, Sony has introduced a new addition to its line-up of Network Cameras – the SNC-P5. Incorporating a built-in web server and a network interface this camera allows users to control cameras and monitor images from a networked PC running a standard web browser, with no need for any additional software. Supporting both JPEG and MPEG-4 compression formats, the camera provides high-quality still images and smooth moving images, even when bandwidth is limited, responding to your application demands and network environment. The camera's pan/tilt feature offers wide area coverage, providing efficient monitoring with a single unit.

What's more, the SNC-P5 incorporates an optical zoom lens, enabling users to monitor small or distant objects with exceptional clarity.

The SNC-P5 is packed with convenient features such as a built-in Compact Flash™ (CF) Type card slot, wireless capability[*1], audio monitoring, and alarm functions. Boasting a compact and unique body, the SNC-P5 is an ideal choice for monitoring applications both indoors and outdoors,[*2] providing remote video and audio monitoring, webcasting and more.

*1 The optional SNCA-CFW1 Wireless Card is required.
*2 The optional SNCA-HP5 Housing Kit is required for use in an outdoor environment.

IPELA

Stunning video and audio brought to you by "IPELA" fashions the novel reality for the modern business person. Sharing ideas and dreams as if you are collocated when your counterpart is half-way around the world, experiencing images as if you are actually there, this is "IPELA". Real audiovisual communication over networks – this is business communication of the future, brought to you today. This is "IPELA".

SONY

SNC-P5

The SNC-P5 represents a cost-effective solution for a broad range of remote monitoring applications – combining state-of-the art technology, great functionality and sleek design in one powerful plug & play package.

MPEG-4 PAN TILT ZOOM NETWORK CAMERA

■ Wide Area Coverage with a Single Unit

■ Monitor Small or Distant Objects with Exceptional Clarity

■ Built in Web-Server Allows Viewing and Control from a Standard Web Browser

Features

Viewer

3 x Optical Zoom (simulated images)

■ All-In-One Network Camera

The SNC-P5 includes a built-in web server and a 100Base- TX/10Base-T network interface, allowing users to configure the unit in any TCP/IP network. Just connect the cameras to a network and access the images from a remote location on a PC running a standard web browser. No additional software is required.

■ Pan/Tilt/Zoom Capability

The SNC-P5 is pan/tilt-capable with a pan range of 120 degrees and a tilt range of 75 degrees allowing users to monitor a relatively wide viewing area with a single camera. What's more, the SNC-P5 employs a 3x optical zoom lens, enabling users to zoom in on small or distant objects with clarity.

■ Selectable MPEG-4 or JPEG Compression

The SNC-P5 supports both MPEG-4 and JPEG compression formats. The high-compression ratio of MPEG-4 provides smooth moving images over networks, even when bandwidth is limited. If higher quality still images are preferred, then the industry standard JPEG compression format is selectable. The SNC-P5 also supports variable bit rates up to 2Mbps. The image size can be selected from six modes to meet your network environment and application requirements.
Image size: 640 x 480 ; 480 x 360 ; 384 x 288 ; 320 x 240 ; 256 x 192 ; 160 x 120.

■ High Frame Rate

The SNC-P5 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, providing 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.

■ Audio Monitoring

Incorporating a built-in microphone and an external microphone input, the SNC-P5 allows for audio as well as video monitoring. The use of an external microphone greatly enhances the ability to pickup the desired sound from the preferred location. The unit is also equipped with a speaker output, enabling users to 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-P5 employs an adaptive rate control function. This automatically varies the video bit-transfer rate to meet changing network conditions and selects the most appropriate frame rates, preventing audio and video breakup.

SIMULTANEOUS ACCESS
Up to 20 users in JPEG mode (10 users in MPEG-4 mode) can simultaneously access the SNC-P5 and monitor images separately.

MULTICASTING
The SNC-P5 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.

■ Network Security Features

IP FILTERING
With IP filtering, access to the SNC-P5 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. The other three levels of access can be set to limit user privileges to functions such as PTZ control, viewing, and trigger control.

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

A built-in expansion slot for CF cards is integrated into the SNC-P5, enabling you to store additional images on CF media as required. In addition, the SNC-P5 supports the SNCA-CFW1 Wireless Card, which is IEEE 802.11b compliant; just insert the card into the slot and the camera can be configured in a wireless network.

■ Flexible Installation

The SNC-P5 provides flexible installation to meet your specific application needs, it can be wall-mounted, ceiling-mounted, or placed on a desktop using the supplied camera stand.
What's more, with the optional SNCA-HP5 Housing Kit, the SNC-P5 can be used in an outdoor environment, expanding your monitoring applications.
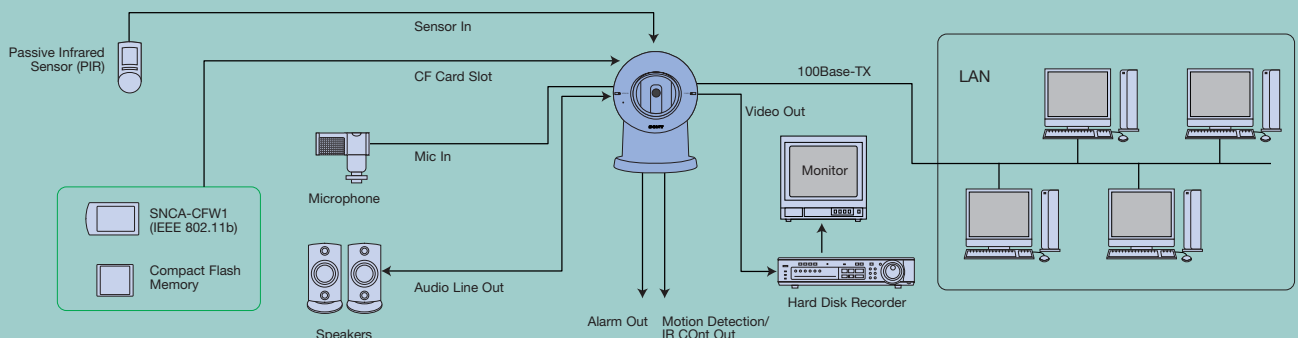
System Configuration.

Passive Infrared Sensor (PIR)

Sensor In

CF Card Slot

SNCA-CFW1 (IEEE 802.11b)

Compact Flash Memory

Microphone

Mic In

Speakers

Audio Line Out

Alarm Out   Motion Detection/ IR COnt Out

Video Out

100Base-TX

LAN

Monitor

Hard Disk Recorder

Rear panel

Wall-mounted

Ceiling-mounted

■ Alarm Functions

MOTION DETECTION*4/ALARM TRIGGER
The SNC-P5 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-P5 is equipped with a sensor-input port that can receive a trigger from an external sensor.

*4 Motion detection function can be used when a monitoring image is set to a MPEG-4.

PRE-/POST-ALARM IMAGE STORAGE
With its built-in buffer memory, the SNC-P5 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*5
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. Furthermore, a still image at the time of an alarm event can be sent to a designated e-mail address.

*5 All transferred images are in JPEG format. MPEG images are converted to JPEG before being transferred.

■ Analogue Composite Video Output

The SNC-P5 can output an analogue composite video signal via the BNC connector. This feature is ideal for sending signals to a local recording device or monitor.

■ User-Friendly Controls

Camera settings, controls, and monitoring can be easily accomplished with a user-friendly graphical user interface (GUI) on the PC monitor.
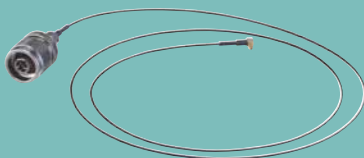
Optional Accessories.

SNCA-AN1
WIRELESS LAN ANTENNA
(Optional accessory for the SNCA-CFW1 Wireless card)

SNCA-CFW1
WIRELESS CARD

SNCA-HP5
HOUSING KIT
(Not shown)

SONY®

SNC-P5 Specifications

CAMERA

Image device	1/4-type progressive scan CCD
Number of effective pixels (H x V)	659 x 494 (330K)
Focal length	f = 3.4 to 10.2 mm
F-number	F2.8 (wide) to 3.9 (Tele)
Minimum object distance	40 cm (wide end), 140 cm (Tele end)
Pan angle	-60 to +60 degree
Tilt angle	-65 to +10 degree
Other functions	Motion Detection

IMAGE

Image size (H x V)		
	MPEG-4 mode	640 x 480, 480x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120
	JPEG mode	640 x 480, 480x 360, 384 x 288, 320 x 240, 256 x 192, 160 x 120
Compression format		MPEG-4,/JPEG (Selectable)
Maximum frame rate		
	MPEG-4 mode	Max. 30 f/s (320x240)
	JPEG mode	Max. 30 f/s (320x240)

AUDIO

Compression format	G.711 (64 kb/s)/G.726 (40,32,24,16 kb/s)
Built-in Microphone	Electret condenser microphone

NETWORK

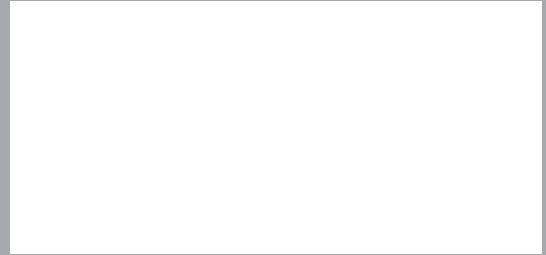|		
Protocols		TCP/IP, ARP, ICMP, DHCP, DSN, HTTP, FTP, SMTP, NTP, SNMP (MIB-2), RTP/RTCP, PPPoE
Number of clients		
	MPEG-4 mode	10
	JPEG mode	20

INTERFACE

Ethernet	100Base-TX/10Base-T (RJ-45)
Card slot	Compact Flash (for SNCA-CFW1 IEEE802.11b Wireless Card or compact flash memory card)
Analogue video output	Mini-jack (1.0 V p-p, 75 Ω , Sync negative)
External Microphone input	Mini-jack, 2.2 kΩ , unbalanced (RCA), 2.5 V plug-in power
Audio line output	Mini-jack, (mono), max output level: 1 Vrms

ANALOGUE VIDEO OUTPUT

Horizontal resolution	400 TV lines
S/N ratio	48 dB
Minimum illumination	3.5 lx (AGC ON, 30IRE)

GENERAL

Mass	Camera: approx. 380 g (13 oz) Stand: approx. 360g (13 oz)
Dimensions (W x H x D)	Camera: 130 x 130 x 110 mm (5 ⅛ x 5 ⅛ x 4 ⅜ inches) Stand: 130 x 178 x 142 mm (5 ⅛ x 7 ⅛ x 5 ⅝ inches)
Power requirements	DC 12 V
Power consumption	6.2 W
Operating temperature	0 to +35 °C (32 to 95 °F)
Operating humidity	20 to 80 %, Non-condensing
Storage temperature	-20 to +60 °C (-4 to +140 °F)
Storage humidity	20 to 95 %, Non-condensing

System Requirements

OPERATING SYSTEM AND WEB BROWSER

Operating system	Microsoft® Windows® 2000/XP
Processor	CPU : Intel® Pentium® IV, 1 GHz or higher
Memory	RAM : 256 MB or more
Web browser	Internet Explorer Ver. 5.5 or 6.0

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