SONY

SNC-HM662

360-degree Hemispheric-view
Camera with a 5-megapixel
CMOS Sensor

Overview

Capture an uninterrupted 360-degree view with clear detail from the 5 megapixels CMOS sensor

The SNC-HM662 IP network camera provides an uninterrupted 360-degree hemispheric field of view. It's an ideal 'overview camera' solution for keeping a watchful eye over a wide range of indoor and outdoor environments – from lobbies, waiting rooms and retail spaces to car parks, campuses and commercial buildings.

While ordinary fisheye lenses are commonly used for 360-degree wide-angle coverage, image quality is seriously degraded at the edge of the picture. The SNC-HM662 takes a radically different approach, using a unique panomorph lens by ImmerVision to capture a true hemispherical view with no blind spots. Video footage from the 5 megapixels sensor is crisp and clear right to the edge of the picture, with a frame-rate up to 13fps.

The resulting 360-degree image can be automatically 'dewarped' to give a clear, undistorted view via Sony's web browser client or a VMS (video management software) client application. Electronic pan/tilt/zoom (ePTZ) allows quick navigation to any part of the camera's field of view for a closer look.

The client applications offer a variety of view modes. These

include the camera's original 360-degree hemispheric view, as well as multiple simultaneous views produced from the same hemispheric image including a 180-degree panoramic view, quad view and 9-way split-screen.

Even when one part of the scene is being reviewed in close-up on a client, the camera continues to stream the whole image to the recording platform. After recording, footage of the whole area can be re-examined. The operator has the same flexibility in play-back as in live-view, to zoom in on any part of the 360-degree scene for a closer look.

Further refinements offered by the SNC-HM662 include two-way audio with a built-in microphone. Power over Ethernet (PoE) helps with simpler installation, while edge storage allows 'no network' recording to a removable memory card. Capable of operating over a wide -30C to +50C temperature range, the SNC-HM662 is also IP66 & IK10 rated for water and impact resistance, making it particularly suitable for use in outdoor applications.

Features

High resolution 5 megapixels images with 360-degree hemispheric view

The panomorph lens from ImmerVision captures a high-resolution 360-degree hemispherical real-time view with no blind spots. With a resolution of 5 megapixels, video images remain crisp and clear right to the edge of the picture.

Advanced dewarping technology for immersive monitoring

Advanced dewarping technology corrects for distortion of hemispheric images, producing rectangular images with video management software (VMS). Image quality is far higher than using conventional fisheye lenses: this avoids image degradation typically caused by camera processing limitations during the

dewarping process.

Solid PTZ
Navigate rapidly to any part of the scene with digital pan, tilt, and zoom (ePTZ) of the 5 megapixels image for a closer view of what's happening, while recording of the whole 360-degree scene continues uninterrupted.

A variety of view modes via client applications
Alongside the camera's original 360-degree hemispheric view, select from multiple simultaneous images including 180-degree panoramic view, quad view and 9-way split-screen that includes the original camera view surrounded by 8 other regional images.

Better pictures, day or night
True Day/Night function automatically switches the camera between Day (colour) and Night (B/W) modes, depending on light levels. This increases sensitivity and allows use of IR illumination thanks to the IR corrected lens.

Recording quality to suit your network
Select CBR (constant bitrate), VBR (variable bitrate) or VBR-with-cap compression modes for optimised recording quality depending on IP network conditions, plus G.711/AAC (32 kHz, 44.1 kHz) audio codecs for high-quality recording.

Automatic edge recording to memory card
Edge Storage allows recording of video and audio directly to an optional micro SD card for later analysis.

IK10-rated anti-vandal resistance
Protects the camera from unwanted tampering and destructive behaviour.

IP66-rated water-resistant and dust-tight
The camera is ideal for indoor use as well as outdoor locations where dust and water ingress may be encountered.

Wide operating temperature range

Ideal for use in summer heat or freezing conditions, the camera can operate reliably over a wide -30C to +50C temperature range.

Built-in microphone and audio output

Capture crisp, clear audio to hear exactly what's happening in the camera's vicinity. An optional speaker can also be added via the camera's audio output for playback of recorded announcements or two-way communication with an operator.

Multiple video and audio codecs

For easy integration with a range of VMS solutions the SNC-HM662 supports H.264 (High/Main/Baseline Profile) /JPEG video codecs and G.711/AAC (32 kHz, 44.1 kHz) audio codecs. This provides compatibility and choice to suit many applications.

Easy IP network configuration

Configuration of network settings is made quick and simple using the supplied SNC Easy IP Setup Guide application.

ONVIF (Open Network Video Interface Forum) compliance

Support for ONVIF Profile-S simplifies integration with a wide range of VMS platforms and hardware, providing video streaming and camera control. ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices, including automatic device discovery and video streaming.

Specifications

Camera	
Image Sensor	1/2.5-type progressive scan CMOS sensor

Number of Effective Pixels	Approx. 5 Megapixels
Minimum Illumination (50 IRE)	Color: 0.7 lx (F2.0, AGC ON, 1/30 s, 10 fps) B/W: 0.3 lx (F2.0, AGC On, 1/30 s, 10 fps)
Minimum Illumination (30 IRE)	Color: 0.4 lx (F2.0, AGC On, 1/30 s, 10 fps) B/W: 0.1 lx (F2.0, AGC On, 1/30 s, 10 fps)
S/N Ratio (Gain 0 dB)	More than 60 dB
Gain	Auto
Shutter Speed	1/5 s to 1/32,000 s
Exposure Control	Exposure compensation, Shutter speed
White Balance	ATW, Manual
Lens	Fixed lens
Zoom Ratio	Digital zoom 12x Total zoom 12x
Horizontal Viewing Angle	182°
Vertical Viewing Angle	182°

Focal Length	f = 0.98 mm to 1.12 mm
F-Number	F2.0
Minimum Object Distance	500 mm
Number of Preset Positions	20
Number of Tour Programs	1

Camera Features

Day/Night	True D/N
360°Hemispheric/180°Panoramic View Modes	Yes/Yes (total view modes: 11) *1
Auto-rotation Mode	Yes
e-Flip	Yes
Wide-D	Yes
Tone Correction	Global Tone Mapping
Privacy Masking (number)	5
Privacy Masking (shape)	Quadrangle formed by any four corner points

Privacy Masking (color/effect)	Opaque 1 colors (Black)
Edge Storage	Yes
Vandal Resistant	IK10
Ingress Protection	IP66
Superimpose Language	English
Menu Language	English, Japanese, Chinese (simplified), Chinese (traditional), French, Spanish, German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai

Video

Resolution	2560 x 1920, 2048 x 1536, 1600 x 1200, 800 x 600, 640 x 480 (Fisheye mode: H.264, JPEG) 1920 x 1080, 1600 x 904, 1360 x 768, 1280 x 720, 640 x 360 (1080p mode: H.264, JPEG)
Compression Format	H.264 (High/Main/Baseline Profile), JPEG

Maximum Frame Rate	H.264: 10 fps (2560 x 1920)/30 fps (1920 x 1080) JPEG: 13 fps (2560 x 1920)/30 fps (1920 x 1080)
Bitrate Control Mode	CBR/VBR (selectable)
Range of Bit Rate Setting	20 Kbps to 16 Mbps
Image Cropping	1920 x 1080
Solid PTZ	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi streaming Capability	Yes (3)
Number of Clients	10

Intelligent Video/Audio Analytics

Intelligent Motion Detection	Yes
Tamper Alarm	Yes

Audio

Compression Format	G.711/AAC (32 kHz, 44.1 kHz)

System Requirements

Operating System	Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows 7 (32/64 bit) Ultimate, Professional Edition Windows 8 Pro (32/64 bit)
Processor	Intel Core7 2.8 GHz or higher
Memory	2 GB or more
Web Browser	Microsoft Internet Explorer Ver. 8.0, Ver. 9.0, Ver 10.0 (32 bit)
SNC toolbox	Yes

Network

Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, SMTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL
Number of IP Address/Mac	1

ADDRESS	
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE802.1X

Interface	
Microphone Input	Built-in Microphone/External MIC-IN
Line Input	Mini jack (monaural)
Line Output	Mini jack (monaural) Maxium output level: 1Vrms
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x1, make contact, break contact
Alarm Output	x1, 24V DC, 0.5A (electrical switch outputs. Isolated by photo coupler)
Card Slots	micro SD x1

Confirmed SD Card Type	microSDHC (no support for microSDXC)

General

Power Requirements	IEEE 802.3af compliant (PoE system), DC 12V±10%
Power Consumption	6.0 W max.
Operating Temperature	-30 °C to +50 °C -22°F to +122°F
Cold Start Temperature	-20 °C to +50 °C -4°F to +122°F
Storage Temperature	-25 °C to + 60 °C -13 °F to + 140 °F
Operating Humidity	20 % to 90 %
Storage Humidity	20 % to 95 %
Dimensions *2	Φ145 mm x 54 mm (without mounting plate) Φ5 3/4 inches x 2 1/4 inches (without mounting plate) Φ147 mm x 70 mm (with mounting plate) Φ5 7/8 inches x 2 7/8 inches (with mounting plate)

Mass	Approx. 640 g (without mounting plate) Approx. 1 lb 7 oz (without mounting plate) Approx. 716 g (with mounting plate) Approx. 1 lb 9 oz (with mounting plate)
External Material	Clear Dome cover: PC Top cover: AL Die-cast Top cover ring: PC Camera base: AL Die-cast Mounting plate: AL Die-cast
External Color	Top cover: Black Top cover ring: White Camera base: White Mounting plate: White
Fire Retardant	UL94HB
Safety Regulations	JATE Technical standard (LAN) UL2044, IEC60950-1 （CB） VCCI Class B, FCC Class B, IC Class B, Emission: EN55022 (Class B) + EN50130-4 Immunity: EN55022 (Class B) + EN55024,

	Emission: AS/NZS CISPR22 (Class B) KCC EAC (GOST-R)
Supplied Accessories	Mounting plate (1) I/O cable (1) Alignment sticker for camera base (1) Alignment sticker for mounting plate (1) Screw driver (1) Desiccant bag (1) Double-sided tape (1) Rubber seal plug (1) Rubber washer (1) Screw (for mounting plate) (1) Installation Manual (1) Warranty card (1) Safety regulations for network camera (1) CD-ROM (supplied program) (1)
Optional Accessories	UNI-MDPHM (Mount Dome Pendant shroud for Hemispheric Mini dome)

Notes

*1	11 view modes are available with an ActiveX viewer on Internet Explorer.
*2	The values for dimensions are approximate.

Related products

UNI-MDPHM

Pendant Mount Adaptor for SNC-HM662 Hemispheric-view Camera

![SONY]

Gallery