## **Product Information**





## **SNC-DS60**

Network mini-dome camera with ExwavePRO technology.

The SNC-DS60 is a network mini-dome camera that incorporates a 1/4-type progressive scan CCD with ExwavePRO technology.

### **Features**

#### Progressive Scan CCD With ExwavePRO Technology

The SNC-DS60 incorporates advanced progressive scan CCDs with ExwavePRO technology. The camera inherits the technical advantages of Sony ExwaveHAD technology, while incorporating progressive scanning and complementary color filters to provide extremely high sensitivity levels and clear, crisp images in both daytime and nighttime environments. Complementary color filters are well suited in cameras used for security applications because the luminance signal-to-noise ratio is higher than when using primary color filters. The minimum illumination is 0.3 lx in color at F1.3.

#### JPEG Picture Quality Settings With Constant Bitrate Algorithm

Users can preset the JPEG picture quality for the camera from a choice of ten levels. In addition, because the camera incorporates a constant bitrate algorithm, it can limit the data bitrate while still maintaining high-quality images. This is useful for calculating the required storage capacity and bandwidth during installation.

#### **Variable Gamma Settings**

Users can choose from six preset gamma curves. By selecting a gamma curve that is appropriate for a given scene, captured images can be reproduced clearly and sharply.

# Powerful Vari-focal Zoom Lens/Wide Viewing Angle

These cameras come equipped with a powerful vari-focal zoom lens. The SNC-DS60 incorporates a 3.6x zoom lens. In addition, the camera has an extremely wide viewing angle of over 100 degrees.

#### **Ball-Joint Lens Mount Technology**

With the Sony patented Ball-Joint Lens Mount mechanism incorporated into the vari-focal lens of the camera, the lens can be rotated freely in any direction. Unlike conventional camera, it takes only one action to adjust the pan and tilt angles, allowing for quick and easy adjustment of the camera's viewing angle.

## Selectable JPEG and MPEG-4 Compression Formats

The camera supports two compression formats: JPEG and MPEG-4. The industry-standard JPEG compression format is the best choice for highquality still images. And the MPEG-4 format provides clear moving images efficiently over networks when bandwidth is limited.

#### **Dual-encoding Capability**

With a dual-encoding capability, the camera can generate both JPEG and MPEG-4 images simultaneously at 30 fps when the image size is set to VGA. This capability is useful for transferring MPEG-4 images over a WAN or an Internet VPN where network bandwidth is limited, while also storing high-resolution JPEG images on a LANbased server.

## SONY

#### The DEPA Platform - Intelligent Video Analytics

The SNC-DS60 offers intelligent video analytics, based on the Sony DEPA platform. DEPA is a combined function of the intelligence built in to the camera and rules/filters that determine which images should be recorded or when an alarm should be triggered. Using the network camera Intelligent Motion Detection (IMD) function, 'tagged' objects and their associated metadata, including object position, are sent either to the NSR Series recorder or the IMZ-RS400 Series software. These products then use the metadata, together with filters, to analyze object movement and to perform a predefined action, such as image recording or alarm triggering. This method of distributed processing minimizes server workload, network bandwidth, and storage requirements.

#### **Intelligent Motion Detection**

The built-in IMD function can trigger a variety of actions, such as the storage and transfer of images or the activation of an external device through its output relays. False alarms caused by noise and repeated motion patterns are minimized thanks to an advanced Sony algorithm. Plus, when used in conjunction with DEPA-enabled recorders or software, a multitude of filter functions are available. These allow you to initiate alarms based on more specific movements, such as passing a virtual borderline.

#### **Compact, Ruggedised Design**

The vandal-resistant SNC-DS60 camera is housed in a heavy-duty, aluminium die-cast enclosure with an impact-resistant polycarbonate dome. It complies with the IP66 standard for protection against water and dust. In addition, with a built-in heater, the camera can be used in severe temperatures as low as -30 °C (-22 °F). Also, because of its compact size of only 166 (W) x 119 (H) mm (6  $5/8 \times 4 3/4$  inches), the camera can be easily installed in places where space is limited.

#### **Day/Night Function**

The SNC-DS60 can switch from day mode (colour) to night mode (B/W) by replacing their infraredcut filter with a clear filter. Based on user presets, the camera can toggle between day mode and night mode using an external sensor or automatically in response to surrounding light conditions. The camera can simultaneously switch to night mode and provide a trigger for near-IR illuminators via its external control port, allowing it to operate even in zero lx conditions.

### **Benefits**

#### Wall- or Ceiling-mountable

For installation flexibility, the camera can be mounted easily on either a wall or ceiling using the supplied bracket.

#### **Easy Viewing Angle Adjustment**

An analog composite output (RCA jack) is provided on the front of the camera so a monitor can be connected. This allows installers to monitor images during installation for quick and accurate adjustment of the viewing angle.

#### **Quick Focus Adjustment**

The iris on the camera can be fully opened at the touch of a button for quick focus settings. In addition, a focus bar is displayed on the monitor, enabling accurate and easy adjustments.

#### **Bi-directional Audio**

Users can connect an external microphone or an audio amp to the camera using the mic/line input (switchable). In addition, the camera is also equipped with an active speaker output, enabling users to sound an alert or make an announcement from the camera unit via a remote location. This significantly expands the possibilities of monitoring applications.

#### **Voice Alert**

The Voice Alert function allows users to upload up to three pre-recorded audio files to the camera. These can then be played out via a locally connected speaker upon an alarm trigger.

#### Sensor IN/Alarm OUT Ports

Equipped with a sensor input, the camera can receives triggers from an external sensor. Also, two alarm relay outputs can be used to trigger external devices to perform a variety of actions.

#### IEEE802.1X Compliant

The camera supports IEEE802.1X port-based network access control. This means it can be integrated to a network environment that uses the IEEE802.1X client-authorization protocol for security purposes.



#### **Date/Time Superimposition**

The date and time of images recorded by the camera can be superimposed on the video while it is being monitored and recorded. This makes it easy to identify the exact date and time of an event during playback. Also, because the information becomes part of the video image, it is a useful feature when providing video evidence to authorities. In addition, up to 20 characters on a single line can be used to display further information such as the monitoring location and the camera name.

#### **Privacy Zone Masking**

The camera can mask up to seven unwanted or prohibited areas within an image for privacy protection.

### **Technical Specifications**

#### --Camera--

	Image device Number of total pixels Number of effective pixels (H x V) Electronic shutter Automatic gain control (AGC) Exposure control White balance modes Lens type Zoom ratio	<ul> <li>1/4-type Progressive Scan CCD with ExwavePRO Technology</li> <li>Approx. 350,000</li> <li>Approx. 330,000 (659 x 494)</li> <li>1 to 1/10,000 s</li> <li>On/Off (0 dB to +36 dB)</li> <li>Auto, Backlight compensation, Gamma settings</li> <li>ATW, ATW Pro</li> <li>Vari-focal lens</li> <li>3.6x optical zoom (2x digital zoom)</li> </ul>
	Horizontal viewing angle Focal length F-number Minimum object distance	73 to 20° f=2.8 to 10.0 mm F1.3 (wide), F3.0 (tele) 300 mm
-Image		
	Image size (H x V) Maximum frame rate	JPEG: 768 x 576, 640 x 480, 384 x 288, 320 x 240 MPEG-4: 640 x 480, 384 x 288, 320 x 240 30 fps (640 x 480)
-Audio		
	Audio compression	G.711/G.726 (40, 32, 24, 16 Kb/s)
-Network		
	Protocols Number of clients Authentication	TCP/IP, HTTP, ARP, ICMP, FTP, SMTP, DHCP, SNMP, DNS, NTP, RTP/RTCP, UDP 10 IEEE802.1X
	Interface	
1	Ethernet	10Base-T/100Base-TX (RJ-45)
	Analogue video output I/O port	BNC x1, 1.0 Vp-p, 75 ohms, RCA x 1 Sensor in x 1, Alarm out x 2
	External microphone input/ Line input Audio line output	Mini-jack x1 (Mic in: monaural, 2.2 k ohms, DC 2.5 V plug-in power, Line in monaural) Mini-jack (monaural), max output level: 1 Vrms
	Audio inte output	mini-jack (monaural), max output level. 1 vims

**Analogue Composite Video Output** 

storing images to a local recorder.

ation fast and effective.

An analogue composite video signal can be output

via the BNC connector. This feature is ideal for

24 V AC, 12 V DC, or PoE Operation

The camera offers a choice of three types of

power: 24 V AC, 12 V DC, or PoE (Power-over-

Ethernet, IEEE 802.3af). They automatically adapt

to whichever power source is used, making install-



#### --Analogue video output--

Horizontal resolution S/N ratio Minimum illumination 400 TV lines more than 50 dB Color: 0.3 lx (50IRE, F1.3, AGC 36dB) B/W: 0.05 lx (50IRE, F1.3, AGC 36dB)

#### --General--

Mass Dimensions (W x H) Power requirements Power consumption Operating temperature Storage temperature approx. 1.4 kg (3 lb 1 oz) approx. 166 x 119 mm (6 5/8 x 4 3/4 inches) PoE (IEEE-802.3af)/AC 24 V/DC 12 V 15 W max. -30 to 50 °C (-22 to 122 °F) -20 to 60 °C (-4 to 140 °F)

#### --System requirements--

Operating system Processor Memory Web browser Microsoft Windows VISTA or Microsoft Windows XP Intel Pentium IV, 2.4 GHz or higher, Intel Core2 Duo, 1.8 GHz or higher RAM: 1 GB or more Microsoft Internet Explorer Ver. 7.0/6.0