

SONY
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Designed for security.

Sony Professional
Video Security
Product Catalogue.

VERSION 7

**IPELA
ENGINE**

www.pro.sony.eu/videosecurity

The future of video security is here.

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- Go HD**
 Install Sony HD and Full HD cameras for high quality IP surveillance.
- Go Migrate**
 Migrate from analogue to IP with hybrid recording solutions.
- Go Advance**
 Advance your capabilities. Forward thinkers use the number one software choice.
- Go Capture**
 You can capture everything with Sony Professional surveillance cameras.
- Go Convert**
 Convert your video security network with intelligent encoder solutions.



At Sony we understand that every site is different, every user has different requirements and every installer has different needs. Some sites are analogue and some are IP, some are a combination of both and some sites simply have nothing at all. The one thing which remains consistent is the demand for high quality, cost effective surveillance solutions.

Sony has an impressive background in both analogue and IP technologies, and is very confident of its expertise in capturing the best possible image. As the industry moves more and more towards IP, Sony builds on its heritage by releasing cutting edge HD and Full HD cameras, whilst also developing a full range of encoders and hybrid recorders.

HD and Full HD cameras are increasingly being installed as the preferred format for high quality IP surveillance. As this demand grows, so too does the need for innovative and value added features. To satisfy this demand, Sony has introduced such features as View-DR, XDNR, Visibility Enhancer, DEPA and Adaptive IR which are now seen as vital and take the IP video surveillance industry "Beyond HD".

At Sony, we believe that selecting a camera designed for security focuses on three key points to satisfy the demand for clarity - Sensitivity, Wide Dynamic Range and Resolution.

Sensitivity

Simply speaking, crime typically happens at night or when lighting conditions are at their worst. For this reason, Sony has focused its efforts on designing sensors that can operate in extremely low lighting conditions and have introduced a range of cameras with features such as, True Day/Night, Adaptive IR, XDNR and Visibility Enhancer. These cameras all present the best possible picture – sharp, clear and free from motion blur.

Wide Dynamic Range

For many years, installers have often located cameras pointing them in directions not preferred by the end user, but trying to find a compromise between the location of camera born from a security requirement and what can actually be seen from its output. To solve this, Sony introduced View-DR, the best wide dynamic range technology in the industry at 130db.

Resolution

Finally, there is a need for a camera that not only gives the clarity, but also has the resolution to be able to see the detail required. Be it a wide area of surveillance for an excellent overview of a site, or a much more narrowed field of view for facial or number plate registration.

Building on this need for clarity, Sony's new range of video security cameras offer significant picture quality enhancements to present images better than the human eye can visualise.



IFSEC2011
 SECURITY INDUSTRY AWARDS
FINALIST
 SNC-ER550 & SNC-ER580



View-DR technology from Sony offers an extremely wide dynamic range.



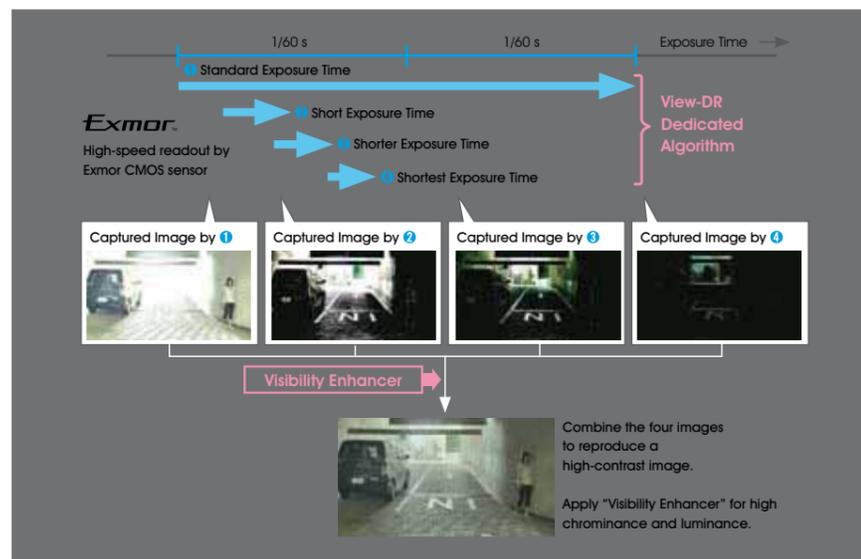
Brilliant clarity even with strong backlighting

View-DR is one of Sony's strongest and most powerful features. Combining the power of our new Exmor CMOS sensor with Visibility Enhancer, we bring you the industry's best-in-class wide dynamic range at 130db.

Real time, within the camera, we can take up to 120 pictures per second. Four of these pictures, each taken with a different exposure time, are then combined using a complex algorithm. Visibility Enhancer is then applied to enhance the colour tones and brightness further.

As can be seen from the examples shown below, this feature is invaluable in scenes which suffer from strong backlighting. Typically installers would choose between repositioning the camera away from the back lighting, or adding artificial lighting to those areas that have been made dark. For the end user this is not the best solution, they need a camera which can be installed anywhere and gives them brilliant picture quality in all lighting conditions, all year round.

Using this technology will not introduce motion blur and does not limit the camera's frame rates or resolution. You will still be able to encode HD video at full frame rate and can even dual stream too.



One image is taken using a standard exposure time and either one or three images are taken using very short exposure times, depending on the camera type. (This illustration shows one standard exposure time and three very short exposure times.)



View-DR is realized in the latest Wide-D technology, the Exmor CMOS sensor with a high-speed readout capability, and adaptive image enhancement with a Visibility Enhancer feature. Sony cameras with View-DR function can reproduce the details of objects and backgrounds, even in high-contrast conditions.

Visibility enhanced wide Dynamic Range



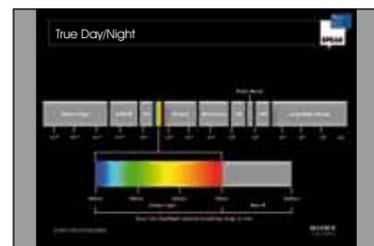
IR Illuminator.

Low visibility in dark scenes is one of the greatest challenges of HD and megapixel cameras within the video security industry, with the dilemma of high resolution or high sensitivity. With the new range of Sony IP Surveillance cameras with built in IR Illuminators, you can now have both.

Designed to work in zero lux, these cutting-edge cameras offer a significant improvement in sensitivity and clarity over rival IP and analogue cameras.

Using Sony Exmor sensors and embedded infrared LEDs, the sensitivity of the camera is maximised and, with the introduction of semi-covert IR light, distinguishing details can be identified at a distance of 15 metres without generating excessive light pollution or experiencing motion blur.

Combining the camera with the IR LEDs has a number of significant benefits. Installation time is drastically reduced while ensuring the quality of the install is maximised. Using PoE, the cost of the install can greatly be reduced as there is no need to install separate power for the camera or external IR lamp. The IR Illuminators will activate automatically when the camera detects the lighting conditions have dropped and the mechanical IR cut filter will be removed to maximise the cameras sensitivity. The camera can automatically refocus itself ensuring the image is perfectly focused, regardless of its lighting conditions, but most importantly, all our cameras with embedded IR Illuminators feature Adaptive IR.



The human eye can see between 400nm and 700nm, the Sony IR cameras are sensitive between 400nm and 1000nm



Adaptive IR

This brand new feature brings IR lighting into the 21st century, the camera can identify an object getting closer and detect when IR light rebounds off the subject or object under surveillance. By intelligently evaluating the scene, the camera can vary the intensity of the IR illuminators enabling the camera to represent the image better than the human eye.



Adaptive IR



H.264 – the latest industry standard... as standard.

Sony Professional has adopted H.264 – the latest compression standard – in all of its latest network cameras, providing enhanced images with reduced bandwidth.

Better quality, reduced bandwidth

H.264 (MPEG-4 Part 10) was developed to provide high-quality video at a much lower bit rate than standard MPEG-4 or JPEG. As a result, H.264 compression represents a significant benefit to network security camera operations, offering enhanced images with reduced bandwidth.

Less bandwidth

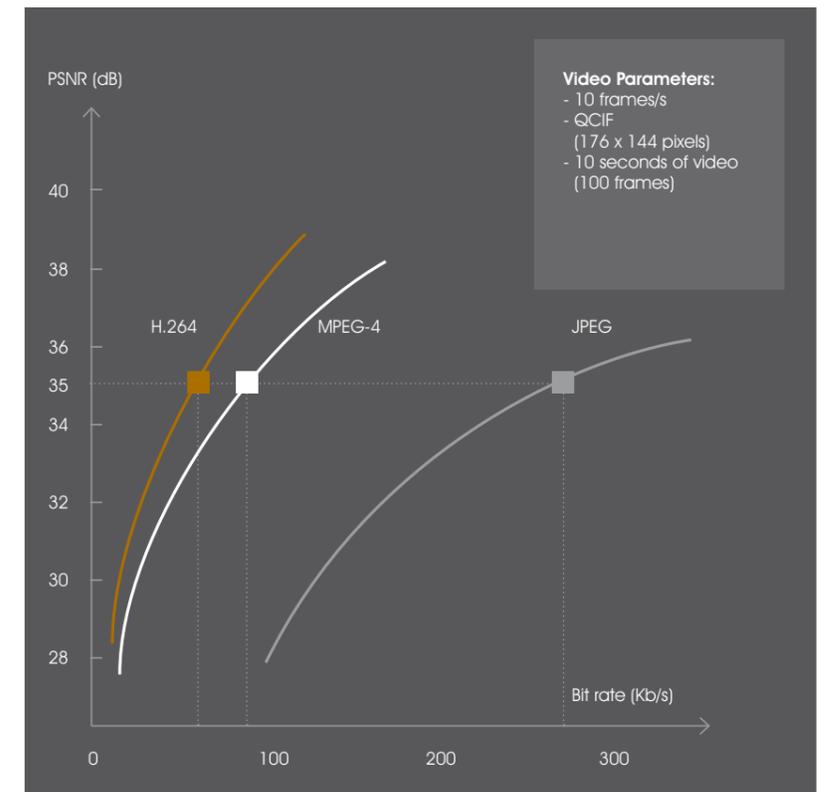
For network security users, H.264 offers all sorts of practical benefits. Using network cameras designed to work with H.264, your clients will need less bandwidth. MPEG-4 requires approximately one-third of the bandwidth used by JPEG; H.264 requires just one-fifth. That's a 40% saving between standard MPEG-4 and H.264.

Reduced storage

With better compression, stored files take up much less room on servers, potentially saving significant sums in network storage requirements.

Improved quality

The data capture elements of each frame in H.264 focus on the movement areas, which has the benefit of creating far more accurate images with more detail. In security applications, this can make a real difference to the identification of facial features, for example, or a vehicle registration plate.



H.264 requires less bandwidth, while delivering better picture quality.

IMD Intelligent Motion Detection – driving actions directly from the camera.

Intelligent Motion Detection (IMD) enables your clients to set up automatic actions based on specific movement parameters.



Automatic prevention and storage capabilities

The built-in IMD function can trigger a variety of actions for prevention, monitoring and apprehending. For example, a particular motion pattern could trigger the activation of lights, alarms or other local devices through its output relays. Alternatively, it could prompt the storage and transfer of images for later analysis. False alarms caused by noise and repeated motion patterns are minimised thanks to an advanced Sony algorithm.

Enhanced performance with DEPA

When used in conjunction with Sony Professional's DEPA™-enabled recorders or software, a multitude of filter functions are available. These allow your clients to initiate alarms based on more specific movements, such as passing a virtual borderline.

IP66 – Vandal Resistant cameras for tough applications.

Many of our models feature Vandal Resistant versions specifically designed for outdoor use.



Meeting IP66 standard for dust and water ingress

Our outdoor cameras are designed to cope with tough conditions. Many of our newest models comply with IP66 standards for protection against water and dust, enabling your clients to enjoy reliable security, regardless of weather conditions or installations in dusty alleys, streets or loading bays.

Vandal Resistant too

Our outdoor cameras are built to the highest standards. Vandal Resistant cameras are housed in aluminium die-cast enclosures. Robust mini-dome cameras feature impact-resistant polycarbonate domes.

Analogue Video Output – for fast installation and set-up.

While Sony Professional IP Cameras bring many advantages to users, some installers prefer analogue set-up. That's why we've retained analogue video output options on all our cameras.

Set up options to suit you

When it comes to setting up viewing angles and focus adjustment, we know that many installers prefer to use their tried and tested analogue monitors.

With Sony Professional, even with the latest IP cameras, we've retained the Analogue Video Output option. You can choose to install using PC-driven software or analogue technology – whichever suits you and the specific application.



HD for your security cameras.

The security market continues to demand higher quality video images, in response to these demands Sony has introduced a range of High Definition (HD) CCTV solutions. Sony HD CCTV solutions represent the next generation in video surveillance technology.



From a surveillance solutions perspective, the transition to HD CCTV provides significant benefits. HD CCTV technology delivers real time capture and delivery of highly detailed images over a wide field of view, highly accurate object detection, recognition, recording and display allow for forensic levels of image analysis not found in existing technology.

Sony HD CCTV solutions combine the benefits of digital technology with the ease of use of analogue to provide the optimum in video security systems performance.

HD CCTV is based upon technology designed for use in high quality broadcast television applications. Video is captured using specialist High Definition CMOS sensors, the sensors contain a pixel array far greater than that found in standard definition CCTV sensors, this results in vastly superior image quality and a greatly enhanced field of view.

Additionally the CMOS sensors utilise a progressive scan system which eliminates the image flicker and blurring associated with interlace scanning systems normally found in standard definition CCTV technology. The resulting images can be transmitted via a suitable network in

a variety of data formats. For maximum flexibility and optimum performance Sony HD CCTV solutions provides H.264, MPEG-4 and JPEG video compression formats.

Sony HD CCTV solutions deliver additional enhancements to image quality by utilising Sony's unique eXcellent Dynamic Noise Reduction (XDNR) and Visibility Enhancer (VE) technology.

XDNR provides clear images by drastically reducing the image noise and motion blur encountered under low light illumination. VE optimises scene visibility by improving wide dynamic ranges under conditions of high contrast illumination.

The superior image quality provided by Sony HD CCTV solutions delivers significant advantages when coupled with the powerful video analytics capability of Sony's Advanced Distributed Enhanced Processing Architecture (DEPA). DEPA technology offers advanced, intelligent alarm functionality whilst distributing and sharing image processing across the network. This powerful combination results in a reduced operator workload through vastly improved alarm handling, superior use of network resources and a security solution that's more flexible, scalable and economical.

Sony is the industry leader in the provision of HD CCTV technology, our portfolio provides for a full range of powerful HD CCTV solutions.

Camera's, SNT Encoder, NSR recording and RSM monitoring software solutions along with a comprehensive range of accessories combine to provide the complete HD CCTV systems solution package.

In addition, total flexibility through our Hybrid approach to seamless integration of new and existing video technology and maximum freedom of choice via our participation in the development of a global open standard for network video products via our Open Network Video Interface Forum (ONVIF) membership ensures that Sony HD solutions are the HD CCTV products of choice.



eXcellent Dynamic Noise Reduction (XDNR).

XDNR delivers superior noise and ghost free images under low light conditions.

The ability of a camera to deliver noise and ghost free images under low light conditions is fast becoming an essential requirement for IP CCTV imaging solutions.

The delivery of high quality images under low light conditions presents numerous technical challenges. Increased image noise levels resulting from signal amplification and image ghosting caused by slow shutter speeds are commonly encountered issues when using existing CCTV technology within a low light environment.

Recognising the importance of noise and ghost free images in low light, SONY has developed its unique eXcellent Dynamic Noise Reduction (XDNR) technology specifically for the IP CCTV environment.

XDNR utilises advanced 2DNR and 3DNR signal processing methods in order to remove random and fixed noise and image ghosting, eliminating the motion blur normally associated with the capture of moving images in low light. Delivering superior image quality in low light, SONY XDNR offers the optimum in noise reduction performance for IP CCTV solutions.

Sony HD SNC-RH PTZ cameras and SNT-EX/EP encoder solutions offer XDNR as a standard feature.

Using SNC-RH PTZ cameras combines the quality of high definition video with the superior noise and ghost free images offered by Sony's unique XDNR technology. By migrating to the Sony range of SNT-EX/EP encoders, XDNR performance can be added to any existing cameras and offers the perfect hybrid solution.

XDNR technology from Sony offers the optimum in low light imaging performance. Available from a range of products the technology is ideal for new or existing installations for superior image capture in low light conditions.





Distributed Enhanced Processing Architecture (DEPA) Advanced.

Building upon the success of DEPA, DEPA Advanced is an enhanced technology that offers high quality image analysis and detection.



Video surveillance has historically been dependent upon human intervention and control, the system operator often providing the interface between alarm activations and required actions. The inability of the operator to monitor and process multiple alarm events is often cited as the weak point in traditional surveillance systems.

The more recent introduction of intelligent video and alarm analysis has provided a reduction in operator workflow by the addition of pre-configured alarms, linked to pre-programmed actions. As a result of its processor intensive requirements video analysis can however be cost prohibitive for many systems, especially in the analogue environment.

Introduced in 2006 Sony's unique Distributed Enhanced Processing Architecture (DEPA) addresses this issue with an innovative design approach. SONY DEPA is an embedded technology providing pre-processing of image data within its camera technology and post of processing of image data within its recording and monitoring solutions. Alarm and image meta data generated by the camera is transmitted on demand to the recording solution where appropriate alarm actions may be initiated.

This distributed architecture allows for intelligent use of network bandwidth and reduces the bottlenecks associated with existing video analysis systems.

Operating a continuous product development policy SONY introduces DEPA Advanced technology. Building upon existing success, DEPA Advanced is an enhanced DEPA technology and now offers the highest quality image analysis and detection. SONY's embedded DEPA Advanced technology delivers unrivalled analytical performance within a range of imaging, recording and monitoring products.

Utilising SONY's unique Intelligent Motion Detection (IMD) to determine real or environmental movement and Intelligent Object Detection (IOD) to monitor the image for violation of a predetermined rule, DEPA Advanced provides highly accurate image meta data to the recording and monitoring solution for alarm activation and processing. A comprehensive range of enhanced predetermined alarm filters include, tamper alarm, virtual fence, trip wire, missing object, people counting and anti loiter options, audio analysis completes the range of advanced features on offer with DEPA advanced technology.

SONY offers a comprehensive range of embedded DEPA Advanced products from the Sony HD SNC-RH PTZ cameras and SNT-EX/EP encoders to NSR1000 recorders and RSM Advanced monitoring software solutions. A comprehensive range of accessories combine to provide the complete DEPA Advanced end to end solution.

Minimising false alarms whilst maximising operator workflow and bandwidth usage, SONY DEPA Advanced offers the optimum in cost effective, flexible and scalable video analysis solutions.

VE Visibility Enhancer (VE).

VE technology from Sony offers the optimum in wide dynamic range performance.

The ability of a camera to deliver optimised images under extreme lighting conditions is known as its wide dynamic range capability. Wide dynamic range is an essential feature when considering image capture under demanding lighting conditions.

Video surveillance technology has traditionally failed to deliver high quality images under the demanding conditions of high contrast scene illumination. Delivering wide dynamic range by resolving bright and dark areas of the image challenges traditional image processing technology.

Existing technology may be optimised for either bright or dark areas of the scene, but not simultaneously. The resulting effect is the reduced visibility of target objects.

In response to this problem Sony has developed its unique Visibility Enhancer (VE) technology. During image processing VE captures and dynamically monitors signal levels, reducing the extreme levels of brightness within the scene and increases levels within the darker areas. This simultaneous

processing and adjustment of both light and dark areas of the scene delivers improved wide dynamic range performance with enhanced scene visibility and superior image quality.

Sony HD SNC-RH PTZ cameras and SNT-EX/EP encoder solutions offer VE as a standard feature. Using SNC-RH PTZ cameras combines the quality of high definition video with the wide dynamic range capability offered by Sony's unique VE technology. By migrating to the Sony range of SNT-EX/EP encoders, VE performance can be added to any existing cameras and offers the perfect hybrid solution.

VE technology from Sony offers the optimum in wide dynamic range performance. Available from a range of products the technology is ideal for new or existing installations for superior image capture in all lighting conditions.



Open Network Video Interface Forum (ONVIF).

In recognising cross-manufacturing compatibility as the key to widespread adoption of network video solutions, Sony along with a number of leading manufacturers have pioneered the establishment of ONVIF (Open Network Video Interface Forum).



The global standards for analogue video are long established and deliver full interconnectivity and interoperability between manufacturer's products. IP cameras and network video solutions do not however currently benefit from a global interoperability standard. As a result the exciting potential for the migration from traditional analogue systems to IP network video solutions is restricted.

The proliferation of IP network video solutions presents a unique set of challenges for both end users and system integrators alike. At a systems integration level the wide range of product on offer can often be limited in its application by the differing standards for image compression and network video transmission found from manufacturer to manufacturer.

This lack of a unified standard defines an obvious limiting factor in the global deployment of fully integrated network video solutions. As a result we restrict customer choice and are unable to fully realise the clear benefits on offer from the wide spread use of this technology.

In recognising cross manufacturing compatibility as the key to wide spread adoption of network video solutions, SONY along with a number of leading manufacturers have pioneered the establishment of ONVIF (Open Network Video Interface Forum). Established in 2008, ONVIF is a worldwide industry forum encompassing manufacturers, developers, consultants, systems integrators, and end users and is open to any group interested in furthering the goals of the organisation.

ONVIF is committed to promoting the adoption of network video solutions within the global security market. Focusing on system interoperability, the development of a worldwide open standard is the forums primary mission.

SONY through its commitment to adoption of the open standard introduces simplicity and ease of use to the integration of solutions delivered by multiple manufacturers. The SONY range of network video solutions offers compatibility with a wide range of manufacturing platforms making it even easier for end users, integrators,

consultants and manufacturers to integrate with SONY products.

Using ONVIF-enabled SONY products unlocks freedom of customer choice and delivers the exciting opportunities available from integrating SONY's truly flexible and scalable network video solutions.

SNC-CH110

Compact and Affordable HD Security Camera. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 960) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. 1/3.8 type progressive scan CMOS sensor incorporated to realize high image quality.



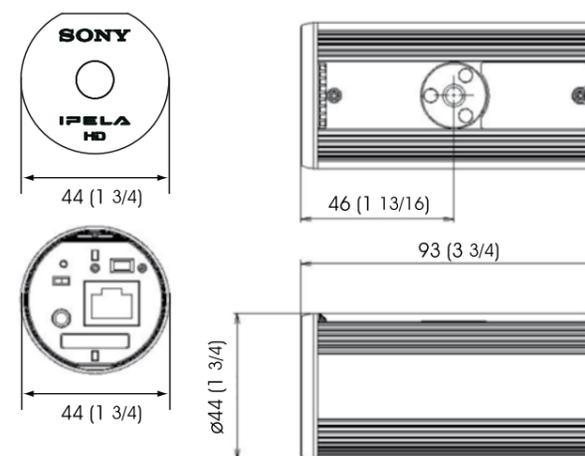
Key Features and Benefits

- Innovative Design.** Compact, slim and two body colours (Silver and Black); suitable for many applications where the bulky camera would be avoided
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (AV mini jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- ONVIF (Open Network Video Interface Forum) Version 1.01** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/3.8 type CMOS sensor
Minimum illumination	5.0 lx / AGC 30dB / 50IRE [IP]
Number of effective pixels (HM)	1.3Megapixel (1296×985)
Electronic shutter	1/2 s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Fixed
Horizontal viewing angle	80.7 degrees
Focal length	f=2.34
F-number	F2.8
Minimum object distance	500 mm
Camera Features	
Day/Night	Yes (electrical D/N)
Noise reduction	Yes
Image	
Codec image size (H x V)	1280x960, 1280x720, 1024x768, 1024x576, 768x576, 720x576, 704x576, 800x480, 720x480, 640x480, 640x368, 384x288, 352x288, 320x240, 320x192, 176x144
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	JPEG / MPEG-4 / H.264: 30fps (1280×960 / 1280×720)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes (Version 1.01)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	AV Mini Jack
Sensor input	x 1
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	100 g (3.5 oz)
Dimensions (ø x H)	ø 44 x 93 mm (ø 1 3/4 x 3 3/4 inches)
Power requirements	PoE
Power consumption	2.4W
Operating temperature	0 °C to 50 °C (32°F to 122°F)
Storage temperature	-20 °C to +60 °C (-4°F to +140°F)
System Requirements	
Operating system	WindowsXP, WindowsVista (32bit), Windows7 (32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver.6.0, 7.0, or 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox-RSM-Lite), Installation manual, B&P warranty booklet, FrontSheet (with logo), FrontSheet (without logo), Sensor input cable

The SNC-CH110 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).



SNC-CH210

Compact and Affordable 1080p HD Security Camera. Excellent 1080p HD picture quality, supporting H.264 at 15 fps. 3 Megapixel (2048 x 1536) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



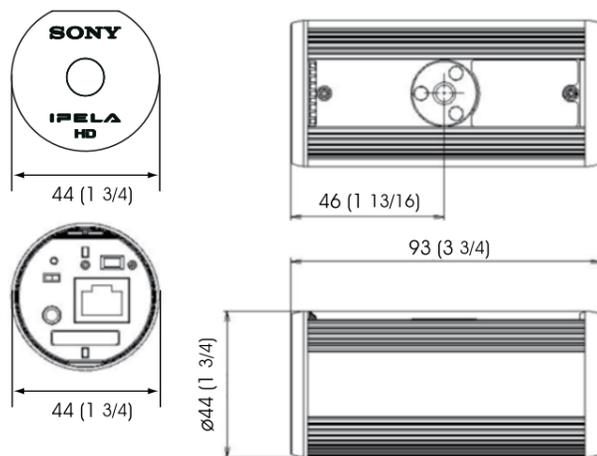
Key Features and Benefits

- Innovative Design.** Compact, slim and two body colours (Silver and Black); suitable for many applications where the bulky camera would be avoided
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (AV mini jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- ONVIF (Open Network Video Interface Forum)** Version 1.01 conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	2.0lx (AGC 38dB / 50IRE[IP])
Number of effective pixels (HxV)	3 Megapixel (2096 x 1561)
Electronic shutter	1s to 1/10000s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Fixed
Horizontal viewing angle	88 degrees
Focal length	f=3.3 mm
F-number	F2.8
Minimum object distance	500 mm
Camera Features	
Day/Night	Yes (electrical D/N)
Noise reduction	Yes
Image	
Codec image size (H x V)	2048x1536 (Jpeg Only), 1920x1080, 1600x1200, 1680x1056, 1440x912, 1280x1024, 1280x960, 1376x768, 1280x800, 1280x720, 1024x768, 1024x576, 768x576, 720x576, 704x576, 800x480, 720x480, 640x480, 640x368, 384x288, 352x288, 320x240, 320x192, 176x144
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 15fps (1920x1080) / 30fps (1280x720) MPEG-4: 12fps (2048x1536) / 15fps (1920x1080) / 30fps (1280x720) JPEG: 15fps (1920x1080) / 30fps (1280x720)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue video output	Mini Jack
Sensor input	x 1
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	100g (3.5 oz)
Dimensions (ø x H)	ø 44 x 93 mm (1 3/4 x 3 3/4 inches)
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	2.4W
Starting temperature	0°C to 50°C (32°F to 122°F)
Working temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
Operating system	CD-ROM (User's Guides, and supplied programs) Installation manual B&P Warranty Booklet FrontSheet (with logo) FrontSheet (without logo) Sensor input cable

* The SNC-CH210 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).



SNC-CH120

High-Quality 720p HD Security Camera. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 1024) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



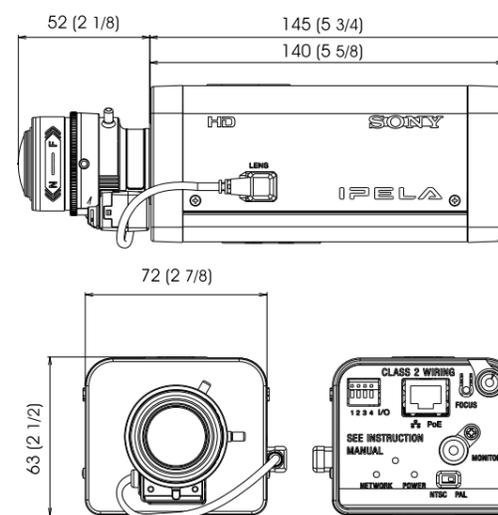
Key Features and Benefits

- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Analogue monitor output (phono jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/3 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour: 0.50lx, BW: 0.30lx (F1.2/ AGC 42dB / 50IRE [IP])
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)
Electronic shutter	1s to 1/10000s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Vari-focal lens
Zoom ratio	Optical 2.9X
Horizontal viewing angle	96.5 to 33.9 degrees
Focal length	f=2.8 mm to 8 mm
F-number	F1.2 (Wide), F1.9 (Tele)
Minimum objects distance	300 mm
Powered Focus	Yes (Easy Focus)
Camera Features	
Day/Night*	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	550 g (1 lb 3 oz) with lens
Dimensions (ø x H)	72 mm x 63 mm x 145 mm (2 7/8 inches x 2 1/2 inches x 5 3/4 inches) not including the projecting parts 72 mm x 63 mm x 197 mm (2 7/8 inches x 2 1/2 inches x 7 7/8 inches) with lens not including the projecting parts
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	5.0 W max.
Starting temperature	0°C to 50°C (32°F to 122°F)
Operating temperature	-10°C to +50°C (14°F to 122°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
Operating system	CD-ROM (User's Guides, and supplied programs) (1) Wire rope (1) Screw M4 (1) Installation Manual (1)

*1 Removable IR Cut Filter.
* The SNC-CH120 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).



SNC-CH160

High-Quality 720p HD Security Camera with IR Illuminators. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 1024) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



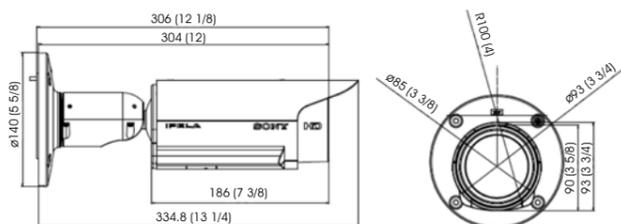
Key Features and Benefits

- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated** waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (phono jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- Equipped with a built-in heater for continued camera operation in cold weather
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiplevendor systems

Dimensions



Specifications

Camera	
Image device	1/3 type progressive scan "Exmor" CMOS sensor
Minimum illumination	0.50lx (Colour), 0 lx (BW) (IR ON) (F1.2/AGC 42dB/50IRE (IP))
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)
Electronic shutter	1 s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Vari-focal lens
Zoom ratio	Optical 2.9X
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f=3.1 to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered Focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night ¹	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	1520 g (3 lb 6 oz)
Dimensions (ø x H)	ø93 x 186 mm (3 3/4 x 7 3/8 inches) ø140 x 334.8 mm (5 5/8 x 13 1/4 inches) (including arm)
Power requirements	PoE
Power consumption	12.9 W max
Starting temperature	-20 to +50 °C (-4 to +122°F)
Operating temperature	-30 to +50 °C (-22 to +122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Ingress protection	IP66
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, +M4x8 screw, B&P Warranty Booklet, Template

¹ Removable IR Cut Filter.

²The SNC-CH160 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-CH220

High-Quality 1080p HD Security Camera. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The Exmor CMOS sensor incorporated to realize high image quality and low noise.



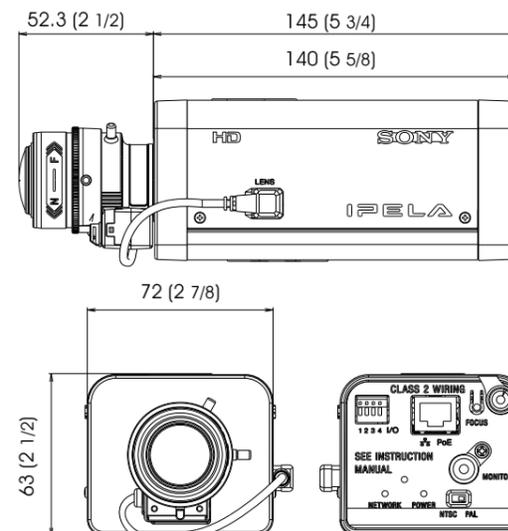
Key Features and Benefits

- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Equipped with a phono jack to instantly monitor the video while installing the camera
- Powered by PoE (Power over Ethernet)** for simple installation
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	0.70lx (Colour), 0.45lx (BW) (F1.2/ AGC 42dB/ 50IRE (IP))
Number of effective pixels (HxV)	Approx. 3.27Megapixel (2096 x 1561)
Electronic shutter	1 s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	CS Mount Vari-focal lens
Zoom ratio	Optical 2.1X
Horizontal viewing angle	101.2 degrees to 47.0 degrees
Focal length	f=2.8 mm to 6.0 mm
F-number	F1.3 (Wide), F1.9 (Tele)
Minimum objects distance	300 mm
Powered Focus	Yes (Easy Focus)
Camera Features	
Day/Night ¹	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 25 fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	550 g (1 lb 3 oz) with lens
Dimensions (ø x H)	72 x 63 x 197.3 mm (2 7/8 x 2 1/2 x 7 3/4 inches)
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	5.0 W Max.
Starting temperature	0 °C to 50 °C (32 °F to 122°F)
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (Users guides, and Supplied programs), Wire rope, Screw M4, Installation Manual

¹ Removable IR Cut Filter.

²The SNC-CH220 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-CH260

High-Quality 1080p HD Security Camera with IR Illuminators. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



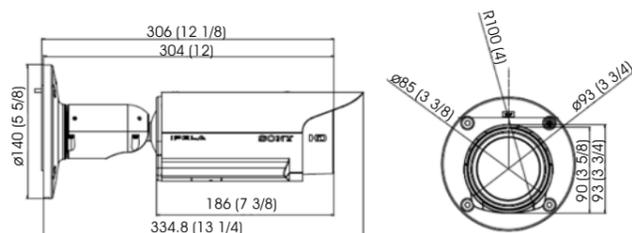
Key Features and Benefits

- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated** waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Equipped with a phono jack to instantly monitor the video while installing the camera
- Powered by PoE (Power over Ethernet)** for simple installation
- Equipped with a built-in heater** for continued camera operation in cold weather supported (-30 °C to +50 °C / -22 °F to +122 °F)
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiplevendor systems

Dimensions



Specifications

Camera	
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour: 0.70lx lx, B/W: 0 lx (IR ON) (F1.2/AGC 42dB / 50IRE [IP])
Number of effective pixels (HxV)	Approx. 3.27Megapixel (2096x1561)
Electronic shutter	1s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Vari-focal lens
Zoom ratio	Optical 2.9X (x2 Digital Zoom)
Horizontal viewing angle	88.5 degrees to 32.3 degrees
Focal length	f=3.1 mm to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered Focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night ¹	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 20 fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	1520g (3 lb 6 oz)
Dimensions (ø x H)	ø93 x 186 mm (3 3/4 x 7 3/8 inches)
	ø140 x 334.8mm (5 3/8 x 13 1/4 inches) (including arm)
Power requirements	PoE
Power consumption	12.9 W max.
Starting temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Operating temperature	-30 °C to +50 °C (-22 °F to +122 °F)*2
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Ingress protection	IP66
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0
	Firefox Ver.3.5 (Plug-in free viewer only)
	Safari Ver.4.0 (Plug-in free viewer only)
	Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, +M4x8 screw, Warranty Booklet, Template

*1 Removable IR Cut Filter. *2 With a built-in heater.
*The SNC-CH260 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-CH140

Sony introduces the powerful addition to its network HD camera lineup, the SNC-CH140. This dual-stream network HD camera, supporting H.264, MPEG-4, and JPEG compression formats, deliver excellent picture quality in HD 720p resolution at 30 frames per second (fps). Incorporating the new "Exmor" CMOS image sensor from Sony, which is specially designed for surveillance applications, this camera features state-of-the-art image-enhancement technology, such as View-DR which realizes an extremely wide dynamic range.



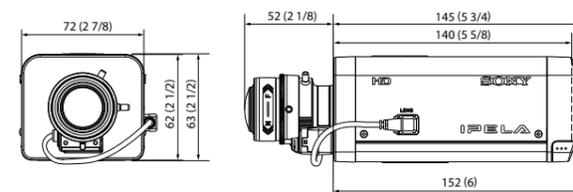
Key Features and Benefits

- 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in low light conditions
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- Equipped with a CF slot for on-board recording and wireless operation capability with the optional SNCA-CFW5 802.11g card
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions

Standard Features and Benefits

- Triple codec support.** (H.264, MPEG-4, JPEG) and dual streaming capability
- Superior HD picture quality,** supporting H.264 at 30 fps (1280 x 720)
- Onvif support.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products
- Power over Ethernet (PoE)** capability

Dimensions



Specifications

Camera	
Image device	1/3-type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour : 0.20 lx, B/W : 0.10 lx (F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Number of effective pixels (HxV)	Approx. 1.4 Megapixel
Electronic shutter speed	1s to 1/10,000s
Auto gain control (AGC)	Max gain setting LOW, MID, HIGH
Exposure control	Auto, EV Compensation*1, Auto Slow Shutter*2
White balance modes	Auto (ATW, ATW-Pro), Preset, One-push WB, Manual
Lens type	CS Mount lens
Zoom ratio	Approx. 2.9X
Horizontal viewing angle	33.9 to 96.5°
Focal length	f=2.8 to 8.0mm
F-number	F1.2 (wide), F1.9 (tele)
Easy Focus	Yes (Easy Focus)
Easy Zoom	No
Camera Features	
Day/Night*3	Yes
Wide-D	View-DR** (125 dB: Theoretical)
Image enhancement	Visibility Enhancer
Noise reduction	XDNR
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H.264/MPEG-4/JPEG: 30 fps (1280 x 720)
Audio	
Audio compression	G.711/G.726
Scene analytics	
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Wireless network	Yes (with optional*5)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Serial interface	No
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x1
Alarm output	x2
External microphone input	Mini-jack (monaural), MIC IN/LINE IN: 2.5 V DC plug-in power
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	NTSC/PAL
Horizontal resolution	600 TVL
S/N ratio	More than 50 dB
General	
Mass	Approx. 600 g (1 lb 2 oz)
Dimensions (W x H x D)	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8 inches)
Power requirements	PoE, AC 24 V, DC 12 V
Power consumption	9.0 W max.
Operating temperature	-10 to +50 °C** (-14 to 122 °F)
Storage temperature	-20 to +60 °C (-4 to 140 °F)
System requirements	
Operating system	Windows Vista®, Microsoft Windows XP
Processor	Intel Core2 Duo 2GHz or higher
Memory	1GB or more
Web browser	Microsoft Internet Explorer Ver6.0, Ver7.0
Supplied Accessories	
	CD-ROM (User's guides, SNC Toolbox), Installation manual, Wire rope, Warranty booklet

*1 Visibility Enhancer off mode only *2 View-DR off mode only *3 Removable IR Cut Filter *4 View-DR technology is a combination of Sony's full-capture Wide-D technology, the high-speed "Exmor" CMOS sensor, and Visibility Enhancer. *5 With optional SNCA-CFW5 *6 Cold start temperature must be greater than 0°C.



SNC-CH180

High-Quality 720p HD Security Camera with IR Illuminator and View-DR. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 1024) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



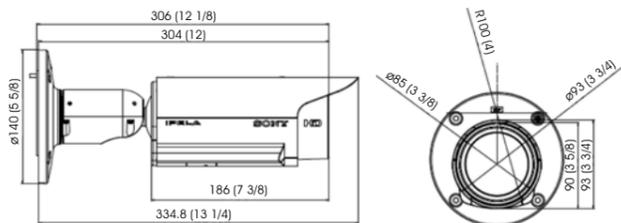
Key Features and Benefits

- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated** waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- Equipped with a CF slot for on-board recording and wireless operation capability with the optional SNCA-CF5 802.11g card

Standard Features and Benefits

- Optical Day/Night function** to switch to Day or Night mode depending on the light level
- XDNR (eXcellent Dynamic Noise Reduction)** technology for clear images without motion blur under low illumination
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/3 type progressive scan "Exmor" CMOS sensor Colour: 0.22 lx, B/W: 0 lx - IR ON
Minimum illumination	(F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)
Electronic shutter	1s to 1/10000s
Auto gain control (AGC)	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Vari-focal lens
Zoom ratio	Optical 2.9X (x2 Digital Zoom)

Specifications (continued)

Camera (continued)	
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f=3.1 to 8.9mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum object distance	300 mm
Powered Focus	Yes (Easy Focus)
Powered Zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 27pcs)*3
Camera Features	
Day/Night *3	Yes
Wide-D	View-DR [125dB: Theoretical]
Image enhancement	Visibility Enhancer
Noise reduction	XDNR
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 [H.264, MPEG-4, JPEG]
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Rule filter	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Number of clients	10
ONVIF conformance	Yes
Wireless network	Yes (with Option *4)
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Serial interface	No
Card slots	CF card x1
Analogue video output	BNC x 1
Sensor input	x 1
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50dB
General	
Weight	1600 g (3 lb 8 oz)
Dimensions (W x H x D)	ø 93 x 186 mm (3 3/4 x 7 3/8 inches)
Power requirements	PoE *5, AC24V, DC12V
Power consumption	30 W Max.
Operating temperature	AC24V/DC12V: -30 to +50 °C (-22 to +122°F) PoE (IEEE802.3af): -10 to +50 °C (23 to 122°F) AC24V/DC12V: -20 to +50 °C (-4 to +122°F)
Starting temperature	PoE (IEEE802.3af): 0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Ingress protection	IP66
System requirements	
Operating system	Windows XP, Windows Vista, Windows 7
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver6.0, 7.0, or 8.0
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, M4 screw, B&P Warranty Booklet Template

*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter. *4 With optional SNCA-CF5. *5 When used with PoE, SNC-CH180 cannot be used with a heater and a CF card slot.
The SNC-CH180 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

SNC-CH240

High-Quality 1080p HD Security Camera with View-DR Technology. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



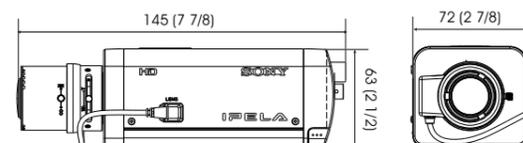
Key Features and Benefits

- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in low light conditions
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- Powered by either AC 24V, DC 12V, or PoE (Power over Ethernet) for easy installation
- Equipped with a BNC connector** to instantly monitor the video while installing the camera.
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor Colour: 0.55 lx, B/W: 0.3 lx (F1.3/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Minimum illumination	
Number of effective pixels (HxV)	3.27 Megapixel (2096 x 1561)
Electronic shutter	1s to 1/10000s
Auto gain control (AGC)	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	CS mount lens
Zoom ratio	Optical 2.1X (x2 Digital Zoom)

Specifications (continued)

Camera (continued)	
Horizontal viewing angle	101.2 to 47.0 degrees
Focal length	f=2.8 to 6.0 mm
F-number	F1.3 (Wide), F1.9 (Tele)
Minimum object distance	300 mm
Powered Focus	Yes (Easy Focus)
Camera Features	
Day/Night *3	Yes
Wide-D	View-DR [84 dB: Theoretical]
Image enhancement	Visibility Enhancer
Noise reduction	XDNR
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 [H.264, MPEG-4, JPEG]
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20 fps (1920 x 1440) / 30 fps (1920 x 1080) MPEG-4: 15 fps (1920 x 1440) / 25 fps (1920 x 1080) JPEG: 10 fps (1920 x 1440) / 15 fps (1920 x 1080)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Rule filter	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Number of clients	10
ONVIF conformance	Yes
Wireless network	Yes (with option *4)
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Serial interface	No
Card slots	CF card x1
Analogue video output	BNC x 1
Sensor input	x 1
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Video system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50 dB
General	
Weight	650 g (1 lb 7 oz)
Dimensions (W x H x D)	72 x 63 x 197.3 mm (2 7/8 x 2 1/2 x 7 7/8 inches)
Power requirements	PoE, AC 24V, DC 12V
Power consumption	11.2 W max.
Starting temperature	0 to 50°C (32 to 122°F)
Working temperature	-10 to +50°C (23 to 122°F)
Storage temperature	-20 to +60°C (-4 to +140°F)
System requirements	
Operating system	Windows XP, Windows Vista, Windows 7
Processor	Intel Core2 Duo 2GHz or higher
Memory	1GB or more
Web browser	Microsoft Internet Explorer Ver6.0, 7.0, or 8.0
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, M4 screw, B&P Warranty Booklet

*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter. *4 With optional SNCA-CF5. *5 The SNC-CH240 include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

SNC-CH280

High-Quality 1080p HD Security Camera with IR Illuminators and View-DR. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



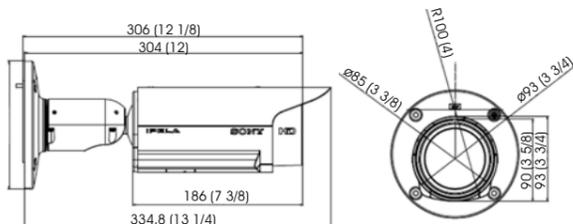
Key Features and Benefits

- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated waterproof and dust-tight feature** for outdoor surveillance, or indoor where water ingress may pose an issue
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- CF** Equipped with a CF slot for on-board recording and wireless operation capability with the optional SNCA-CFW5 802.11g card

Standard Features and Benefits

- Optical Day/Night function** to switch to Day or Night mode depending on the light level
- XDNR (eXcellent Dynamic Noise Reduction)** technology for clear images without motion blur under low illumination
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour: 0.40 lx, B/W: 0 lx (IR ON)
Number of effective pixels (HxV)	(F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE (IP)) Approx. 3.27Megapixel (2096 x 1561)
Electronic shutter	1s to 1/10000 s
Auto gain control (AGC)	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Vari-focal lens
Zoom ratio	Optical 2.9X (x2 Digital Zoom)

Specifications (continued)

Camera (continued)	
Horizontal viewing angle	88.5 degrees to 32.3 degrees
Focal length	f=3.1mm to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered Focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 27pcs)
Camera Features	
Day/Night *3	Yes
Wide-D	View-DR (90dB)
Image enhancement	Image enhancement Visibility Enhancer
Noise reduction	XDNR
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 20fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes (with built in Post Filter)
Rule filter	Yes
Network	
Protocols	IPv4, IPv6, UDP, TCP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Wireless network	Yes (with Option *4)
Number of clients	10
Authentication	IEEE802.1X
Analogue Monitor Output	
Signal system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50dB
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Serial Interface	No
Card slots	CF card x1
Analogue video output	BNC x 1
Analogue monitor output	Phono jack x 1
Sensor input	x 1
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
General	
Weight	1690 g (3 lb 12 oz)
Dimensions (ø x H)	ø93 x 186 mm (3 3/4 x 7 3/8 inches) ø140 x 334.8mm (5 3/8 x 13 1/4 inches) (including arm)
Power requirements	PoE, AC24V, DC12V
Power consumption	33 W Max.
Starting temperature	AC24V/DC12V : -20 °C to +50 °C (-4 °F to +122 °F) PoE (IEEE802.3af) : 0 °C to 50 °C (32 °F to 122 °F)
Operating temperature	AC24V/DC12V : -30 °C to +50 °C (-22 °F to +122 °F) *5 PoE (IEEE802.3af) : -10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Ingress protection	IP66
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, +M4x8 screw, Warranty Booklet, Template

*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter. *4 With optional SNCA-CFW5.
*5 With a built-in heater.
*The SNC-CH280 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-EB520

High-Quality Security Camera. SVGA (800 x 600) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realise high image quality and low noise.



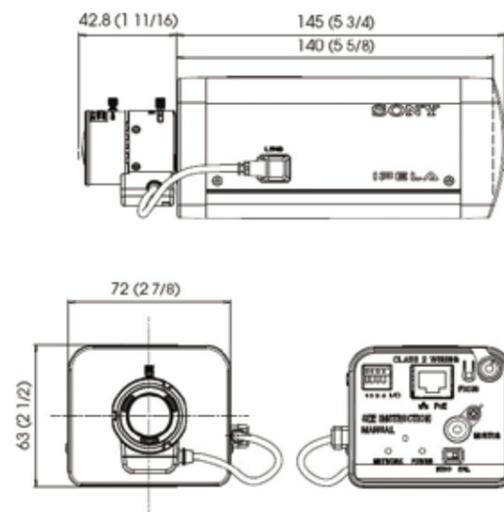
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Stream Squared function** to send two 4:3 aspect ratio videos in user-selectable resolutions up to SD simultaneously (Low-cost solution to replace two SD cameras located in a line)

Standard Features and Benefits

- Analogue monitor output** (phono jack)
- Powered by PoE (Power over Ethernet)** for simple installation
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Unit: mm (inches)

Specifications

Camera	
Image sensor	1/3-type "Exmor" CMOS sensor
Number of effective pixels (H x V)	Approx. 1.4 Megapixel (1329 x 1049)
Minimum illumination	Colour: 0.47 lx, B/W: 0.27 lx (F1.0, shutter 1/30 sec., AGC 42dB, 50IRE by IP)
Gain control	Auto
Electronic shutter speed	1/1 to 1/10,000 s
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance mode	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	CS Mount Vari-focal lens
Zoom ratio	Optical 2.6x
Powered focus	Yes (Easy Focus)
Horizontal viewing angle	89.2 to 34.6 degrees
Focal length	f = 3.0 to 8.0 mm
F-number	F1.0 (Wide), F1.65 (Tele)
Minimum object distance	200 mm
Camera Features	
Day/Night	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	800 x 600 (SVGA), 720 x 576 (PAL D1), 720 x 480 (NTSC D1), 704 x 576 (4CIF) 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264, MPEG-4, JPEG)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Network port	10BASE-T / 100BASE-TX (RJ-45)
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)
General	
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	5.0 W max.
Operating temperature	-10 to +50 °C (14 to 122°F)
Starting temperature	0 to +50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Operating humidity	20 to 80%
Storage humidity	20 to 95%
Dimensions (W x H x D)	72 mm x 63 mm x 145 mm (2 7/8 inches x 2 1/2 inches x 5 3/4 inches) not including the projecting parts 72 mm x 63 mm x 187.8 mm (2 7/8 inches x 2 1/2 inches x 7 7/8 inches) with lens not including the projecting parts
Mass	Approx. 530 g (1 lb 7 oz) with lens
Safety regulations	UL2044, FCC Class A Digital Device, IC Class A Digital Device, IEC60950-1, EN55022(A)+EN55024+EN55024-1, VCCI Class A, AN/NSZ CISPR22
System requirements	
Operating system	Microsoft Windows XP, Windows Vista (32 bit), Windows 7 (32 bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (Users Guides, and supplied programs) (1), Wire rope (1), Screw M4 (1), Installation Manual (1)

SNC-DH110 / DH110T

Compact and Affordable Full HD Security Camera. Vandal-Resistant HD Security Camera. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 960) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. 1/3.8 type progressive scan CMOS sensor incorporated to realize high image quality.



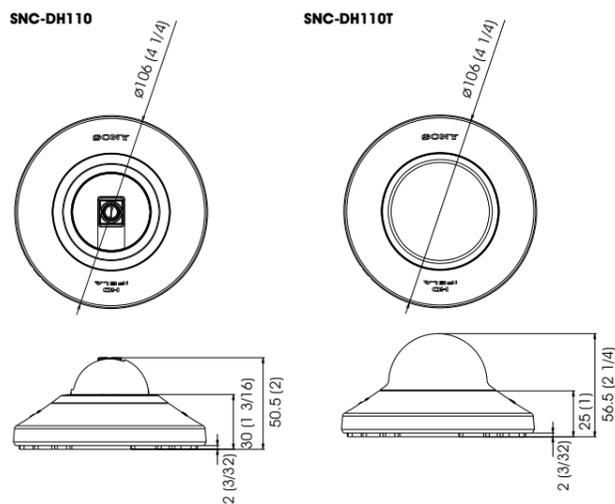
Key Features and Benefits

- Innovative Design.** Compact, slim and two body colours (Silver and Black); suitable for many applications where the bulky camera would be avoided
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (AV mini jack)
- Powered by PoE (Power over Ethernet)** for simple installation
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- ONVIF (Open Network Video Interface Forum)** Version 1.01 conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	SNC-DH110	SNC-DH110T
Image device	1/3.8 type CMOS sensor	
Minimum illumination	5.0lx / AGC 30dB / 50IRE(IP)	5.5lx / AGC 30dB / 50IRE(IP)
Number of effective pixels (HxV)	1.3 Megapixel (1296 x 985)	
Electronic shutter	1/2s to 1/10000s	
Auto gain control (AGC)	Auto	
Exposure control	Auto, EV Compensation, Auto Slow Shutter	
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual	
Lens type	Fixed	
Horizontal viewing angle	80.7 degrees	79 degrees
Focal length	f=2.34	
F-number	F2.8	
Minimum objects distance	500 mm	
Pan angle	Approx. 340°	
Tilt angle	0° to 57°	
Camera Features		
Day/Night	Yes (electrical D/N)	
Noise reduction	Yes	
Image		
Codec image size (H x V)	1280x960, 1280x720, 1024x768, 1024x576, 768x576, 720x576, 704x576, 800x480, 720x480, 640x480, 640x368, 384x288, 352x288, 320x240, 320x192, 176x144	
Video compression format	H.264, MPEG-4, JPEG	
Codec streaming capability	Dual streaming	
Maximum frame rate	JPEG / MPEG-4 / H.264: 30fps (1280x960 / 1280x720)	
Scene Analytics		
Intelligent motion detection	Yes	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
ONVIF conformance	Yes	
Wireless network	No	
Number of clients	5	
Authentication	IEEE802.1X	
Interface		
Ethernet	10BASE-T / 100BASE-TX (RJ-45)	
Analogue monitor output	AV Mini Jack	
Sensor input	x 1	
Analogue video output		
Signal system	NTSC / PAL	
General		
Weight	160 g (5.6 oz) *Without cable	170 g (6 oz) *Without cable
Dimensions (ø x H)	ø 106 x 50.5 mm (ø 4 1/4 x 2 inches)	ø 106 x 56.5 mm (ø 4 1/4 x 2 1/4 inches)
Power requirements	PoE IEEE802.3af compliant, class 1	
Power consumption	2.4 W max.	
Operating temperature	0 °C to 50 °C (32°F to 122°F)	
Storage temperature	-20 °C to +60 °C (-4°F to +140°F)	
Vandal resistant	-	IK10
System Requirements		
Operating system	WindowsXP, WindowsVista (32bit), Windows7(32bit)	
Processor	Intel Core2 Duo 2 GHz or higher	
Memory	1 GB or more	
Web browser	Microsoft Internet Explorer Ver.6.0, 7.0, or 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)	
Supplied Accessories	CD-ROM (User's Guide, SNC Toolbox, RSM-Lite) installation manual, B&P Warranty Booklet, Sensor input cable, Template	

* The SNC-DH110 and SNC-DH110T include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-DH210 / DH210T

Compact and Affordable Full HD Security Camera. Vandal-Resistant HD Security Camera. Excellent 1080p HD picture quality, supporting H.264 at 15 fps. 3 Megapixel (2048 x 1536) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



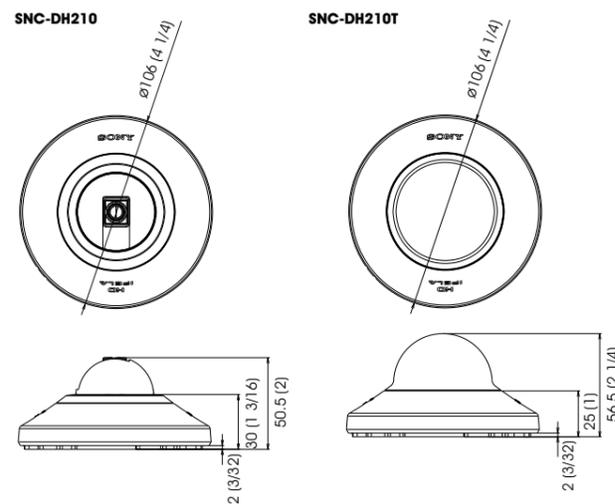
Key Features and Benefits

- Innovative Design.** Compact, slim and two body colours (Silver and Black); suitable for many applications where the bulky camera would be avoided
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (AV mini jack)
- Powered by PoE (Power over Ethernet)** for simple installation
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- ONVIF (Open Network Video Interface Forum)** Version 1.01 conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	SNC-DH210	SNC-DH210T
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor	
Minimum illumination	2.0 lx / AGC(38db) / 50IRE(IP)	2.3 lx / AGC(38db) / 50IRE(IP)
Number of effective pixels (HxV)	3Megapixel (2096 x 1561)	
Electronic shutter	1s to 1/10000 s	
Auto gain control (AGC)	Auto	
Exposure control	Auto, EV Compensation, Auto Slow Shutter	
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual	
Lens type	Fixed	
Horizontal viewing angle	88 degrees	86 degrees
Focal length	f=3.3	
F-number	F2.8	
Minimum objects distance	500 mm	
Pan angle	Approx. 340°	
Tilt angle	0° to 60°	
Camera Features		
Day/Night	Yes (electrical D/N)	
Noise reduction	Yes	
Image		
Codec image size (H x V)	2048x1536 (Jpeg Only), 1920x1080, 1600x1200, 1680x1056, 1440x912, 1280x1024, 1280x960, 1376x768, 1280x800, 1280x720, 1024x768, 1024x576, 768x576, 720x576, 704x576, 800x480, 720x480, 640x480, 640x368, 384x288, 352x288, 320x240, 320x192, 176x144	
Video compression format	H.264, MPEG-4, JPEG	
Codec streaming capability	Dual streaming	
Maximum frame rate	JPEG:12fps (2048x1536)/15fps (1920x1080)/30fps (1280x720) MPEG-4 / H.264: 15fps (1920x1080) / 30fps (1280x720)	
Scene Analytics		
Intelligent motion detection	Yes	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
ONVIF conformance	Yes (Version 1.01)	
Number of clients	5	
Authentication	IEEE802.1X	
Interface		
Ethernet	10BASE-T / 100BASE-TX (RJ-45)	
Analogue monitor output	AV Mini Jack	
Sensor input	x 1	
Analogue video output		
Signal system	NTSC / PAL	
General		
Weight	160 g (5.6 oz)	170 g (6 oz)
Dimensions (ø x H)	ø 106 x 50.5 mm (ø 4 1/4 x 2 inches)	ø 106 x 56.5 mm (ø 4 1/4 x 2 1/4 inches)
Power requirements	PoE	
Power consumption	2.4W	
Operating temperature	0 °C to 50 °C (32°F to 122°F)	
Storage temperature	-20 °C to +60 °C (-4°F to +140°F)	
Vandal resistant	-	IK10
System Requirements		
Operating system	WindowsXP, WindowsVista (32bit), Windows7(32bit)	
Processor	Intel Core2 Duo 2 GHz or higher	
Memory	1 GB or more	
Web browser	Microsoft Internet Explorer Ver.6.0, 7.0, or 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)	
Supplied Accessories	CD-ROM (User's Guide, SNC Toolbox, RSM-Lite) installation manual, B&P Warranty Booklet, Sensor input cable, Template	

* The SNC-DH210 and SNC-DH210T include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-DH120 / DH120T

High-Quality 720p HD Security Camera. Vandal-Resistant 720p HD Security Camera. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 1024) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



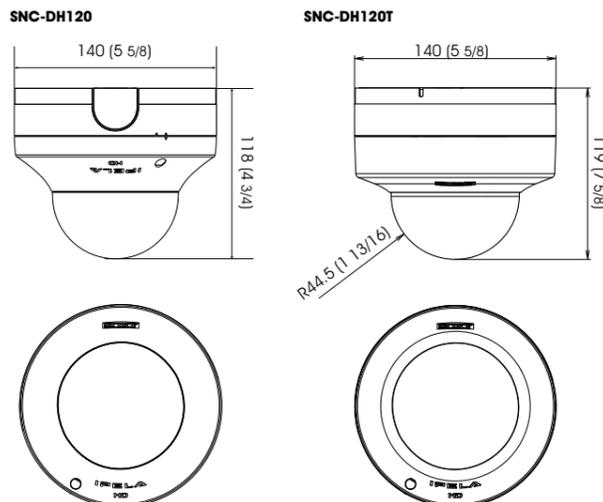
Key Features and Benefits

- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- DEPA Intelligent Video Analytics system** can be set up with a DEPA-enabled recorder
- Analogue monitor output (phono jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	SNC-DH120	SNC-DH120T
Image device	1/3 type progressive scan "Exmor" CMOS sensor	
Minimum illumination	Colour: 0.50lx, BW: 0.30lx (F1.2/AGC 42dB / 50IRE [IP])	
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)	
Electronic shutter	1 s to 1/10000 s	
Auto gain control (AGC)	Auto	
Exposure control	Auto, EV Compensation, Auto Slow Shutter	
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual	
Lens type	Vari-focal lens	
Zoom ratio	Optical 2.9X	
Horizontal viewing angle	85.4 to 31.2 degrees	
Focal length	f=3.1 mm to 8.9 mm	
F-number	F1.2 (Wide), F2.1 (Tele)	
Minimum objects distance	300 mm	
Powered focus	Yes (Easy Focus)	
Powered zoom	Yes (Easy Zoom)	
Camera Features		
Day/Night *1	Yes	
Noise reduction	Yes	
Image		
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)	
Video compression format	H.264, MPEG-4, JPEG	
Codec streaming capability	Dual streaming	
Maximum frame rate	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)	
Scene Analytics		
Intelligent motion detection	Yes	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
ONVIF conformance	Yes	
Number of clients	5	
Authentication	IEEE802.1X	
Interface		
Ethernet	10BASE-T / 100BASE-TX (RJ-45)	
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)	
Sensor input	- x 1, make contact, break contact x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)	
Alarm output	-	
Analogue video output		
Signal system	NTSC / PAL	
General		
Weight	715 g (1 lb 9 oz), not including the cables and bracket	945 g (2 lb 1 oz), not including the cables and bracket
Dimensions (ø x H)	ø140 mm x 118 mm (5 5/8 inches x 4 3/4 inches)	ø140 mm x 119 mm (5 5/8 inches x 4 3/4 inches)
Power requirements	PoE (IEEE802.3af compliant)	
Power consumption	6.0 W max.	
Starting temperature	0°C to 50°C (32°F to 122°F)	
Operating temperature	-10°C to +50°C (14°F to 122°F)	
Storage temperature	-20°C to +60°C (-4°F to +140°F)	
Vandal resistant	IK10	
System Requirements		
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)	
Processor	Intel Core2 Duo 2 GHz or higher	
Memory	1 GB or more	
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)	
Supplied Accessories		
	CD-ROM (User's Guides, and supplied programs) (1), Bracket (1), Template (1), Wire rope (1), Camera unit mounting screws (2), Shoulder screw M4 (1), LAN cable (1), Installation Manual (1)	CD-ROM (User's Guides, and supplied programs) (1), Bracket (1), Template (1), Wire rope (1), Camera unit mounting screws (2), Shoulder screw M4 (1), Wrench (1), I/O cable (1), LAN cable (1), Installation Manual (1)

*1 Removable IR Cut Filter.
* The SNC-DH120 and SNC-DH120T include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-DH160

IP66 Vandal-Resistant 720p HD Security Camera with IR Illuminators. Excellent 720p HD picture quality, supporting H.264 at 30 fps. 1.3 Megapixel (1280 x 1024) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



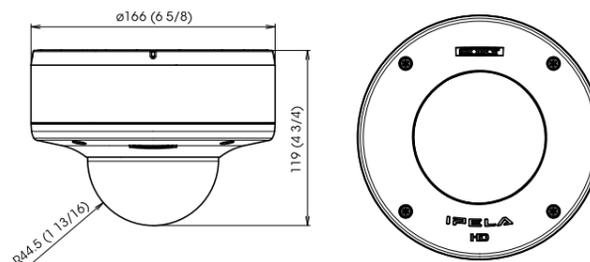
Key Features and Benefits

- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated** waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue
- IK10-rated** vandal-resistant feature to protect the camera from destructive behaviours
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared" function.** Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Analogue monitor output (AV mini jack)**
- Powered by PoE (Power over Ethernet)** for simple installation
- Equipped with a built-in heater for continued camera operation in cold weather
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiplevendor systems

Dimensions



Specifications

Camera	SNC-DH160
Image device	1/3 type progressive scan "Exmor" CMOS sensor
Minimum illumination	0.50lx (Colour), 0 lx (BW) [IR ON] (F1.2/AGC 42dB/50IRE [IP])
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)
Electronic shutter	1 s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Vari-focal lens
Zoom ratio	Optical 2.9X
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f=3.1 to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night *1	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1
Sensor input	x 1, make contact, break contact x 1, 24V AC/DC, 1A
Alarm output	(Mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	1320 g (2 lb 15 oz)
Dimensions (ø x H)	ø 166 x 119 mm (6 5/8 x 4 3/4 inches)
Power requirements	PoE
Power consumption	12.9 W max
Starting temperature	-20 to +50 °C (-4 to +122°F)
Operating temperature	-30 to +50 °C (-22 to +122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Ingress protection	IP66
Vandal resistant	IK10
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guides, SNC Toolbox, Installation Manual, Bracket, Template, Wire rope, Camera unit mounting screws (4), Shoulder screw M4, I/O cable, LAN cable, B&P Warranty Booklet

*1 Removable IR Cut Filter.
*The SNC-DH160 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).



SNC-DH220 / DH220T

High-Quality 1080p HD Security Camera. Vandal-Resistant 1080p HD Security Camera. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The Exmor CMOS sensor incorporated to realize high image quality and low noise.



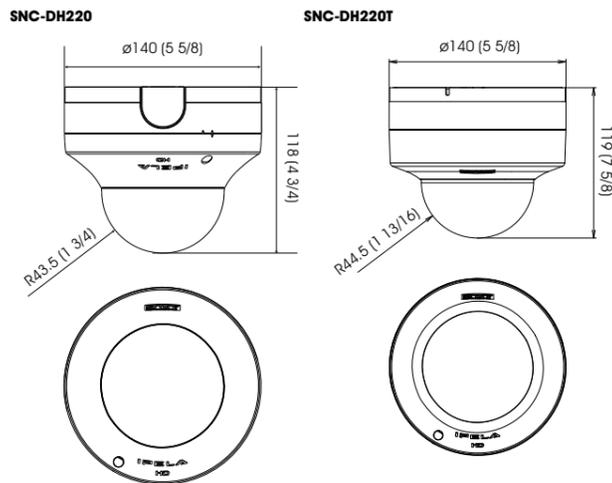
Key Features and Benefits

- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared"** function. Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Equipped with a phono jack to instantly monitor the video while installing the camera
- Powered by PoE (Power over Ethernet)** for simple installation
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	SNC-DH220	SNC-DH220T
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor	
Minimum illumination	0.70 lx (Colour), 0.45 lx (BW) (F1.2/AGC 42dB/ 50IRE (IP))	
Number of effective pixels (HxV)	Approx. 3.27 Megapixel (2096x1561)	
Electronic shutter	1 s to 1/10000 s	
Auto gain control (AGC)	Auto	
Exposure control	Auto, EV Compensation, Auto Slow Shutter	
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual	
Lens type	Built-in Vari-focal lens	
Zoom ratio	Optical 2.9X	
Horizontal viewing angle	88.5 degrees to 32.3 degrees	
Focal length	f=3.1 mm to 8.9 mm	
F-number	F1.2 (Wide), F2.1 (Tele)	
Minimum objects distance	300 mm	
Powered focus	Yes (Easy Focus)	
Powered zoom	Yes (Easy Zoom)	
Camera Features		
Day/Night *1	Yes	
Noise reduction	Yes	
Image		
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)	
Video compression format	H.264, MPEG-4, JPEG	
Codec streaming capability	Dual streaming	
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 25fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)	
Scene Analytics		
Intelligent motion detection	Yes	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
ONVIF conformance	Yes	
Number of clients	5	
Authentication	IEEE802.1X	
Interface		
Ethernet	10BASE-T / 100BASE-TX (RJ-45)	
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)	
Sensor input	x 1, make contact, break contact x 1, 24V AC/DC, 1A	
Alarm output	- (mechanical relay outputs electrically isolated from the camera)	
Analogue video output		
Signal system	NTSC / PAL	
General		
Weight	715 g (1 lb 9 oz), not including the cables and bracket	945 g (2 lb 1 oz), not including the cables and bracket
Dimensions (ø x H)	ø140 mm x 118 mm (5 5/8 inches x 4 3/4 inches)	ø140 mm x 119 mm (5 5/8 inches x 4 3/4 inches)
Power requirements	PoE (IEEE802.3af compliant)	
Power consumption	6.0 W max.	
Starting temperature	0 °C to 50 °C (32 °F to 122 °F)	
Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)	
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)	
Vandal resistant	IK10	
System Requirements		
Operating system	Microsoft Windows XP, Windows Vista (32bit), Windows 7 (32bit)	
Processor	Intel Core2 Duo 2 GHz or higher	
Memory	1 GB or more	
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)	
Supplied Accessories		
	CD-ROM (User's guides, and Supplied programs), Bracket, Template, Wire rope, Camera unit mounting screws (2), Shoulder screw M4, LAN cable, Installation Manual	CD-ROM (User's guides, and Supplied programs), Bracket, Template, Wire rope, Camera unit mounting screws, Shoulder screw M4, Wrench, I/O cable, LAN cable, Installation Manual

*1 Removable IR Cut Filter.
* The SNC-DH220 and SNC-DH220T include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).

SNC-DH260

IP66 Vandal-Resistant 1080p HD Security Camera with IR Illuminators. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



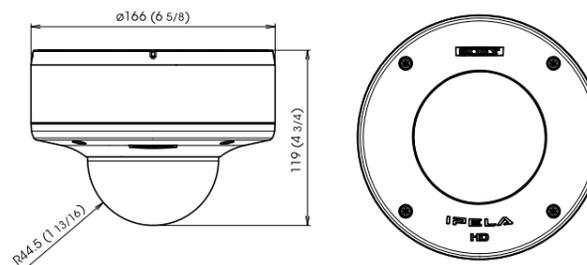
Key Features and Benefits

- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated** waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue
- IK10-rated** vandal-resistant feature to protect the camera from destructive behaviours
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- "Stream Squared"** function. Allows simultaneous streaming of two 4:3 aspect ratio videos in user selectable SD resolutions. You can select the entire image or a portion of the image from the original field of view and resize to SD resolution or lower for each stream

Standard Features and Benefits

- Intelligent Motion Detection** that supports DEPA
- Equipped with a phono jack to instantly monitor the video while installing the camera
- Powered by PoE (Power over Ethernet)** for simple installation
- Equipped with a built-in heater for continued camera operation in cold weather supported (-30 °C to +50 °C / -22 °F to +122 °F)
- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems.

Dimensions



Specifications

Camera	SNC-DH260
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour: 0.70lx lx, BW: 0 lx (IR ON) (F1.2/AGC 42dB/ 50IRE (IP))
Number of effective pixels (HxV)	Approx. 3.27 Megapixel (2096x1561)
Electronic shutter	1 s to 1/10000 s
Auto gain control (AGC)	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Vari-focal lens
Zoom ratio	Optical 2.9X
Horizontal viewing angle	88.5 degrees to 32.3 degrees
Focal length	f=3.1mm to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night *1	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 20fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Sensor input	x 1, make contact, break contact x 1, 24V AC/DC, 1A
Alarm output	(mechanical relay outputs electrically isolated from the camera)
Analogue video output	
Signal system	NTSC / PAL
General	
Weight	1320g (2 lb 15 oz)
Dimensions (ø x H)	ø 166 x 119 mm (6 5/8 x 4 3/4 inches)
Power requirements	PoE
Power consumption	12.9 W Max.
Starting temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Operating temperature	-30 °C to +50 °C (-22 °F to +122 °F)*2
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Ingress protection	IP66
Vandal resistant	IK10
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista (32bit), Windows 7 (32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, M4 screw, Warranty Booklet, Template

*1 Removable IR Cut Filter. *2 With a built-in heater.
*The SNC-DH260 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (www.openssl.org).



SNC-DH140 / DH140T

Delivering HD resolution images in all lighting conditions and utilising state-of-the-art image enhancement with the View-DR wide dynamic range and XDNR noise reduction technologies, the SNC-DH140 / DH140T from Sony represents the very latest in mini-dome, HD network camera technology.



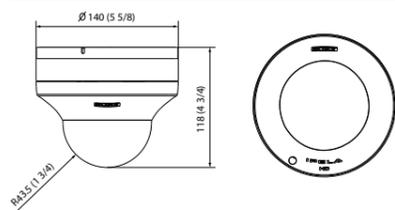
Key Features and Benefits

- 1/3" Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in low light conditions
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Advanced audio detection.** Monitors and stores ambient audio levels to deliver highly accurate audio alarm triggering

Standard Features and Benefits

- Triple codec support.** Delivers flexible image compression formats to overcome bandwidth limitations
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- Onvif support.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products
- Excellent 720p HD picture quality,** supporting H.264 at 30 fps

Dimensions



Specifications

Camera	SNC-DH140	SNC-DH140T
Image device	1/3 type progressive scan "Exmor" CMOS sensor	
Minimum illumination	Colour : 0.20 lx, B/W : 0.10 lx (F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	
Number of effective pixels (HxV)	Approx. 1.4 Megapixel	
Electronic shutter speed	1s to 1/10,000s	
Auto gain control (AGC)	Max gain setting LOW, MID, HIGH	
Exposure control	Auto, EV Compensation*1, Auto Slow Shutter*2	
White balance modes	Auto (ATW, ATW-Pro), Preset, One-push WB, Manual	
Lens type	Vari-focal lens	
Zoom ratio	Optical 2.9X (x2 Digital Zoom)	

Specifications (continued)

Camera (continued)	SNC-DH140	SNC-DH140T
Horizontal viewing angle	31.2 to 85.4°	
Focal length	f=3.1 to 8.9mm	
F-number	F1.2 (wide), F2.1 (tele)	
Powered Focus	Yes (Easy Focus)	
Powered Zoom	Yes (Easy Zoom)	
Camera Features		
Day/Night*3	Yes	
Wide-D	View-DR*4 (125 dB: Theoretical)	
Image enhancement	Visibility Enhancer	
Noise reduction	XDNR	
Vandal resistant standard	No	IK10
Image		
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG	
Maximum frame rate	H.264/MPEG-4/JPEG: 30 fps (1280 x 720)	H.264: 20fps (1280 x 1024) / 30 fps (1280 x 720) MPEG-4: 25fps (1280 x 1024) / 30 fps (1280 x 720) JPEG: 30fps (1280 x 1024) / 30 fps (1280 x 720)
Audio		
Audio compression	G.711/G.726	
Scene analytics		
Intelligent motion detection	Yes (with built-in Post Filter)	
Intelligent object detection	No	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
ONVIF conformance	Yes	
Wireless network	No	
Number of clients	10	
Authentication	IEEE802.1X	
Interface		
Ethernet connectivity	10BASE-T / 100BASE-TX (RJ-45)	
Serial interface	No	
Card slots	No	
Analogue video output	Composite video (1Vp-p) BNC x 1	
Sensor input	x1	
Alarm output	x2	
External microphone input	Mini-jack (monaural), MIC IN/LINE IN: 2.5 V DC plug-in power	
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms	
Analogue video output		
Signal system	NTSC/PAL	
Horizontal resolution	600 TV lines	
S/N ratio	More than 50 dB	
General		
Mass	Approx. 750 g (1 lb 10 oz)	980g (2 lb 3 oz)
Dimensions (W x H x D)	140 x 118 mm (5 5/8 x 4 3/4 inches)	
Power requirements	PoE, AC24V, DC12V	
Power consumption	8.0 W max.	
Operating temperature	-10 to +50 °C (-14 to 122 °F) -10 to +50 °C (23 to 122°F)	
Storage temperature	-20 to +60 °C (-4 to 140 °F)	
System requirements		
Operating system	Windows Vista*, Microsoft Windows XP	Windows XP, Windows Vista, Windows 7
Processor	Intel Core2 Duo 2GHz or higher	
Memory	1GB or more	
Web browser	Microsoft Internet Explorer Ver6.0, Ver7.0	Microsoft Internet Explorer Ver6.0, 7.0, or 8.0
Supplied Accessories	CD-ROM (User's guides, SNC Toolbox), Installation manual, Template, Wire rope, Bracket, LAN cable, BNC cable, Power input cable, I/O cable, Audio Cable, Warranty booklet, M4 shoulder screw, M4 screws (2), Wrench	

*1 Visibility Enhancer off mode only *2 View-DR off mode only *3 Removable IR Cut Filter *4 View-DR technology is a combination of Sony's full-capture Wide-D technology, the high-speed "Exmor" CMOS sensor, and Visibility Enhancer. *5 Cold start temperature must be greater than 0°C.

SNC-DH180

Sony is pleased to introduce a powerful addition to its network HD camera lineup, the SNC-DH180. This vandal-resistant, wide dynamic range camera is designed with a built-in infrared (IR) illuminators. As a dual-stream network camera, it supports H.264, MPEG-4, and JPEG compression formats, and delivers excellent picture quality in HD 720p resolution at 30 frames per second (fps).



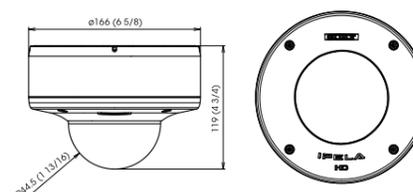
Key Features and Benefits

- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- 1/3" Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in low light conditions
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- Excellent picture quality** in HD 720p resolution, supporting H.264 at 30 fps

Standard Features and Benefits

- Triple codec support.** Delivers flexible image compression formats to overcome bandwidth limitations
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- ONVIF support.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products
- IP66 Rated.** Maximum environmental protection for heavy duty outdoor monitoring applications

Dimensions



Specifications

Camera	SNC-DH180
Image device	1/3 type progressive scan "Exmor" CMOS sensor
Minimum illumination	0.2 lx (Colour) 0 lx (B/W) - IR ON (F1.2 / View-DR Off/VE Off / AGC High(48dB max.) / XDNR Middle / 50IRE [IP])
Number of effective pixels (HxV)	1.4 Megapixel (1329 x 1049)
Electronic shutter	1s to 1/10000s
Auto gain control (AGC)	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance modes	Auto (AIW, AIW-Pro), Preset, One-push WB, Manual
Lens type	Vari-focal lens
Zoom ratio	Optical 2.9X (x2 Digital Zoom)
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f=3.1 to 8.9 mm

Specifications (continued)

Camera (continued)	SNC-DH180
F-number	F1.2 (wide), F2.1 (tele)
Minimum object distance	300 mm
Powered Focus	Yes (Easy Focus)
Powered Zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21pcs)
Camera Features	
Day/Night *3	Yes
Wide-D	View-DR (125dB: Theoretical)
Image enhancement	Visibility Enhancer
Noise reduction	XDNR
Image	
Codec image size (H x V)	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 640 x 480, 640 x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H.264: 20fps (1280 x 1024) MPEG-4: 25fps (1280 x 1024) JPEG: 30fps (1280 x 1024) H.264/MPEG-4/JPEG: 30 fps (1280 x 720)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Rule filter	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Number of clients	10
ONVIF conformance	Yes
Wireless network	No
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Serial interface	No
Card slots	No
Analogue video output	BNC x 1, RCA x 1
Sensor input	x 1
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Video system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50 dB
General	
Weight	1380 g (3 lb 1 oz)
Dimensions (W x H x D)	166 x 119 mm (6 5/8 x 4 3/4 inches)
Power requirements	PoE *4, AC24V, DC12V
Power consumption	28 W max.
Starting temperature	AC24V/DC12V: -20 to 50 °C (-4 to 122°F) PoE (IEEE802.3af): 0 to 50 °C (32 to 122°F)
Working temperature	AC24V/DC12V: -30 to 50 °C (-22 to 122°F) PoE (IEEE802.3af): -10 to 50 °C (23 to 122°F)
Storage temperature	-20°C to +60°C (-4°F to 140 °F)
Ingress Protection	IP66
Vandal resistant standard	IK10
System requirements	
Operating system	Windows XP, Windows Vista
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver 6.0 or 7.0
Supplied Accessories	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, Bracket, BNC cable, I/O cable, Audio cable, M4 shoulder screw, M4 screw x 4, Flyee, L-wrench, B&P Warranty Booklet, Template

*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter. *4 When used with PoE, SNC-DH180 cannot be used with a heater. The SNC-DH180 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).



SNC-DH240 / DH240T

Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



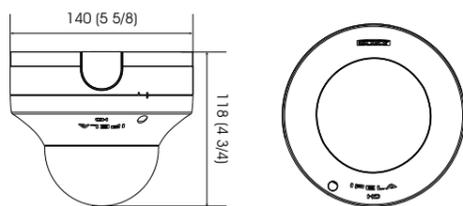
Key Features and Benefits

- 1/3" Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in low light conditions
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance
- ONVIF support.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products
- Ruggedised design.** Ideal for hostile indoor conditions (on SNC-DH240T only)

Dimensions



Specifications

Camera	SNC-DH240	SNC-DH240T
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor	
Minimum illumination	Colour: 0.55 lx, B/W: 0.3 lx (F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])	
Number of effective pixels (HxV)	3.27 Megapixel (2096 x 1561)	
Electronic shutter	1s to 1/10000s	
Auto gain control (AGC)	Auto (3 levels)	
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2	
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual	
Lens type	Vari-focal lens	
Horizontal viewing angle	88.5 to 32.3 degrees	
Zoom ratio	Optical 2.9X (x2 Digital Zoom)	

Specifications (continued)

Camera (continued)	SNC-DH240	SNC-DH240T
Focal length	f= 3.1 to 8.9 mm	
F-number	F1.2 (Wide), F2.1 (Tele)	
Minimum object distance	300 mm	
Powered Focus	Yes (Easy Focus)	
Powered Zoom	Yes (Easy Zoom)	
Camera Features		
Day/Night *3	Yes	
Wide-D	View-DR (84 dB: Theoretical)	
Image enhancement	Visibility Enhancer	
Noise reduction	XDNR	
Vandal resistant standard	No	IK10
Image		
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)	
Video compression format	H.264, MPEG-4, JPEG	
Codec streaming capability	Dual streaming	
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 25 fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)	
Audio		
Audio compression	G.711/G.726	
Scene Analytics		
Intelligent motion detection	Yes (with built-in Post Filter)	
Intelligent object detection	No	
Rule filter	Yes	
Network		
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)	
Number of clients	10	
ONVIF conformance	Yes	
Wireless network	No	
Authentication	IEEE802.1X	
Interface		
Ethernet	10BASE-T / 100BASE-TX (RJ-45)	
Serial interface	No	
Card slots	No	
Analogue video output	BNC x 1	
Analogue monitor output	Phono jack x 1	
Sensor input	x 1	
Alarm output	x 2	
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power	
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms	
Analogue video output		
Video system	NTSC / PAL	
Horizontal resolution	600 TV lines	
S/N ratio	More than 50 dB	
General		
Weight	750g (1 lb 10 oz)	980g (2 lb 3 oz)
Dimensions (W x H x D)	ø140 x 118 mm (5 5/8 x 4 3/4 inches)	ø140 x 119 mm (5 5/8 x 4 3/4 inches)
Power requirements	PoE, AC24V, DC12V	
Power consumption	10.2 W max.	
Starting temperature	0 to 50°C (32 to 122°F)	
Working temperature	-10 to +50°C (23 to 122°F)	
Storage temperature	-20 to +60°C (-4 to +140°F)	
System requirements		
Operating system	Windows XP, Windows Vista, Windows 7	
Processor	Intel Core2 Duo 2GHz or higher	
Memory	1GB or more	
Web browser	Microsoft Internet Explorer Ver.6.0, 7.0, or 8.0	
Supplied Accessories		
CD-ROM (User's guides, SNC Toolbox), Installation manual, Template, Wire rope, Bracket, LAN cable, BNC cable, Power input cable, I/O cable, Audio Cable, Warranty booklet, M4 shoulder screw, M4 screws (2), Wrench		

*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter.
*The SNC-DH240 / DH240T include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

SNC-DH280

IP66 Vandal-Resistant 1080p HD Security Camera with IR Illuminators and View-DR. Excellent 1080p HD picture quality, supporting H.264 at 30 fps. 3 Megapixel (1920 x 1440) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realize high image quality and low noise.



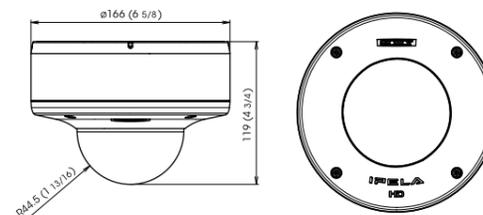
Key Features and Benefits

- View-DR enhanced wide Dynamic range technology.** Superior performance in high contrast lighting conditions
- Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- IR Illuminator.** Clearly captures objects in the dark up to 15m (49 feet) away with IR illuminators, which allows the camera to operate in 0 lux lighting conditions
- IP66-rated waterproof and dust-tight feature** for outdoor surveillance, or indoor where water ingress may pose an issue
- IK10-rated vandal-resistant feature** to protect the camera from destructive behaviours
- Easy focus function.** Automatic adjustment of image focusing simplifies installation
- Easy zoom function.** Adjusts the focus relative to the zoom ratio
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- Optical Day/Night function** to switch to Day or Night mode depending on the light level
- XDNR (eXcellent Dynamic Noise Reduction) technology** for clear images without motion blur under low illumination
- Powered by either AC 24V, DC 12V, or PoE (Power over Ethernet)** for easy installation
- Equipped with a built-in heater for continued camera operation in cold weather supported (-30 °C to +50 °C / -22 °F to +122 °F)
- Equipped with a BNC connector and a phono jack to instantly monitor the video while installing the camera
- ONVIF (Open Network Video Interface Forum) conformance** that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



*1 VE off mode only. *2 View-DR off mode only. *3 Removable IR Cut Filter. *4 With a built-in heater.
The SNC-DH280 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

Specifications

Camera	SNC-DH280
Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Colour: 0.40 lx, B/W: 0 lx (IR ON) (F1.2/View-DR OFF/XDNR ON-Middle/VE OFF/AGC High/50 IRE [IP])
Number of effective pixels (HxV)	Approx. 3.27Megapixel (2096 x 1561)
Electronic shutter	1 s to 1/10000 s
Auto gain control (AGC)	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance modes	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Vari-focal lens
Zoom ratio	Optical 2.9X (x2 Digital Zoom)
Horizontal viewing angle	88.5 degrees to 32.3 degrees
Focal length	f=3.1mm to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum objects distance	300 mm
Powered focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes (Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night *3	Yes
Wide-D	View-DR (90dB)
Image enhancement	Image enhancement Visibility Enhancer
Noise reduction	Yes
Image	
Codec image size (H x V)	1920 x 1440, 1600 x 1200, 1680 x 1056, 1920 x 1080, 1440 x 912, 1376 x 768, 1280 x 960, 1280 x 800, 1280 x 720, 1280 x 1024, 1024 x 768, 1024 x 576, 800 x 480, 768 x 576, 720 x 576, 704 x 576, 720 x 480, 640 x 480, 640x 368, 384 x 288, 320 x 240, 320 x 192 (H.264, MPEG-4, JPEG)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	H264: 20fps (1920 x 1440) / 30fps (1920 x 1080) MPEG-4: 15fps (1920 x 1440) / 20fps (1920 x 1080) JPEG: 10fps (1920 x 1440) / 15fps (1920 x 1080)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes (with built-in Post Filter)
Rule filter	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analogue video output	BNC x 1
Analogue monitor output	Phono jack x 1
Sensor input	x 1
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.5VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue Monitor Output	
Signal system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50 dB
General	
Weight	1400g (3 lb 1 oz)
Dimensions (ø x H)	ø 166 x 119 mm (6 5/8 x 4 3/4 inches)
Power requirements	PoE, AC24V, DC12V
Power consumption	29 W Max.
Starting temperature	AC24V/DC12V : -20 °C to +50 °C (-4 °F to +122 °F) PoE (IEEE802.3af) : 0 °C to 50 °C (32 °F to 122 °F)
Operating temperature	AC24V/DC12V : -30 °C to +50 °C (-22 °F to +122 °F)*4 PoE (IEEE802.3af) : -10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Ingress protection	IP66
Vandal resistant	IK10
System Requirements	
Operating system	Microsoft Windows XP, Windows Vista(32bit), Windows 7(32bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, M4 screw, Warranty Booklet, Template	

SNC-EM520

High-Quality Security Camera. SVGA (800 x 600) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realise high image quality and low noise.



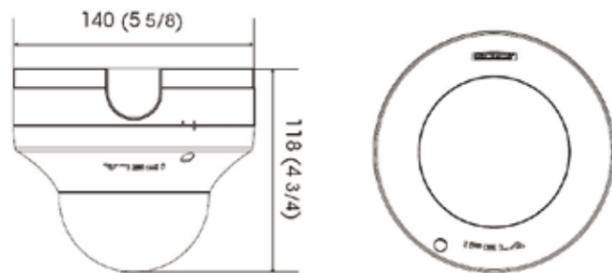
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Stream Squared function** to send two 4:3 aspect ratio videos in user-selectable resolutions up to SD simultaneously (Low-cost solution to replace two SD cameras located in a line)

Standard Features and Benefits

- **Analogue monitor output** (phono jack)
- **Powered by PoE (Power over Ethernet)** for simple installation
- **ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Unit: mm (inches)

Specifications

Camera	
Image sensor	1/3-type "Exmor" CMOS sensor
Number of effective pixels (H x V)	Approx. 1.4 Megapixel (1329 x 1049)
Minimum illumination	Colour: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 sec., AGC 42dB, 50IRE by IP)
Gain control	Auto
Electronic shutter speed	1/1 to 1/10,000 s
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance mode	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Varifocal lens
Powered zoom	Yes (Easy Zoom)
Zoom ratio	Optical 2.9x
Powered focus	Yes (Easy Focus)
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f = 3.1 to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum object distance	300 mm
Camera Features	
Day/Night	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	800 x 600 (SVGA), 720 x 576 (PAL D1), 720 x 480 (NTSC D1), 704 x 576 (4CIF), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264, MPEG-4, JPEG)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Network port	10BASE-T / 100BASE-TX (RJ-45)
General	
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	6.0 W max.
Operating temperature	-10 to +50 °C (14 to 122°F)
Starting temperature	0 to +50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Operating humidity	20 to 80%
Storage humidity	20 to 95%
Dimensions (W x H x D)	ø140 mm x 118 mm (5 5/8 inches x 4 3/4 inches)
Mass	Approx. 715 g (1 lb 9 oz) not including the cables and bracket
Safety regulations	UL2044, FCC Class A Digital Device, IC Class A Digital Device, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, AN/NZS CISPR22
System requirements	
Operating system	Microsoft Windows XP, Windows Vista (32 bit), Windows 7 (32 bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guides, and supplied programs) (1), Bracket (1), Template (1), Wire rope (1), Camera unit mounting screws (2), Shoulder screw M4 (1), LAN cable (1), Installation Manual (1)

*The SNC-EP520 and SNC-EP521 include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).



SNC-EM521

Vandal-Resistant Security Camera. SVGA (800 x 600) maximum resolution. Three codecs (H.264, MPEG-4, JPEG) and a dual streaming capability. The "Exmor" CMOS sensor incorporated to realise high image quality and low noise.



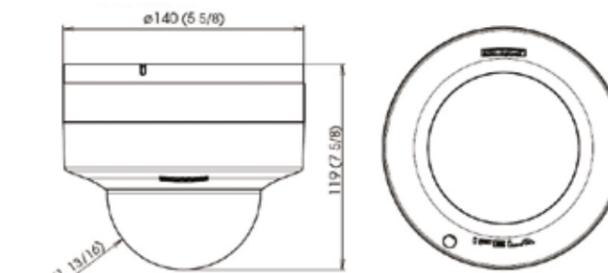
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- IK10-rated vandal-resistant** feature to protect the camera from destructive behaviors
- Stream Squared function** to send two 4:3 aspect ratio videos in user-selectable resolutions up to SD simultaneously (Low-cost solution to replace two SD cameras located in a line)

Standard Features and Benefits

- **Analogue monitor output** (phono jack)
- **Powered by PoE (Power over Ethernet)** for simple installation
- **ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Unit: mm (inches)

Specifications

Camera	
Image sensor	1/3-type "Exmor" CMOS sensor
Number of effective pixels (H x V)	Approx. 1.4 Megapixel (1329 x 1049)
Minimum illumination	Colour: 0.50 lx, B/W: 0.30 lx (F1.2, shutter 1/30 sec., AGC 42dB, 50IRE by IP)
Gain control	Auto
Electronic shutter speed	1/1 to 1/10,000 s
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance mode	Auto (ATW, ATW-PRO), Preset, One-push WB, Manual
Lens type	Built-in Varifocal lens
Powered zoom	Yes (Easy Zoom)
Zoom ratio	Optical 2.9x
Powered focus	Yes (Easy Focus)
Horizontal viewing angle	85.4 to 31.2 degrees
Focal length	f = 3.1 to 8.9 mm
F-number	F1.2 (Wide), F2.1 (Tele)
Minimum object distance	300 mm
Camera Features	
Day/Night	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	800 x 600 (SVGA), 720 x 576 (PAL D1), 720 x 480 (NTSC D1), 704 x 576 (4CIF), 640 x 480 (VGA), 352 x 288 (CIF), 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264, MPEG-4, JPEG)
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client only), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
ONVIF conformance	Yes
Number of clients	5
Authentication	IEEE802.1X
Interface	
Analogue monitor output	Phono jack x 1 (1.0 Vp-p, 75 ohms, unbalanced, sync negative)
Network port	10BASE-T / 100BASE-TX (RJ-45)
Sensor input	x 1, make contact, break contact
Alarm output	x 1, 24V AC/DC, 1A (mechanical relay outputs electrically isolated from the camera)
General	
Power requirements	PoE (IEEE802.3af compliant)
Power consumption	6.0 W max.
Operating temperature	-10 to +50 °C (14 to 122°F)
Starting temperature	0 to +50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
Operating humidity	20 to 80%
Storage humidity	20 to 95%
Vandal resistant	IK10
Dimensions (W x H x D)	ø140 mm x 119 mm (5 5/8 inches x 4 3/4 inches)
Mass	Approx. 945 g (2 lb 2 oz), not including the cables and bracket
Safety regulations	UL2044, FCC Class A Digital Device, IC Class A Digital Device, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, AN/NZS CISPR22
System requirements	
Operating system	Microsoft Windows XP, Windows Vista (32 bit), Windows 7 (32 bit)
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's Guides, and supplied programs) (1), Bracket (1), Template (1), Wire rope (1), Camera unit mounting screws (2), Shoulder screw M4 (1), Wrench (1), I/O cable (1), LAN cable (1), Installation Manual (1)

*The SNC-EP550 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).



SNC-EP521

High-Quality PTZ Camera. Three codecs (H.264, MPEG-4, JPEG) and dual-streaming capability. Powerful 36x optical zoom capability. Wide-D technology. Slim and stylish.



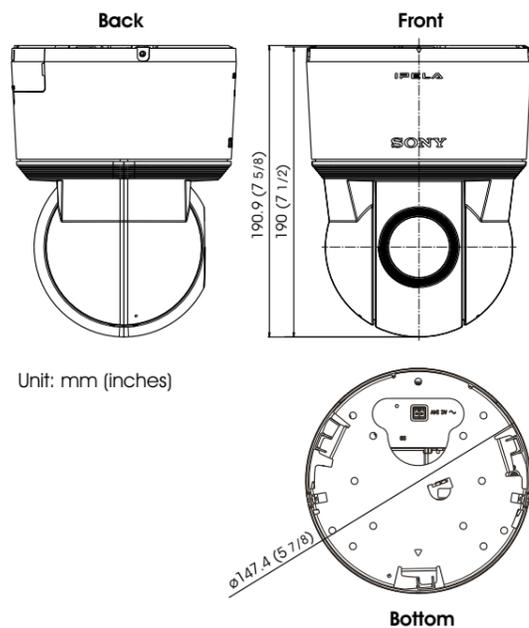
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 36x optical and total zoom ratio** of 432x with 12x digital zoom
- Wide-D technology** to handle various lighting conditions in a scene
- Powered by hPoE** for simple installation
- SD memory card slot** for an on-board recording capability
- ONVIF (Open Network Video Interface Forum)** Version 1.02 conformance

Dimensions



Specifications

Camera	
Image device	1/4-type EXview HAD CCD
Number of effective pixels	Approx. 0.44 Megapixel
Minimum illumination	Colour: 1.4lx (F1.6, shutter 1/50sec, AGC ON, 50IRE[IP]) B/W: 0.15lx (F1.6, shutter 1/50sec, AGC ON, Night Mode, 50IRE[IP])
Signal system	PAL standard
Electronic shutter speed	1/1 to 1/10,000 s
Auto gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 36x, Digital zoom 12x, Total zoom 432x
Horizontal viewing angle	57.8 to 1.7 degrees
Focal length	f=3.4 to 122.4 mm
F-number	F1.6 to F4.5
Minimum object distance	10mm (wide) to 1500mm (tele)
Pan angle	340 degrees
Pan Speed	300 degrees/s (max)
Tilt angle	105 degrees
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	720x576, 704x576, 640x480, 384x288, 320x240
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264/MPEG-4/JPEG)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP (32bit) - Professional Edition Microsoft Windows Vista (32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*The SNC-EP520 and SNC-EP521 include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

SNC-EP550

High-Quality 720p HD PTZ Camera. Excellent 720p HD picture quality, supporting 30 fps at H.264 (1280 x 720 maximum resolution). The "Exmor" CMOS sensor incorporated to realize high image quality and low noise. Powerful 28x optical zoom capability.



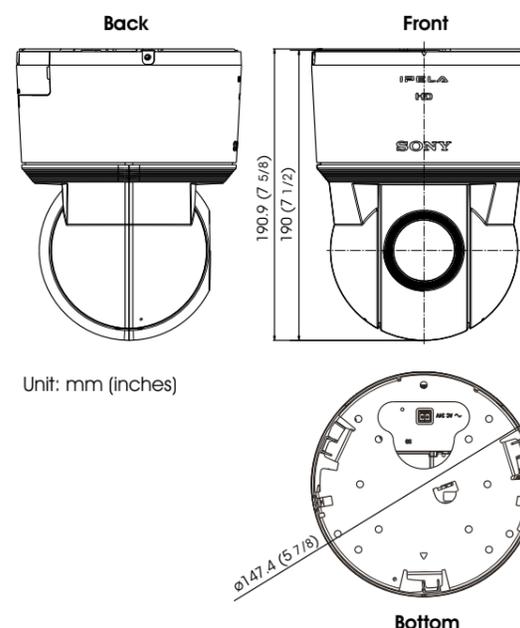
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- Excellent 720p HD picture quality at 30fps**
- 28x optical and total zoom ratio** of 336x with 12x digital zoom
- Wide-D technology** to handle various lighting conditions in a scene
- Powered by hPoE** for simple installation
- SD memory card slot** for an on-board recording capability
- ONVIF (Open Network Video Interface Forum)** Version 1.02 conformance

Dimensions



Specifications

Camera	
Image device	1/4-type Exmor CMOS
Number of effective pixels	Approx. 1.43 Megapixel
Minimum illumination	Colour: 1.0lx (F1.35, shutter 1/30sec, AGC ON, 50IRE[IP]) B/W: 0.1lx (F1.35, shutter 1/30sec, AGC ON, Night Mode, 50R [IP]) Color: 0.7lx (F1.35, shutter 1/30sec, AGC ON, 30IRE[IP]) B/W: 0.07lx (F1.35, shutter 1/30sec, AGC ON, Night Mode, 30IRE[IP])
Electronic shutter speed	1/1 to 1/10,000 s
Gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 28x, Digital zoom 12x, Total zoom 336x
Horizontal viewing angle	55.9 to 2.1 degrees
Focal length	f=3.5 to 98 mm
F-number	F1.35 to F3.7
Minimum object distance	10mm (wide) to 1500mm (tele)
Pan angle	340 degrees
Pan Speed	300 degrees/s (max)
Tilt angle	105 degrees
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	1280x720, 1024x576, 800x600, 800x480, 768x576, 720x576, 704x576, 720x480, 640x480, 640x368, 384x288, 320x240, 320x192
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264/MPEG-4/JPEG)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP(32bit) - Professional Edition Microsoft Windows Vista(32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*The SNC-EP550 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).



SNC-EP580

High-Quality 1080p HD PTZ Camera. Excellent 1080p HD picture quality, supporting 30 fps at H.264 (1920 x 1080 maximum resolution). The "Exmor" CMOS sensor incorporated to realize high image quality and low noise. Powerful 20x optical zoom capability.

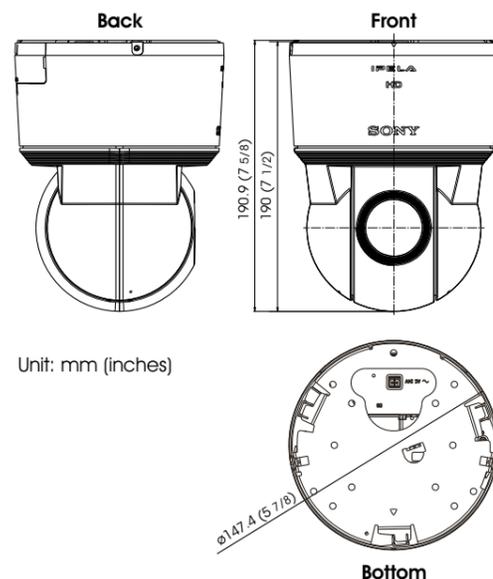
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- Excellent 1080p HD picture quality at 30fps
- 20x optical and total zoom ratio of 240x with 12x digital zoom
- Wide-D technology to handle various lighting conditions in a scene
- Powered by hPoE for simple installation
- SD memory card slot for an on-board recording capability
- ONVIF (Open Network Video Interface Forum) Version 1.02 conformance

Dimensions



Specifications

Camera	
Image device	1/2.8-type Exmor CMOS
Number of effective pixels	Approx. 3.27 Megapixel
Minimum illumination	Colour: 1.7lx (F1.6, shutter 1/30sec, AGC ON, 50IRE[IP]) B/W: 0.07lx (F1.6, shutter 1/30sec, AGC ON, Night Mode, 50IRE[IP])
Electronic shutter speed	1/1 to 1/10,000 s
Gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 20x, Digital zoom 12x, Total zoom 240x
Horizontal viewing angle	55.4 to 2.9 degrees
Focal length	f=4.7 to 94.0 mm
F-number	F1.6 to F3.5
Minimum object distance	10mm (wide) to 800mm (tele)
Pan angle	340 degrees
Pan Speed	300 degrees/s (max)
Tilt angle	105 degrees
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes*1
Noise Reduction	Yes
Image	
Codec image size (H x V)	1920x1080, 1680x1056, 1280x1024, 1440x912, 1280x960, 1376x768, 1280x800, 1280x720, 1024x768, 1024x576, 800x600, 800x480, 768x576, 720x576, 704x576, 720x480, 640x480, 640x368, 384x288, 320x240, 320x192
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP(32bit) - Professional Edition Microsoft Windows Vista(32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2.33 GHz or higher
Memory	2 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*1 When using Wide-D technology, the maximum frame rate will be 15fps.
*The SNC-EP580 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

SNC-ER521

High-Quality Rapid Dome Camera. Three codecs (H.264, MPEG-4, JPEG) and dual-streaming capability. High-speed 360 degrees endless rotation. Powerful 36x optical zoom capability. Wide-D technology. Slim and stylish.

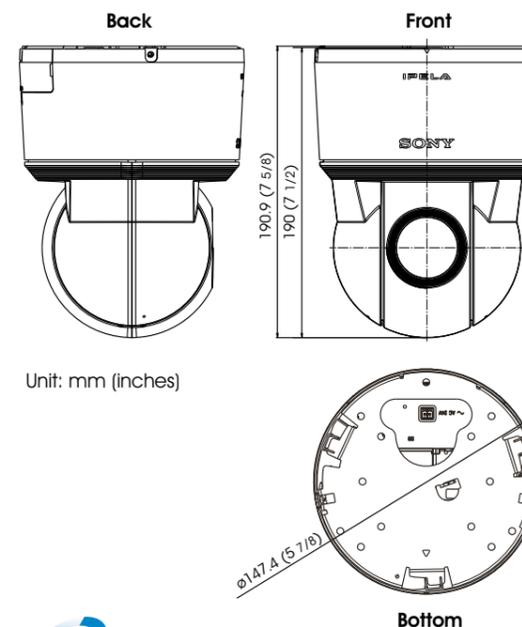
Key Features and Benefits

- High-Speed 360 degrees endless rotation**
- Above-the-horizon tilt.** 15° tilt-up, total tilt range of 210°
- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 36x optical and total zoom ratio of 432x with 12x digital zoom
- Wide-D technology to handle various lighting conditions in a scene
- Powered by hPoE for simple installation
- SD memory card slot for an on-board recording capability
- ONVIF (Open Network Video Interface Forum) Version 1.02 conformance

Dimensions



Specifications

Camera	
Image device	1/4-type ExView HAD CCD
Number of effective pixels	Approx. 0.44 Megapixel
Minimum illumination	Colour: 1.4lx (F1.6, shutter 1/50sec, AGC ON, 50IRE[IP]) B/W: 0.15lx (F1.6, shutter 1/50sec, AGC ON, Night Mode, 50IRE[IP])
Signal system	PAL standard
Electronic shutter speed	1/1 to 1/10,000 s
Auto gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 36x, Digital zoom 12x, Total zoom 432x
Horizontal viewing angle	57.8 to 1.7 degrees
Focal length	f=3.4 to 122.4 mm
F-number	F1.6 to F4.5
Minimum object distance	10mm (wide) to 1500mm (tele)
Pan angle	360 degrees
Pan Speed	300 degrees/s (max)
Tilt angle	210 degrees
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	720x576, 704x576, 640x480, 384x288, 320x240
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264/MPEG-4/JPEG)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP(32bit) - Professional Edition Microsoft Windows Vista(32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*The SNC-ER520 and SNC-ER521 include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

VIDEO SECURITY

IP RAPID DOME OR PTZ CAMERAS

SNC-ER550

High-Quality 720p HD Rapid Dome Camera. Excellent 720p HD picture quality, supporting 30 fps at H.264 (1280 x 720 maximum resolution). The "Exmor" CMOS sensor incorporated to realize high image quality and low noise. High-speed 360 degrees endless rotation. Powerful 28x optical zoom capability.



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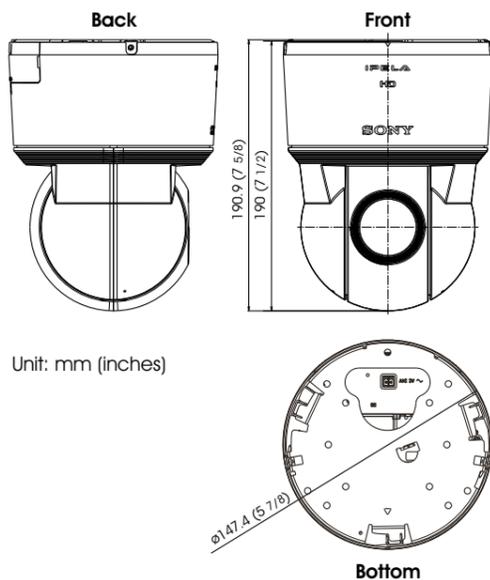
Key Features and Benefits

- High-Speed 360 degrees endless rotation**
- Above-the-horizon tilt.** 15° tilt-up, total tilt range of 210°
- JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- Excellent 720p HD picture quality at 30fps
- 28x optical and total zoom ratio of 336x with 12x digital zoom
- Wide-D technology to handle various lighting conditions in a scene
- Powered by hPoE for simple installation
- SD memory card slot for an on-board recording capability
- ONVIF (Open Network Video Interface Forum) Version 1.02 conformance

Dimensions



Unit: mm (inches)



Specifications

Camera	
Image device	1/4-type Exmor CMOS
Number of effective pixels	Approx. 1.43 Megapixel
Minimum illumination	Color: 1.0lx (F1.35, shutter 1/30sec, AGC ON, 50IRE[PI]) B/W: 0.1lx (F1.35, shutter 1/30sec, AGC ON, Night Mode, 50IRE[PI]) Color: 0.7lx (F1.35, shutter 1/30sec, AGC ON, 30IRE[PI]) B/W: 0.07lx (F1.35, shutter 1/30sec, AGC ON, Night Mode, 30IRE[PI])
Electronic shutter speed	1/1 to 1/10,000 s
Gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 28x, Digital zoom 12x, Total zoom 336x
Horizontal viewing angle	55.9 to 2.1 degrees
Focal length	f=3.5 to 98 mm
F-number	F1.35 to F3.7
Minimum object distance	10mm (wide) to 1500mm (tele)
Pan angle	360 degrees endless rotation
Pan Speed	300 degrees/s (max)
Tilt angle	210 degrees (with e-flip)
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes
Noise Reduction	Yes
Image	
Codec image size (H x V)	1280x720, 1024x576, 800x600, 800x480, 768x576, 720x576, 704x576, 720x480, 640x480, 640x368, 384x288, 320x240, 320x192
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264/MPEG-4/JPEG)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP(32bit) - Professional Edition Microsoft Windows Vista(32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*The SNC-ER550 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

VIDEO SECURITY

IP RAPID DOME OR PTZ CAMERAS

SNC-ER580

High-Quality 1080p HD Rapid Dome Camera. Excellent 1080p HD picture quality, supporting 30 fps at H.264 (1920 x 1080 maximum resolution). The "Exmor" CMOS sensor incorporated to realize high image quality and low noise. High-speed 360 degrees endless rotation. Powerful 20x optical zoom capability.



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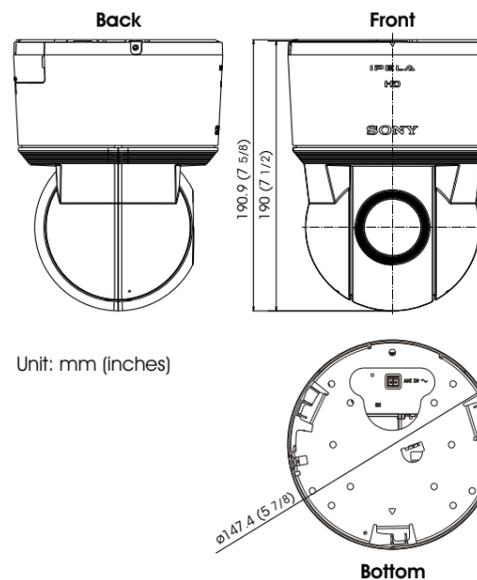
Key Features and Benefits

- High-Speed 360 degrees endless rotation**
- Above-the-horizon tilt.** 15° tilt-up, total tilt range of 210°
- JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- Day/night function.** Switches automatically to mono in night conditions
- Recording software (RealShot Manager Lite)** is bundled to start recording and monitoring instantly
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- Excellent 1080p HD picture quality at 30fps
- 20x optical and total zoom ratio of 240x with 12x digital zoom
- Wide-D technology to handle various lighting conditions in a scene
- Powered by hPoE for simple installation
- SD memory card slot for an on-board recording capability
- ONVIF (Open Network Video Interface Forum) Version 1.02 conformance

Dimensions



Unit: mm (inches)



Specifications

Camera	
Image device	1/2.8-type Exmor CMOS
Number of effective pixels	Approx. 3.27 Megapixel
Minimum illumination	Colour: 1.7lx (F1.6, shutter 1/30sec, AGC ON, 50IRE[PI]) B/W: 0.07lx (F1.6, shutter 1/30sec, AGC ON, Night Mode, 50IRE[PI])
Electronic shutter speed	1/1 to 1/10,000 s
Gain control	Auto/Manual (-3 to 28 dB)
Exposure control	Full auto, Shutter priority, Iris priority, Manual
White balance mode	Auto, ATW, Indoor, Outdoor, One-push, Manual, Sodium vapour lamp
Lens type	Auto-focus Zoom Lens
Zoom ratio	Optical zoom 20x, Digital zoom 12x, Total zoom 240x
Horizontal viewing angle	55.4 to 2.9 degrees
Focal length	f=4.7 to 94.0 mm
F-number	F1.6 to F3.5
Minimum object distance	10mm (wide) to 800mm (tele)
Pan angle	360 degrees endless rotation
Pan Speed	300 degrees/s (max)
Tilt angle	210 degrees (with e-flip)
Tilt speed	300 degrees/s (max)
Preset position	256 positions
Tour	5
Camera Features	
Day/Night	Yes
Wide-D	Yes*
Noise Reduction	Yes
Image	
Codec image size (H x V)	1920x1080, 1680x1056, 1280x1024, 1440x912, 1280x960, 1376x768, 1280x800, 1280x720, 1024x768, 1024x576, 800x600, 800x480, 768x576, 720x576, 704x576, 720x480, 640x480, 640x368, 384x288, 320x240, 320x192
Video compression format	H.264, MPEG-4, JPEG
Codec streaming capability	Dual streaming
Maximum frame rate	30 fps (H.264)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Intelligent motion detection	Yes
Network	
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP(MIB-2)
ONVIF conformance	Yes (Ver. 1.02)
Number of clients	5
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Card slots	SD memory card x 1 (Compatible with the SD/SDHC standards)
Sensor input	x2
Alarm output	x1
External microphone input	Mini-jack (monaural)
Audio line output	Mini-jack (monaural), Max output level: 1 Vrms
General	
Mass	1.7 kg (3 lb 12 oz) (including sealing bracket)
Dimensions (ø x H mm)	ø147.4 x 190.9 mm (5 7/8 x 7 5/8 inches)
Power requirements	HPoE (IEEE802.3at compliant), AC24V
Power consumption	Approx. 25W
Operating temperature	-5 to +50 °C (23 to 122°F)
Starting temperature	0 to 50 °C (32 to 122°F)
Storage temperature	-20 to +60 °C (-4 to +140°F)
System requirements	
Operating system	Microsoft Windows XP(32bit) - Professional Edition Microsoft Windows Vista(32bit) - Ultimate, Business Edition Microsoft Windows 7 (32/64bit) - Ultimate, Professional Edition
Processor	Intel Core2 Duo 2 GHz or higher
Memory	1 GB or more
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefox Ver.3.5 (Plug-in free viewer only) Safari Ver.4.0 (Plug-in free viewer only) Google Chrome Ver.4.0 (Plug-in free viewer only)
Supplied Accessories	
	CD-ROM (User's guide, supplied programs), Installation manual, Ceiling bracket, Screws(2), Template, 24V AC Connector, I/O Connector

*1 When using Wide-D technology, the maximum frame rate will be 15fps.
*The SNC-ER580 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>).

SNC-RH124

The SNC-RH124 indoor rapid dome camera delivers unrivalled image quality at HD resolution.



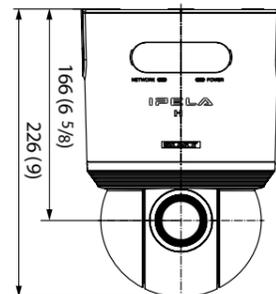
Key Features and Benefits

- HD** **HD video at 30 fps.** Superior High Definition image quality with real time capture
- XDNR** **XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE** **Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA** **Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	HD CMOS
Day/Night	Yes
Wide-D	No
Number of effective pixels	(H x V) Approx. 2 Megapixel
Electronic shutter speed	1/2 to 1/10,000s
Auto gain control	Auto/Manual (-3dB to +18dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	10x
Horizontal viewing angle	5.4 to 50 degrees
Focal length	f=5.1 to 51mm
F-number	F1.8 (wide), F2.1 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 1280 x 720, 1024 x 576, 800 x 480, 768 x 576, 640 x 480 (VGA), 640 x 368, 384 x 288, 320 x 240 (QVGA), 320 x 192
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4: 30 fps (1280 x 720)
JPEG	10 fps (1280 x 720)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
S/N ratio	More than 50 dB
Sensitivity colour	1.9 (50IRE, AGC ON)
Sensitivity monochrome	0.17 (50IRE, AGC ON)
General	
Weight	Approx. 2.1 kg (4 lb 10 oz)
Dimensions	(ø x H) 154 x 226 mm (6 1/8 x 9 inches)
Power requirements	hPoE, AC24V, DC12V
Power consumption	27 W max
Operating temperature	0 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Mounting bracket, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Mounting template, Wire rope

SNC-RH164

Ideal for heavy duty, outdoor monitoring applications, the SNC-RH164 rapid dome camera delivers unrivalled image quality at HD resolution.



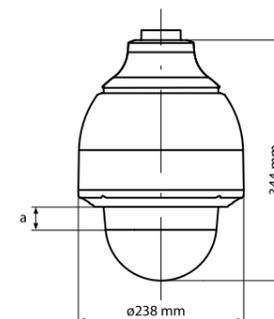
Key Features and Benefits

- HD** **HD video at 30 fps.** Superior High Definition image quality with real time capture
- XDNR** **XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE** **Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA** **Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- IP66 Rated.** Maximum environmental protection for heavy duty outdoor monitoring applications
- Sunshade Ventilation Mechanism.** Delivering optimum performance in hot weather conditions the camera benefits from a special ventilation mechanism
- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	HD CMOS
Day/Night	Yes
Wide-D	Yes
Number of effective pixels	(H x V) Approx. 2 Megapixel
Electronic shutter speed	1/2 to 1/10,000s
Auto gain control	Auto/Manual (-3 to +18dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	10x
Horizontal viewing angle	5.4 to 50 degrees
Focal length	f=5.1 to 51mm
F-number	F1.8 (wide), F2.1 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 1280 x 720, 1024 x 576, 800 x 480, 768 x 576, 640 x 480 (VGA), 640 x 368, 384 x 288, 320 x 240 (QVGA), 320 x 192
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4: 30 fps (1280 x 720)
JPEG	10 fps (1280 x 720)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (With Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
S/N ratio	More than 50 dB
Sensitivity colour	2.1 (50IRE, AGC ON)
Sensitivity monochrome	0.19 (50IRE, AGC ON)
General	
Weight	Approx. 4.5 kg (9 lb 15 oz)
Dimensions	(ø x H) 238 x 346 mm (9 3/8 x 13 5/8 inches)
Power requirements	AC24V
Power consumption	78 W max
Operating temperature	-40 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Top sunshade, Rotate-and-lock coupling, Waterproof plug, Screws, Installation manual, CD-ROM (User's guide, SNC toolbox), Wire rope

SNC-RS44P

The SNC-RS44P indoor rapid dome camera delivers high image quality coupled feature-rich performance.



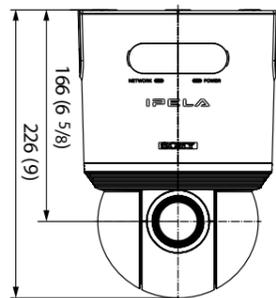
Key Features and Benefits

- 1/4" CCD with Exwave HAD™ technology.** Superior image quality with extended infra red response
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 18 x optical zoom.** Powerful optical zoom capability delivers flexible image capture and tracking
- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	1/4-type CCD with Exwave HAD technology
Day/Night	Yes
Wide-D	Yes
Number of effective pixels	(H x V) 440,000
Electronic shutter speed	1/2 to 1/10,000s
Auto gain control	Auto/Manual (-3dB to +28dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, AIW, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	18x
Horizontal viewing angle	2.8 to 48 degrees
Focal length	f=4.1 to 73.8mm
F-number	F1.4 (wide), F3.0 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 720 x 576, 640 x 480 (VGA), 384 x 288, 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4/JPEG, 25 fps (720 x 576)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
Horizontal resolution	530 TV lines
S/N ratio	More than 50 dB
Sensitivity colour	0.4 (50IRE, AGC ON)
Sensitivity monochrome	0.08 (50IRE, AGC ON)
General	
Weight	Approx. 2.1 kg (4 lb 10 oz)
Dimensions	(ø x H) 154 x 226 mm (6 1/8 x 9 inches)
Power requirements	hPoE, AC24V, DC12V
Power consumption	25 W max.
Operating temperature	0 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Mounting bracket, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Mounting template, Wire rope

SNC-RS46P

The SNC-RS46P indoor rapid dome camera delivers high image quality and feature-rich performance with an enhanced optical zoom range capability.



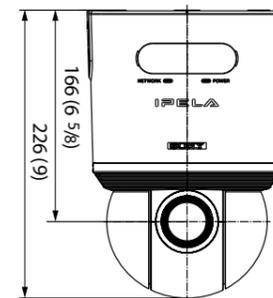
Key Features and Benefits

- 1/4" CCD with Exwave HAD™ technology.** Superior image quality with extended infra red response
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 36 x optical zoom.** Powerful optical zoom capability delivers flexible image capture and tracking
- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	1/4-type CCD with Exwave HAD technology
Day/Night	Yes
Wide-D	Yes
Number of effective pixels	(H x V) 440,000
Electronic shutter speed	1 to 1/10,000s
Auto gain control	Auto/Manual (-3dB to +28dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, AIW, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	36x
Horizontal viewing angle	1.7 to 57.8 degrees
Focal length	f=3.4 to 122.4mm
F-number	F1.6 (wide), F4.5 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 720 x 576, 640 x 480 (VGA), 384 x 288, 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4/JPEG, 25 fps (720 x 576)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
Horizontal resolution	530 TV lines
S/N ratio	More than 50 dB
Sensitivity colour	0.7 (50IRE, AGC ON)
Sensitivity monochrome	0.08 (50IRE, AGC ON)
General	
Weight	Approx. 2.1 kg (4 lb 10 oz)
Dimensions	(ø x H) 154 x 226 mm (6 1/8 x 9 inches)
Power requirements	hPoE, AC24V, DC12V
Power consumption	25 W max.
Operating temperature	0 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Mounting bracket, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Mounting template, Wire rope

SNC-RS84P

Ideal for outdoor, heavy duty monitoring applications, the SNC-RS84P rapid dome camera delivers high image quality coupled with feature-rich performance.



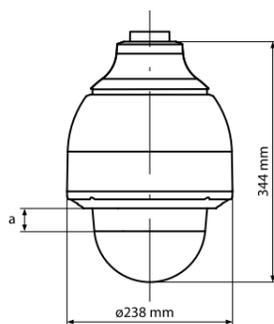
Key Features and Benefits

- 1/4" CCD with Exwave HAD™ technology.** Superior image quality with extended infra red response
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 18 x optical zoom.** Powerful optical zoom capability delivers flexible image capture and tracking
- IP66 Rated.** Maximum environmental protection for heavy duty outdoor monitoring applications
- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	1/4-type CCD with Exwave HAD technology
Day/Night	Yes
Wide-D	Yes
Number of effective pixels	(H x V) 440,000
Electronic shutter speed	1 to 1/10,000s
Auto gain control	Auto/Manual (-3 to +28dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, AIW, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	18x
Horizontal viewing angle	2.8 to 48 degrees
Focal length	f=4.1 to 73.8mm
F-number	F1.4 (wide), F3.0 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 720 x 576, 640 x 480 (VGA), 384 x 288, 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4/JPEG, 25 fps (720 x 576)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
Horizontal resolution	530 TV lines
S/N ratio	More than 50 dB
Sensitivity colour	0.4 (50IRE, AGC ON)
Sensitivity monochrome	0.09 (50IRE, AGC ON)
General	
Weight	Approx. 4.5 kg (9 lb 15 oz)
Dimensions	(ø x H) 238 x 346 mm (9 3/8 x 15 5/8 inches)
Power requirements	AC24V
Power consumption	80 W max.
Operating temperature	-40 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Top Sunshade, rotate and lock coupling, Waterproof plug, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Wire rope



SNC-RS86P

Ideal for outdoor, heavy duty monitoring applications, the SNC-RS86P rapid dome camera delivers high image quality and feature-rich performance with an enhanced optical zoom range capability.



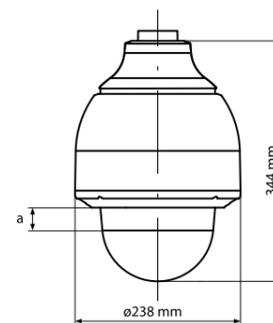
Key Features and Benefits

- 1/4" CCD with Exwave HAD™ technology.** Superior image quality with extended infra red response
- XDNR noise reduction technology.** Noise and Ghost free images with superior sensitivity in lowlight conditions
- VE Visibility Enhancer.** Enhanced wide dynamic range improves performance in challenging lighting conditions
- DEPA Advanced analytics.** Advanced, powerful intelligent video analytics deliver enhanced system performance

Standard Features and Benefits

- 36 x optical zoom.** Powerful optical zoom capability delivers flexible image capture and tracking
- IP66 Rated.** Maximum environmental protection for heavy duty outdoor monitoring applications
- 210 degree tilt angle.** Greater image capture at high angles of tilt
- Quick Release Mechanism.** Quick and easy to install and maintain
- ONVIF Compliant.** Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Dimensions



Specifications

Camera	
Image device	1/4-type CCD with Exwave HAD technology
Day/Night	Yes
Wide-D	Yes
Number of effective pixels	(H x V) 440,000
Electronic shutter speed	1 to 1/10,000s
Auto gain control	Auto/Manual (-3dB to +28dB)
Exposure control	Auto, Full auto, Shutter-priority, Iris-priority, Manual, EV compensation, Backlight compensation
White balance mode	Auto, Indoor, Outdoor, One-push WB, AIW, Manual
Lens type	Auto-focus zoom lens
Zoom ratio	36x
Horizontal viewing angle	2.8 to 48.0 degrees
Focal length	f=3.4 to 122.4 mm
F-number	F1.4 (wide), F3.0 (tele)
Pan angle	360 degrees endless rotation
Pan speed	400 degrees/s (max.)
Tilt angle	210 degrees (with e-flip)
Tilt speed	400 degrees/s (max.)
Image	
Codec image size	(H x V) 720 x 576, 640 x 480 (VGA), 384 x 288, 320 x 240 (QVGA)
Video compression format	H.264, MPEG-4, JPEG
Maximum frame rate	H264/MPEG-4/JPEG, 25 fps (720 x 576)
Audio	
Audio compression	G.711/G.726
Scene Analytics	
Simple activity detection	No
Intelligent motion detection	Yes (with built-in Post Filter)
Intelligent object detection	No
Network	
Protocols	TCP/IP, ARP, ICMP, HTTP, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, SNMP (MIB-2)
Wireless network	Yes (Optional card)
Number of clients	10
Authentication	IEEE802.1X
Interface	
Ethernet	10BASE-T/100BASE-TX (RJ-45)
Serial interface	RS-232C/RS-422 (PELCO D protocol)
Card slots	CF card x1
Analogue video output	Composite video (1Vp-p)
Sensor input	x 4
Alarm output	x 2
External microphone input	Mini-jack (Monaural), MIC IN/LINE IN: 2.2k ohm, 2.45VDC plug-in power
Audio line output	Mini-jack (Monaural), Max output level: 1 Vrms
Analogue video output	
Signal system	PAL
Horizontal resolution	530 TV lines
S/N ratio	More than 50 dB
Sensitivity colour	0.8 (50IRE, AGC ON)
Sensitivity monochrome	0.09 (50IRE, AGC ON)
General	
Weight	Approx. 4.5 kg (9 lb 15 oz)
Dimensions	(ø x H) 238 x 346 mm (9 3/8 x 15 5/8 inches)
Power requirements	AC24V
Power consumption	80 W max.
Operating temperature	-40 to 50 °C
Storage temperature	-20 to 60 °C
System requirements	
Operating system	Windows XP/Vista®
System requirements	CPU: Intel® Pentium® IV 3GHz, Intel® Core™2 Duo 2GHz or higher, RAM: 1GB or more
Web browser	Microsoft Internet Explorer Ver6.0 or higher
Supplied Accessories	
	Base unit, Top Sunshade, rotate and lock coupling, Waterproof plug, Screws, Cables (Power input, BNC, I/O, Serial), Installation manual, CD-ROM (User's guide, SNC toolbox), Wire rope

SNC-ZB550

Hybrid Fixed Camera.



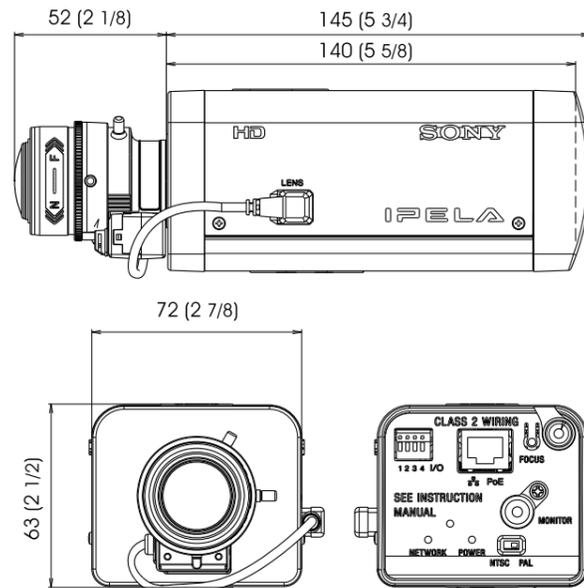
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- HD video at 30 fps.** Superior High Definition image quality with real time capture
- Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Maximum resolution (IP)	1280 x 1024 (1.3 Mega)
Horizontal viewing angle	96.5° to 33.9°
Zoom ratio	2.9x optical zoom
Focal length	f=2.8 to 8 mm
Lens type	CS mount lens
Minimum illumination	Colour: 0.50 lx B/W: 0.30 lx (F1.2/AGC 42dB/50IRE (IP))
Camera Features	
Day/Night	Yes
Wide-D	No
Noise reduction	Yes
Image	
Codec streaming capability	Dual streaming (Any combination with H.264/MPEG-4/JPEG, including multiple streams of the same format)
Video compression format	H.264/MPEG-4/JPEG
Computer display format	HD
Maximum frame rate	30 fps H.264/MPEG-4/JPEG at 1280 x 720
Image device	1/3 type progressive scan Exmor CMOS sensor
Network	
Wireless capability	No
Interface	
Card slots	No
Analogue video output	
Signal system	NTSC standard/PAL standard (selectable)
General	
Power requirements	AC 24 V, DC 12 V
Power consumption	6 W max. (TBD)
Dimensions	72 x 63 x 197 mm (2 7/8 x 2 1/2 x 7 7/8 inches) with lens, not including projecting parts

SNC-ZM551

Hybrid Vandal Mini Dome Camera.



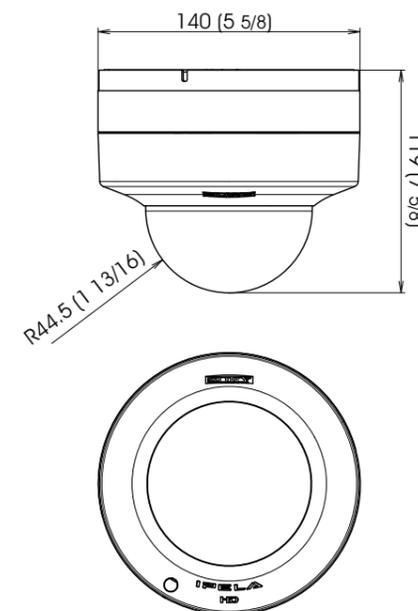
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- HD video at 30 fps.** Superior High Definition image quality with real time capture
- Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- IK10-rated** vandal-resistant feature to protect the camera from destructive behaviours

Standard Features and Benefits

- ONVIF (Open Network Video Interface Forum)** conformance that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Maximum resolution (IP)	1280 x 1024 (1.3 Mega)
Horizontal viewing angle	85.4° to 31.2°
Zoom ratio	2.9x optical zoom
Focal length	f=3.1 to 8.9 mm
Lens type	Built-in variable focal lens
Vandal Resistant	IK10
Minimum illumination	Colour: 0.50 lx B/W: 0.30 lx (F1.2/AGC 42dB/50IRE (IP))
Camera Features	
Day/Night	Yes
Wide-D	No
Noise reduction	Yes
Image	
Codec streaming capability	Dual streaming (Any combination with H.264/MPEG-4/JPEG, including multiple streams of the same format)
Video compression format	H.264/MPEG-4/JPEG
Computer display format	HD
Maximum frame rate	30 fps H.264/MPEG-4/JPEG at 1280 x 720
Image device	1/3 type progressive scan Exmor CMOS sensor
Network	
Wireless capability	No
Interface	
Card slots	No
Analogue video output	
Signal system	NTSC standard/PAL standard (selectable)
General	
Power requirements	AC 24 V, DC 12 V
Power consumption	7 W max. (TBD)
Dimensions	ø140 x 119 mm (ø5 5/8 x 4 3/4 inches)

SNC-ZM550

Hybrid Mini Dome Camera.



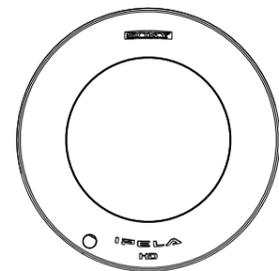
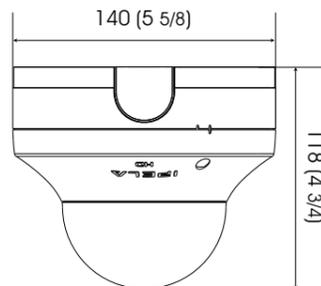
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- HD video at 30 fps.** Superior High Definition image quality with real time capture
- 1/3" Sony 1/3" Exmor HD CMOS image sensor with mechanical IRC filter.** Designed for security with superior HD image resolution in all lighting conditions
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions

Standard Features and Benefits

- ONVIF (Open Network Video Interface Forum) conformance** that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Specifications

Camera	
Maximum resolution (IP)	1280 x 1024 (1.3 Mega)
Horizontal viewing angle	85.4° to 31.2°
Zoom ratio	2.9x optical zoom
Focal length	f=3.1 to 8.9 mm
Lens type	Built-in variable focal lens
Minimum illumination	Colour: 0.50 lx B/W: 0.30 lx (F1.2/AGC 42dB/50IRE (IP))
Camera Features	
Day/Night	Yes
Wide-D	No
Noise reduction	Yes
Image	
Codec streaming capability	Dual streaming (Any combination with H.264/MPEG-4/JPEG, including multiple streams of the same format)
Video compression format	H.264/MPEG-4/JPEG
Computer display format	HD
Maximum frame rate	30 fps H.264/MPEG-4/JPEG at 1280 x 720
Image device	1/3 type progressive scan Exmor CMOS sensor
Network	
Wireless capability	No
Interface	
Card slots	No
Analogue video output	
Signal system	NTSC standard/PAL standard (selectable)
General	
Power requirements	AC 24 V, DC 12 V
Power consumption	7 W max. (TBD)
Dimensions	ø140 x 118 mm (ø5 5/8 x 4 3/4 inches)

SNC-ZR550 / ZP550

SNC-ZR550 Hybrid Rapid Dome Camera.
SNC-ZP550 Hybrid PTZ Camera.



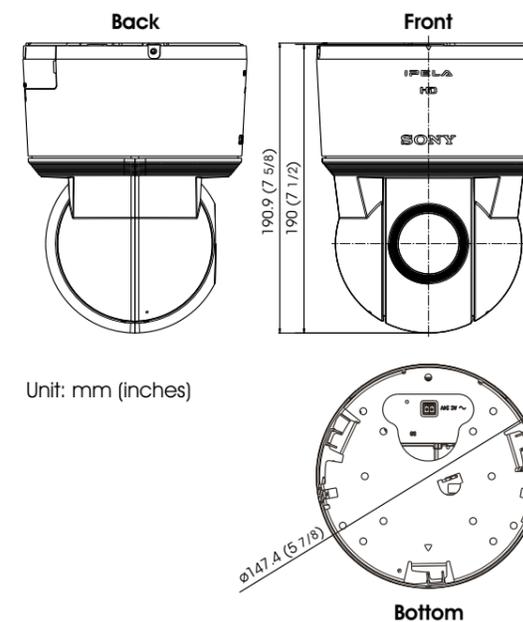
Key Features and Benefits

- H.264 JPEG, MPEG-4 and H.264 streaming.** JPEG, MPEG-4, H.264 encoding allows maximum image transmission flexibility
- HD video at 30 fps.** Superior High Definition image quality with real time capture
- 1/4" CCD with Exwave HAD™ technology.** Superior image quality with extended infra red response
- Day/night function.** Ideal for mechanical switching to monochrome in night conditions
- IK10-rated** vandal-resistant feature to protect the camera from destructive behaviours

Standard Features and Benefits

- ONVIF (Open Network Video Interface Forum) conformance** that ensures greater interoperability and more flexibility in building multiple-vendor systems

Dimensions



Unit: mm (inches)

Specifications

Camera	SNC-ZR550	SNC-ZP550
Maximum resolution (IP)	1280 x 720	
Horizontal viewing angle	55.9° to 2.1°	
Zoom ratio	28x optical zoom	
Focal length	f=3.5 to 98 mm	
Lens type	Auto-focus zoom lens	
"Rapid Dome" or "PTZ"	Rapid Dome	PTZ
Pan angle	360° endless rotation	340°
Tilt angle	-105° to +105° (210° tilt)	-15° to +90°
Minimum illumination	Colour: 0.7 lx (F1.35/AGC ON/shutter 1/30 s/30 IRE (IP)), B/W: 0.07 lx (F1.35/AGC ON/shutter 1/30 s/30 IRE (IP))	
Camera Features		
Day/Night	Yes	
Wide-D	DynaView	
Noise reduction	Yes	
Image		
Codec streaming capability	Dual streaming (Any combination with H.264/MPEG-4/JPEG, including multiple streams of the same format)	
Video compression format	H.264/MPEG-4/JPEG	
Computer display format	HD	
Maximum frame rate	30 fps H.264/MPEG-4/JPEG	
Image device	1/4 type Exmor CMOS sensor	
Network		
Wireless capability	No	
Interface		
Card slots	SD card x 1	
Analogue video output		
Signal system	NTSC standard/PAL standard (selectable)	
General		
Power requirements	hPoE, AC 24 V	
Power consumption	TBD	
Dimensions	ø147.4 x 190.9 mm (ø5 7/8 x 7 5/8 inches)	

SNT-EX/EP Series

Offering single channel, four channel and highly flexible and scalable blade solutions, the SONY SNT-EX/EP series delivers a unique encoding concept which adds significant value and performance advantages not previously available to traditional analogue camera systems. By simply adding SNT-EX/EP encoders to an existing analogue system, users can immediately benefit from Sony's unique image-enhancing and advanced analytics technology. Converting analogue video signals into digital video streams for transmission via IP-based networks, the SNT-EX/EP encoders offer unrivalled network flexibility coupled with D1 resolution support.



Sony's unique XDNR (eXcellent Dynamic Noise Reduction), VE (Visibility Enhancer), DFI (Dynamic Frame Integration) technology and DEPA Advanced (Distributed Enhanced Processing Architecture), combine with RS-485 and Coaxitron telemetry options to deliver superior image quality, powerful video and audio analytics and advanced telemetry support to existing analogue systems. Delivering advanced features, superior image quality from existing analogue video signals and the significant benefits of intelligent video and audio analytics, the SONY SNT-EX/EP series encoders are the obvious choice when migrating from an existing analogue system, to an IP based surveillance solution.

Key Features

- D1 resolution support
- XDNR noise reduction technology
- Visibility Enhancer
- DFI (Dynamic Frame Integration)
- DEPA Advanced analytics
- Triple codec support
- Advanced audio detection
- Voice alert
- Versatile telemetry interface
- External storage solutions
- Onvif support

Benefits

- Delivers the highest possible image quality
- Existing analogue cameras benefit from noise and ghost-free images with superior sensitivity in lowlight conditions
- Enhanced wide dynamic range improves performance for existing analogue cameras in challenging lighting conditions
- Produces superior images from dynamic scenes containing both still and moving objects
- Advanced, powerful intelligent video analytics deliver enhanced system performance to existing analogue systems
- Delivers flexible image compression formats to overcome bandwidth limitations. The encoders generate JPEG/MPEG and H.264 images at 30FPS
- Monitors and stores ambient audio levels to deliver highly accurate audio alarm triggering
- Stores up to three pre-recorded messages which may be replayed via manual or alarm activation
- Flexible support for third-party telemetry cameras via RS-422, RS-485 and Coaxitron interfaces
- Continuous, pre-and post-event recording may be stored using USB memory devices
- Maximum interoperability and flexibility with a wide range of manufacturers' network video products

Specifications

Encoder Features	SNT-EX101	SNT-EX101E	SNT-EX104	SNT-EP104	SNT-EX154	SNT-EP154
Visibility enhancer			Yes			
XDNR			Yes			
Coaxitron control		Yes		No	Yes	No
Interface						
Analogue video input	x1			x4		
Composite buffered throughput	x1			-		
Ethernet			10Base-T/100Base-TX (RJ-45)			
Serial interface	RS-422/RS-485		RS-485	-	RS-485	-
USB Memory slots	x1		x4		-	
Sensor input	x2		x4	-	x4	-
Alarm output	x2		x4	-	x4	-
Audio interface (IN/OUT)	IN x1, OUT x1		IN x4, OUT x4	-	IN x1, OUT x1	-
External microphone input	Mini-jack (monaural), MIC IN/LINE IN: over 2.2kohm, 2.45VDC plug-in power			-	Mini-jack (monaural), MIC IN/LINE IN: over 2.2kohm, 2.45VDC plug-in power	-
Audio line output	Mini-jack (monaural), Max output level: 1.5Vp-p			-	Mini-jack (monaural), Max output level: 1.5Vp-p	-
Image						
Codec image size (HxV)	D1 (NTSC: 720 x 480, PAL: 720 x 576), VGA (640 x 480), CIF (384 x 288), QVGA (320 x 240)					
Video compression format	H.264, MPEG-4, JPEG					
Maximum frame rate	H264/MPEG-4/JPEG: 30 fps (NTSC: 720 x 480, PAL: 720 x 576)					
Audio						
Audio compression	G.711/G.726		G.711/G.726			
Scene Analytics						
Intelligent motion detection	Yes (with built-in Post Filter)		No		Yes (with built-in Post Filter)	No
Motion detection	No		Yes		No	Yes
Advanced audio detection	Yes		No		Yes	No
Network						
Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP (client/server), SMTP, DHCP, DNS, NTP, RTP/RTCP, RTSP, SNMP (MB-2)					
Number of clients	10					
Authentication	IEEE802.1X					
Number of IP address/Mac address	x1		x4			
General						
Weight	Approx. 0.4kg (1.4 oz)		Approx. 1.4kg (2 lb 3 oz)	Approx. 1.3kg (2 lb 3 oz)	Approx. 0.4kg (1.4 oz)	
Dimensions (W x H x D)	73 x 34 x 155 mm 2 7/8 x 1 3/8 x 6 1/8 inches		210 x 44 x 250 mm 8 3/8 x 1 3/4 x 9 7/8 inches		78 x 34 x 382 mm 3 1/8 x 1 3/8 x 15 1/8 inches	
Power requirements	AC 24V (In ±20%, Out)		PoE (802.af)		DC 12V	
Power consumption	9.6W max.		14.4W max.		12W max.	
Operating temperature	0 to 50°C		0 to 45°C			
Storage temperature	-20 to 60°C					
System requirements						
Operating system	Microsoft Windows Vista®					
Processor	Intel® Core™2 Duo, 1.8GHz or higher.					
Memory	1GB or more					
Web browser	Microsoft Internet Explorer Ver. 6.0, Ver. 7.0					
Supplied Accessories						
CD-ROM (User's Guide and supplied programs) (1), Installation Manual (1), B&P Warranty Booklet (1), I/O port connector (1), 24V AC connector (1), Attachment brackets (4), Attachment screws (8)			CD-ROM (User's Guide and supplied programs) (1), Installation Manual (1), B&P Warranty Booklet (1), AC adaptor (AC-NB 12A) (1), Power cord (1), I/O port connector (SNT-EX104 only) (1)		Installation Manual (1), B&P Warranty Booklet (1), I/O port connector (Only SNT-EX154) (1), Attachment screws (2)	

Peripherals



SNT-RS3U
3U rack station, houses up to 12 SNT-EX/EP154 blade encoders to provide a maximum of 48 analogue input channels

Optional Accessories



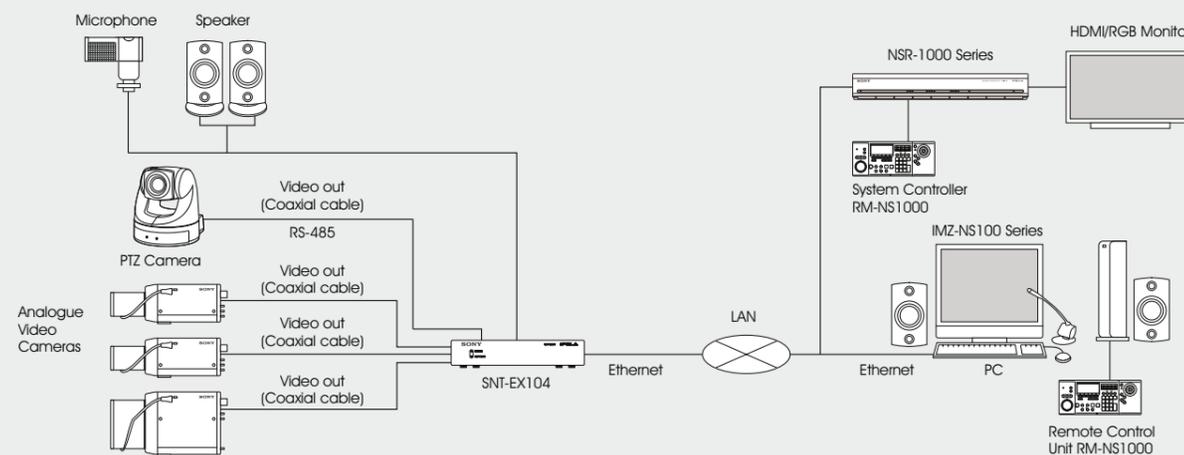
SNTA-RP1
Rack station power supply unit, provides a redundant power supply system for the SNT-RS3U



SNT-RS1U
3U rack station, houses up to 4 SNT-EX154/EP154 blade encoders to provide a maximum of 16 analogue input channels.

Configurations

System Configuration



IMZ-NS100 Series

Real Shot Manager Advanced: simple, flexible, powerful and scalable – HD-ready Intelligent Monitoring Software from Sony Professional.



Post VMD Search

VMF Search

Key Features

- Easy to use and understand graphical user interface
- Automatic camera registration
- Simple yet powerful recording capabilities
- Advance image search functions
- Hot spot monitoring function
- Flexible custom screen layouts
- Totally scalable with multiple camera options
- Open platform

Benefits

- Minimal operator training required
- Quick and easy set up of Sony IP cameras
- Manual, event and scheduled recording available
- Locate required images quickly and easily
- Provides detailed view for area of interest
- Allows user defined graphical interface options
- System expansion to meet your requirement via IMZ-NS101, NS104, NS109 and NS116, 1, 4, 9 and 32 channels options
- Powerful system flexibility via support of third-party IP cameras

Specifications

System Requirements		
Operating system ^{*1}	Windows 7 Professional (32bit or 64bit) Windows 7 Enterprise (32bit or 64bit) Windows Vista Business Service Pack 2 (32bit only) Windows Vista Enterprise Service Pack 2 (32bit only) Windows XP Professional Service Pack 3 (32bit only) Windows Server 2003 Service Pack 2 (32bit only) Windows Server 2008 R2 Standard Edition (32bit or 64bit)	
CPU	Intel® Core™ 2Duo 2.0-GHz or higher	
Main memory	1 GB or more	
HDD 2	10GB spare capacity (or more depending on the video that is to be stored)	
Video card	1024 x 768, 16/24 bit colour	
Network interface card (NIC)	100BASE-TX or higher	
Display (Resolution)	1024 x 768 or higher	
Specifications		
	Server	Client
Video compression	JPEG/MPEG-4	JPEG/MPEG-4
Audio compression	G711/G726	G711/G726
Number of cameras to be connected ^{*2}	32	—
Number of clients to be connected ^{*3}	10	—
Maximum number of layouts	100	100
Maximum number of users	100	100
Maximum number of servers to a client ^{*4}	—	64

*1 x 64 edition is not supported.
*2 This is a recommended value to assure high performance. It is technically possible to connect more than 32 units by installing on the PC a corresponding number of licences. Display/recording performance basically depends on PC performance, but an increase in cameras may deteriorate overall performance.
*3 This is a recommended value to assure high performance. It is technically possible to connect more than 10 clients, but this increase may deteriorate overall performance.
*4 This is a recommended value to assure high performance. It is technically possible to connect more than 64 servers, but this increase may deteriorate overall performance.

Easy-to-use monitoring functions



Double-clicking a Frame

Hot spot monitoring/Dual monitor support

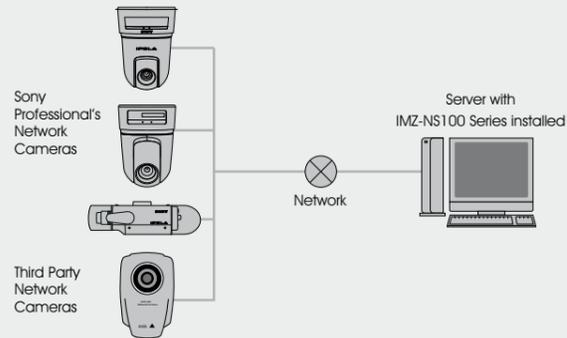


Monitor 1

Monitor 2 (Hot spot)

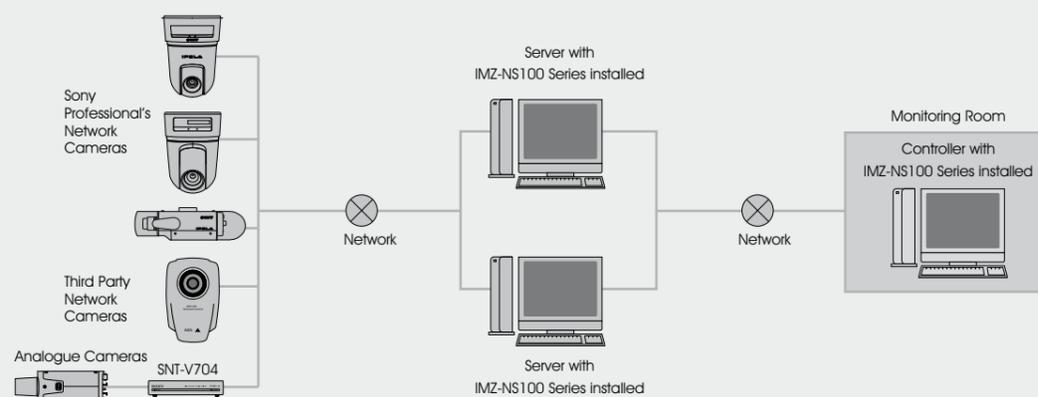
Configurations

Standalone Configuration



	RSM Lite	RSM AD
Support device	Sony IP camera / Encoder	Open platform
Max ch number	9	Unlimited
Max client number	3	20
Master / Slave structure (Multiple servers connection from client)	No	Yes
VMD (Recorder)	No	Yes
Object Search	No	Yes
DEPA (VMF)	No	Yes
Manual Action	No	Yes

Client-Server Configuration



RSM Advanced Series software packages

IMZ-NS101

Control PC software for one networked video source.

IMZ-NS104

Control PC software for up to four networked video sources.

IMZ-NS109

Control PC software for up to nine networked video sources.

IMZ-NS116

Control PC software for up to 16 networked video sources.

IMZ-NS132

Control PC software for up to 32 networked video sources images to be searched quickly.

RSM Lite

Free of charge monitoring software provided with all Sony IP products. Control PC software for up to 9 cameras. Please see RSM Advanced vs RSM Lite table for more information.

NSR-500

The NSR-500 is Sony's 16-channel full-HD network surveillance recording server delivering an excellent cost-performance ratio. Six models with different storage capacities are available, so you can select according to your precise requirements.



Key Features

• Long-duration Recording

With a 12 TB HDD (2 TB x 6), you can record more than 300 hours of high-quality full-HD images compressed at 4 Mbps with a frame rate of 30 fps.

• RAID Technology to Prevent Disk-failure Data Loss

The hard disk storage units of the NSR-500 are configured with high redundancy. They feature RAID implementations and hotswappable capabilities to protect important data against hard disk failure, 24 hours a day. You can choose from RAID 1 (1+0), RAID 5 or RAID 5 + Hot Spare, depending on your system requirements.

• Optional Licenses for Future System Expansion

The optional NSBK-CL05 allows you to add extra licenses, and you can connect up to 24 network cameras to a single NSR-500 (including the original 16 cameras).

• Easy Setup and Easy Operation

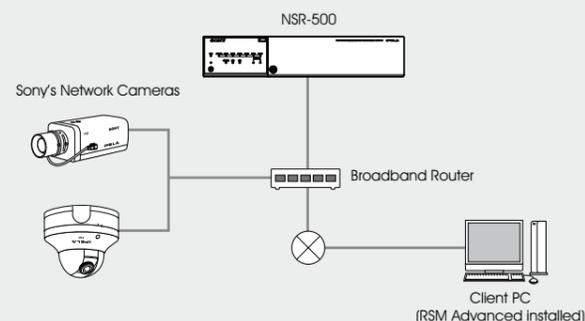
The NSR-500 detects Sony's network cameras in a network and sets up all the parameters of each camera in a step-by-step manner with a dedicated setup wizard. This drastically reduces the time required for system installation. Images from cameras are assigned automatically to a monitor layout menu, so that you can start monitoring instantly.

• Backward System Compatibility

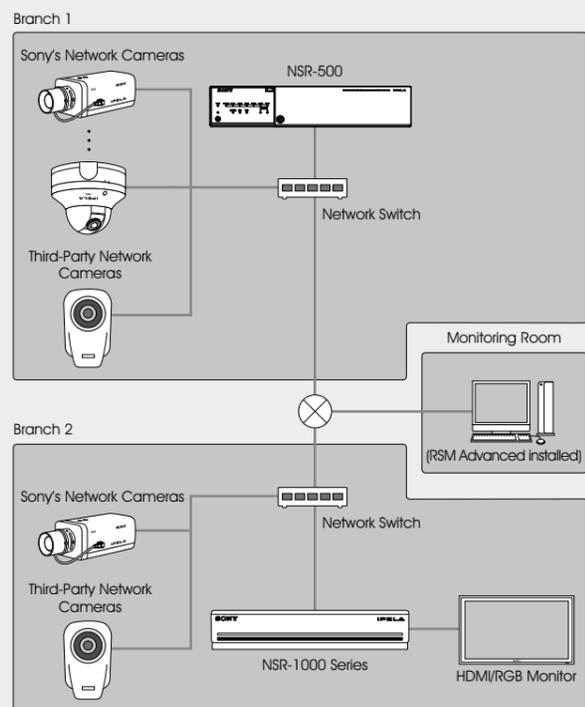
The NSR-500 can be used with Sony's existing recording systems such as the NSR-1000 Series, and RealShot Manager Advanced, through the RealShot Manager Advanced client, whose software can be downloaded from the NSR-500.

Configurations

Standalone Configuration



Multi-location System



Specifications

Video/Recording	
Number of cameras supported	16 (max. 24ch with NSBK-CL05)
Video compression (IP camera)	H.264, MPEG-4, JPEG
Total recording frame rate (at H.264, full-HD, 4 Mbps)	480 fps
Recording frame rate / camera	Max. 30 fps / camera
Hard disk drives (physical capacity)	Up to 12 TB (2 TB x 6)
Hard disk drives (interface)	Serial ATA
Hard disk drives (RAID level)	RAID 0, 1 (1+0), 5, 5+hot spare
*RAID level to be selected depends on the number of HDDs	
Hard disk drives (recording capacity)	NSR-500:01 (RAID no): Approx. 880 GB NSR-500:02 (RAID 0): Approx. 1.7 TB NSR-500:04 (RAID 5): Approx. 2.6 TB NSR-500:08 (RAID 5): Approx. 5.4 TB NSR-500:12 (RAID 5): Approx. 9.0 TB
Expansion storage	iSCSI storage (max. 16 TB)
Video Output	
Monitor OUT *1	Analogue RGB (D-sub 15-pin) x 1
Monitor OUT display resolution	1,920 x 1,200 / 1,920 x 1,080 / 1,360 x 768 / 1,600 x 1,200 / 1,280 x 1,024 / 1,024 x 768
Audio Output	
Audio OUT	Stereo mini jack x 1
Sensor Input/Alarm Output	
Sensor IN	Compatible with DC3.3 V to 24 V, photo coupler input x 8 (insulated from main unit)
Alarm OUT	Max. DC 24V/1A, mechanical relay output x 8 (insulated from main unit)
Other Interfaces	
Ethernet	1000BASE-T/100BASE-TX/10BASE-T x 2
USB	USB2.0 x 2 (Front), USB2.0 x 2 (Rear)
Serial interface (for UPS)	RS-232C : D-sub 9-pin x 1
General	
Dimensions (W x H x D)	440 x 88 x 400 mm (17 3/8 x 3 1/2 x 15 3/4 inch), excluding protrusions
Mass	Approx. 9.4 kg (20 lb 12 oz)
Power requirements	100 V to 127 V AC / 200 V to 240 V (50/60 Hz)
Power consumption	Max. 250 W (100-240 V 3.5-1.5 A)
Operating temperature	5 to 40 degrees C (41 to 104 degrees F)
Operating humidity	20 to 80% (no condensing)
Supplied accessories	Installation manual x 1, CD-ROM x 1, Flyer (WEEE) x 1, Flyer (EU battery) x 1, Warranty booklet x 1, Front panel key x 2, Rubber PAD x 4, HDD screw x 24 (*w/o HDD model only), Setup Disc x 1 (*w/o HDD model only)

Line-up

NSR-500	NSR-500:00	NSR-500:01	NSR-500:02	NSR-500:04	NSR-500:08	NSR-500:12
HDD	-	1 TB x1	1 TB x2	1 TB x4	1 TB x4	1 TB x6
Physical capacity	-	1 TB	2 TB	4 TB	8 TB	12 TB
Default RAID level	-	-	RAID 0	RAID 5		

Optional Accessories

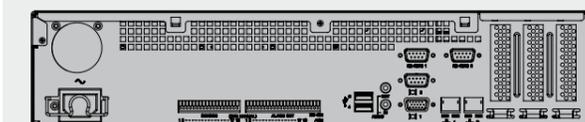
- Additional Camera License NSBK-CL05
- Hard Disk Drive (1 TB) NSBK-HS05:01
- Hard Disk Drive (2 TB) NSBK-HS05:02

Connectors

Front Panel (Cover Open) NSR-500



Rear Panel NSR-500



*1: Monitoring performance depends on the number of cameras registered and recorded, so Display Out is used for making settings.

Hybrid Camera Receivers

SNCA-ZX104 4CH Hybrid Camera Receiver.



Video/Recording		SNCA-ZX104
Number of supported hybrid cameras		4
Camera input		BNC x 4
Analogue video output		BNC x 4
Other Interfaces		
Network port		RJ45 x 1 (100Base-TX/10Base-T)
Serial interface		RS-485 x 1
Supported Serial PTZ control protocol		Pelco-D
General		
Power requirements		DC 12 V (AC 100 V to AC 127 V, AC 200 V to AC 240 V, 50/60 Hz for AC adaptor)
Power consumption		Approx. 8.5 W/9.0 W (AC 100 V/AC 240 V) with AC adaptor
Dimensions (W x H x D)		210 x 44 x 250 mm (8 1/3 x 1 3/4 x 9 7/8 inches) not including projecting parts

NSR Accessories

Expand your NSR storage with a selection of cost-effective storage solutions to enable you to keep your data longer, while allowing fast access and reliable data protection.



Features & Benefits

NSRE-SI8/1*

- 8 hot-swappable SAS/SATA drive bays in a robust 2U chassis
- Multiple-port iSCSI 1Gb access with link aggregation
- iSCSI, SMB/CIFS, NFS, FTP support
- Single power supply unit with 80-PLUS Bronze Certified
- OPAS and UPS Monitor via USB service
- Comprehensive embedded web-based management via Ethernet – WebPAM PROe
- Power Scheduler Operation
- MAID 2.0 support
- PerfectRAID and Predictive Data Migration technology for robust error handling and recovery
- LCD Panel support (optional)
- Wake-on-LAN support (VessRAID)
- Wake-on-SAS support (VessJBOD)

NSRE-SI16/1*

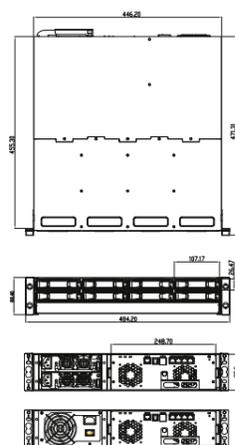
- 16 hot-swappable SAS/SATA drive bays in a robust 3U chassis
- Multiple-port iSCSI 1Gb access with link aggregation
- iSCSI, SMB/CIFS, NFS, FTP support
- SAS expansion for easy scalability
- Single power supply unit with 80-PLUS Bronze Certified
- OPAS and UPS Monitor via USB service
- Comprehensive embedded web-based management via Ethernet – WebPAM PROe
- Power Scheduler Operation
- MAID 2.0 support
- PerfectRAID and Predictive Data Migration technology for robust error handling and recovery
- LCD Panel support (optional)
- Wake-on-LAN support (VessRAID)
- Wake-on-SAS support (VessJBOD)

NSRE-SJBOD16/1*

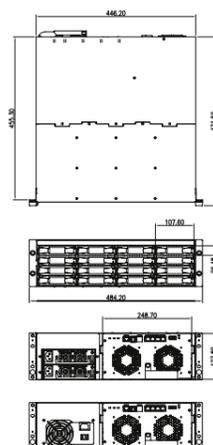
- 16 hot-swappable drive bays in a robust 3U chassis
- Supports Serial Attached SCSI (SAS) and SATA drives
- Single SAS JBOD I/O module
- Single power supply unit with 80-PLUS Bronze Certified
- SES-2 compliant enclosure management
- Fully compatible with PROMISE HBAs and RAID subsystems
- Wake-on-SAS support (WOS)

Dimensions

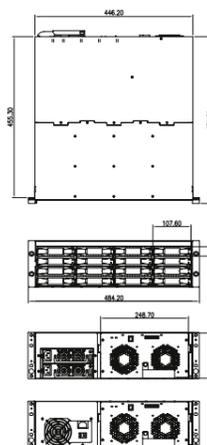
NSRE-SI8/1



NSRE-SI16/1



NSRE-SJBOD16/1



Peripherals

NSR-RM1*

Rackmount kit for the following products
- NSR-1100/2T, NSR-1200/4T & NSR-1050H/1T

NSRE-RM2*

Rackmount kit for NSRE-SI8/1, for the installation in a standard 19" rack housing.

NSRE-RM3*

Rackmount kit for NSRE-SI16/1 and NSRE-SJBOD16/1 for installation in a standard 19" rack housing.

NSRE-SASCABLE*

This is a 1M cable used to connect the NSRE-SJBOD16/1 with the NSRE-SI16/1.

Specifications

System and Controller Features	NSRE-SI8/1	NSRE-SI16/1
Form Factor	2U	3U
Drive Support	8 Drives (3.5") SAS(3Gb/s), SATAIII(3Gb/s), NCQ, TCQ	16 Drives (3.5") SAS(3Gb/s), SATAIII(3Gb/s)
Controller	Single (Intel® IOP348 1.2GHz)	
Host Channel	Quad Ports full-duplex 1Gb iSCSI	
Promise Expansion Enclosure	N/A	One Port SAS-wide (x4) for VessJBOD series
Data Cache	512MB – 2GB ECC cache memory with Optional BBU (Battery Backup Unit) Error Recovery Level 0	
iSCSI Features	Link Aggregation and Jumbo Frames w/ up to 64 Concurrent Sessions CHAP, iSNS and DHCP Microsoft iSCSI MPIO Support 1024	
Command Queue Depth	1024	
NAS Features		
File Sharing Protocol	SMB/CIFS (Apple, Microsoft), NFS (Linux/Unix)	
Network Protocol	FTP	
Data Services	Online Volume Clone, Box Replication, NAS Fusion	
Operational Features		
RAID Levels	0, 1, 1E, 3, 5, 6, 10 (0+1), 30, 50, 60	
Hot spares	Global or Dedicated w/ revertible option	
Max LUNs per subsystem	256	
Max LUNs per array	32	
Variable Block and Sector Size	64KB – 1MB stripe block sizes 512B, 1KB, 2KB, 4KB sector size	
Disk Data Formats	Supports Disk Data Format (DDF) for drive roaming between VTrak and VessRAID series systems. Media Patrol	
Background Activities	Background Synchronizing; Initialization Rebuild; Redundancy Check SMART Condition Pooling, OCE (Online Capacity Expansion)/RLM (RAID Level Migration) Priority Control; Throttle Rate Control and watermarking per BGA (background activities) in Disk and NVRAM PDM (Predictive Data Migration)	
RAID Robustness	PerfectRAID™ advanced error handling Array Error Recovery Read/Write Check Table, Write Hole Table, Bad Sector Re-map Table, NVRAM event logging	
System Management		
Supported OS	Windows 2000, XP, 2003, Vista, 2008 ¹ RedHat Linux, SuSE Linux, FreeBSD 7.0 VMWare ESX Server 4.0	
Management Tools	WebPAM PROe/SNMP via Ethernet CLI/CLU via RJ-11 or Ethernet LCD Control Panel (Optional) OPAS/UPS Monitor via USB service Power Scheduler Control	
Management Interfaces/Protocols	Ethernet, RJ-11 Serial Port, USB SNMP, SSL, Telnet, SLP	
Event Notification	Email, SNMP, NETSEND, Buzzer, LEDs, LCD Control Panel	
System Information		
AC Input	90 – 264 VAC, 47 – 63Hz	
Current (Maximum)	6A (100V); 3A (240V)	7A (100V); 3.5A (240V)
Power Supply	Single 350W 90-264V full-ranging w/PFC 80PLUS® Bronze	Single 450W 90-264V full-ranging w/PFC 80PLUS® Bronze
Power Consumption	167.3 Watts (w/ SAS drives) 73.2Watts (w/o drives)	242.8 Watts (w/ SAS drives) 72.2Watts (w/o drives)
FAN	N+1 Design	
Temperature	5° – 40°C ² (-40° – 60°C non operational)	
Relative Humidity	10% to 80% non-condensing	
Dimensions (H x W x D)	88.2 x 446.2 x 461 mm 3.5 x 17.6 x 18.1 in	130.1 x 446.2 x 461 mm 130.1 x 446.2 x 461 mm
Weight	10.8 kg (23.81 lbs) w/o drives 16kg (35.27 lbs) w/ drives	13.2 kg (29.1 lbs) w/o drives 23.6 kg (52.03 lbs) w/ drives
Base Configuration	VessRAID 2U/3U Unit w/ Drive Carrier VessJBOD 2U/3U Unit w/ Drive Carrier RJ11-to-DB9 Serial Data Cable, Power Cord	
Warranty and Support		
Warranty	3 years limited warranty ²	
Supported Hardware Options	LCD Panel, Front Bezel, Sliding Rail, Battery Backup Unit, SAS Cable	

JBOD I/O Module Features	NSRE-SJBOD16/1
Form Factor	3U
Drive Support	16 Drives (3.5") SAS(3Gb/s), SATAIII(3Gb/s)
Controller	Single
Host Channel	Dual, IN/OUT SAS-wide(x4) port over SFF-8088
Host Options	
Promise RAID HBA	SuperTrak EX8654, SuperTrak EX8658 SuperTrak TX8658
Promise RAID Storage System	VessRAID 1000 iSCSI/SAS Series
SAS Features	
Management Function	SAS Features Full SAS domain Topology Management SAS Management Protocol In-band Access to Expander and PHY Statistic Counters and Performance Monitors Statistic Counters and Performance Monitors SES Enclosure Management
System Management	
Supported OS	Windows 2000, XP, 2003, Vista, 2008 Windows 2000, XP, 2003, Vista, 2008 RedHat Linux, SuSE Linux, FreeBSD 7.0 LED Status Indicator
Management Interfaces	In-band SES Enclosure Management In-band SES Enclosure Management
Management Protocols	SES over in-band SAS
System Information	
AC Input	90 – 264 VAC, 47 – 63Hz
Current (Max)	7A (100V); 3.5A (240V)
Power Supply	Single 450W 90-264V auto-ranging w/PFC 80PLUS® Bronze N+1 Design
FAN	N+1 Design
Temperature	5° – 40°C ¹ (-40° – 60°C non operational)
Relative Humidity	10% to 80% non-condensing
Dimensions (H x W x D)	131 x 446.2 x 460.5 mm 5.1 x 17.6 x 18.1 in
Weight	13.8 kg (30.42 lbs) w/o drives 13.8 kg (30.42 lbs) w/o drives VessJBOD 2U/3U Unit w/ Drive Carrier
Base Configuration	RJ11-to-DB9 Serial Data Cable, Power Cord Quick Start Guide, Set of Screws, CD (Product Manual, Firmware Update Tool, QSG)
Warranty and Option	
Warranty	3 years limited warranty ²
Supported Hardware Options	Front Bezel, Sliding Rail, SAS Cable

¹Operational Temperature between 5° – 35°C if BBU installed.
²BBU is covered by one year limited warranty

NSR Accessories continued



Features & Benefits

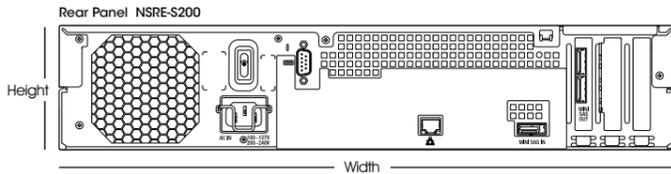
NSRE-S200/4T

- The NSR-1200/4T, 1100/2T & 1050H/1T have an internal storage capacity of up to 2 TB/1 TB/0.5 TB respectively. For additional storage requirements, each server can connect up to seven NSRE-S200/4T units via its SAS interface. The NSRE-S200/4T is a 2 TB hard disk storage device with RAID 5 capability. With the NSR-1200/4T in RAID 5 configuration and with seven connected NSRE-S200/4T units, its total maximum recording capacity is approximately 22 TB.

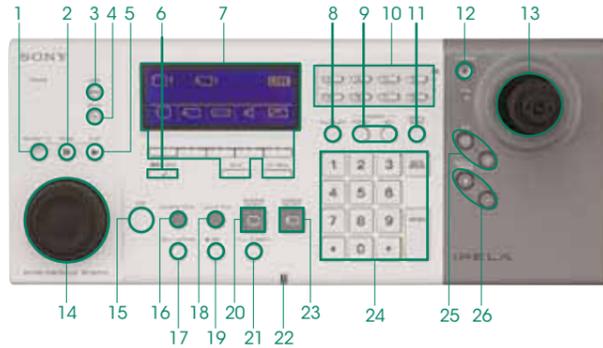
RM-NS1000

- An optional RM-NS1000 System Controller – which connects to the NSR-1000 Series or a client PC via USB cable – allows the user to control multiple servers and cameras. A wide range of operations can be performed from this unit, including camera selection, Pan/Tilt/Zoom (PTZ) with preset controls, snapshot capturing, video exporting, and event search and playback. Equipped with a three-axis joystick with a mouse emulator, three-line LCD, and feature-rich control panel, the RM-NS1000 is the ideal tool for easy operation of your system.

Dimensions



Height 3.4" (87mm)
Width 16.9" (430mm)
Depth 16.4" (417mm)



- JOG/SHUTTLE LED BUTTON
- PAUSE
- LOCK BUTTON
- PANIC BUTTON
- PLAY BUTTON
- ALARM BUTTON
- LCD/MULTI FUNCTION BUTTON
- ALL SELECT BUTTON
- PRESET/SET BUTTON
- CUSTOM FUNCTION BUTTON
- DIGITAL ZOOM BUTTON
- CURSOR LED BUTTON
- JOYSTICK
- JOG/SHUTTLE DIAL
- LIVE BUTTON
- CAMERA TOUR BUTTON
- STILL CAPTURE BUTTON
- LAYOUT TOUR BUTTON
- MIC BUTTON
- MONITOR SELECT BUTTON
- FULL SCREEN BUTTON
- BUILT-IN MIC
- CAMERA SELECT BUTTON
- NUMERIC KEY
- IRIS BUTTON
- FOCUS BUTTON

Specifications

Storage Capacity		NSRE-S200/4T
Hard disk drive	Physical capacity	4 TB (500 GB x4)
	Interface	Serial ATA
	RAID level	RAID 5
	Recording capacity	Approx. 1TB x 4
Interfaces		
Ethernet	100BASE-TX/10BASE-T x1 (Auto switching) (For maintenance)	
Serial interface	RS-232C x1 (For maintenance)	
Serial attached SCSI (SAS1.1)	SFF-8088 (mini-SAS 26pin): input x1, output x2	
General		
Dimensions (W x H x D)	430 x 87 x 417 mm (16.9 x 3.4 x 16.4 inches) (Excluding protrusions)	
Mass	Approx. 12 kg (26 lb 7 oz)	
Power requirements	AC 100 to 127 V/200 to 240 V (50/60 Hz)	
Power consumption	Approx. 80 W (typical) (Max. 350 W)	
Operating temperature	5 to 40 °C (41 to 104 °F)	
Operating humidity	20 to 80 %	
Supplied accessories	Mini-SAS cable (1 m), Front panel key (2), Installation manual, Warranty booklet, Rubber foot (4)	

Interfaces		RM-NS1000
Interface		USB 2.0 low-speed device (Cable Length - Approx 3m; 9ft. 10in.)
		USB 2.0 (2)
	External Interface	Microphone stereo mini jack (plug-in power) (1) Headphone stereo mini jack (1) RS-485 port
General		
Dimensions	409.0 (W) x 111.5 (H) x 170.0 (D) mm (16 1/8 x 4 1/2 x 6 3/4 inches)	
Mass	1,200 g (2.6 lb)	
Power Requirement	DC 12V	
Power Consumption	1A	
AC Adapter	100-240V AC, 50/60Hz	
Operating Temperature	5 to 40 degrees C (41 to 104 degrees F)	
Operating Humidity	20 to 80 % (max. wet bulb temperature : 32 degrees C (90 degrees F))	
Supplied Accessories	AC Adapter (1), First Step Guide (1), CD-ROM (User's Guide) (1), Warranty (1)	

SNCA-HRX550/EXT*

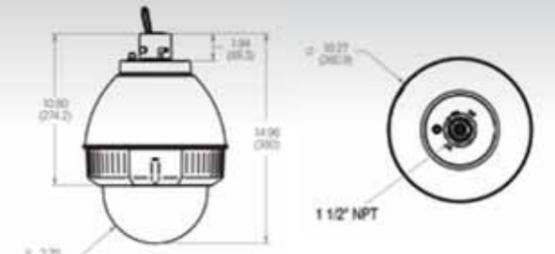
The SNCA-HRX550/EXT Dome offers versatility and camera protection in a compact size. This IP66 outdoor dome housing is specifically designed to accommodate SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras.



Features and Benefits

- IP66 rated dome housing
- Designed to support SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras in outdoor installations
- Constructed of durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear .080 (2.0mm) thick polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRX550/EXT	Outdoor dome camera housing	IP66	-29 to +50°C -44 to +50°C with optional heater/blower kit added (SNCA-HEATER)	24VAC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124	SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER521 SNC-ER550 SNC-ER580 SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included) SNCA-POWERBOX (with SNCA-WM accessory)	DuPont Sky White PFW-510-S9

SNCA-HRX550/INT*

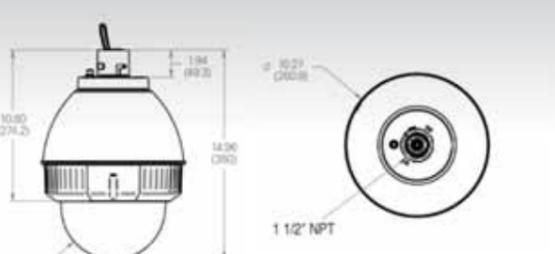
The SNCA-HRX550/INT 7" Dome offers versatility and camera protection in a compact size for indoor installations. This IP66 outdoor dome housing is specifically designed to accommodate SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras.



Features and Benefits

- Designed for the SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras
- Constructed of Durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear.118" (3mm) thick aspheric polycarbonate dome

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRX550/INT	Indoor dome camera housing	IP66	0°C to +40°C	24VAC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124	SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER521 SNC-ER550 SNC-ER580 SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included)	DuPont Sky White PFW-510-S9

*These products are manufactured by Videolarm

SNCA-HRX550EXT/R*

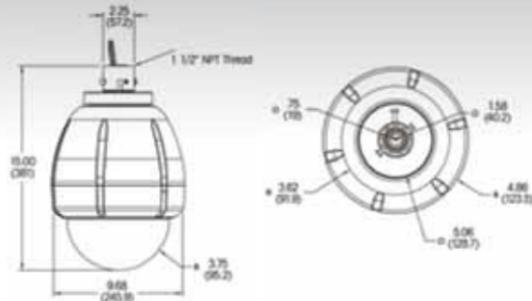
The SNCA-HRX550EXT/R 7" dome housing offers heavy duty, vandal resistant protection for the camera. This tough dome housing is specifically designed to accommodate SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras. The housing offers versatility and outstanding camera protection in a compact size.



Features and Benefits

- IP66 outdoor IK10 rated vandal protection dome housing
- Designed for SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras
- Outdoor dome, UV protected
- Strong cast aluminium top and trim ring for IK10 rated protection
- Optically clear 1.18" (3mm) thick aspheric polycarbonate dome
- Thermostatically controlled 24VAC heater
- 24 Hour fan operation for effective heating and condensation protection
- Separate power input for heater and blower and camera power
- Pendant mount, 1 1/2" NPT quick connect coupling

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRX550EXT/R	Heavy duty, outdoor dome housing	IP66	-29 to +50°C -44 to +50°C with optional heater/blower kit added (SNCA-HEATER)	24VAC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124 SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER521 SNC-ER550 SNC-ER580	SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included) SNCA-POWERBOX (with SNCA-WM accessory)	DuPont Sky White PFW-510-S9

SNCA-RX550EXT1 2V*

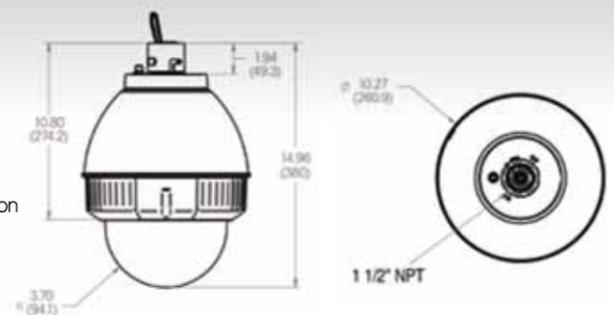
The SNCA-RX550EXT dome housing offers versatility and camera protection in a compact size. This IP66 dome housing is specifically designed as a 12vdc input enclosure for outdoor installations to accommodate SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras.



Features and Benefits

- IP66 outdoor dome housing
- Designed for SNC-RZ25, RX series, EP/ER series* and RS/RH series indoor cameras
- Constructed of durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 1.18" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 12vdc heater
- Separate power input for heater and blower and camera power

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-RX550EXT1 2V	Outdoor dome housing (12V)	IP66	-29 to 50°C	12VDC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124 SNC-EP521* SNC-EP550* SNC-EP580* SNC-ER521* SNC-ER550* SNC-ER580*	SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included)	Clear

* It doesn't power the camera

SNCA-HRX550EXT/W*

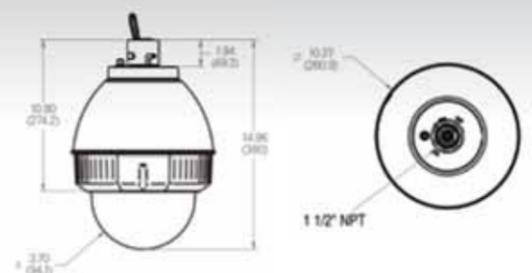
The SNCA-HRX550EXT/W 7" dome housing offers versatility and camera protection in a compact size. This IP66 dome housing is specifically designed to accommodate SNC-RZ25, RX series and RS/RH series indoor cameras with wireless capability. The SNCA-HRX550EXT/W includes a pre-run wireless antenna cable that works with the SNCA-CFW1 wireless card & SNCA-AN1 antenna.



Features and Benefits

- IP66 outdoor dome housing
- Designed for SNC-RZ25, RX series and RS/RH series indoor cameras
- Constructed of Durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 1.18" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power
- Wireless antenna cable included with housing

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRX550EXT/W	Outdoor dome housing for wireless installation	IP66	-29 to +50°C -44 to +50°C with optional heater/blower kit added (SNCA-HEATER)	24VAC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124 SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER521 SNC-ER550 SNC-ER580	SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included) SNCA-POWERBOX (with SNCA-WM accessory)	DuPont Sky White PFW-510-S9

SNCA-HRX550/PRE*

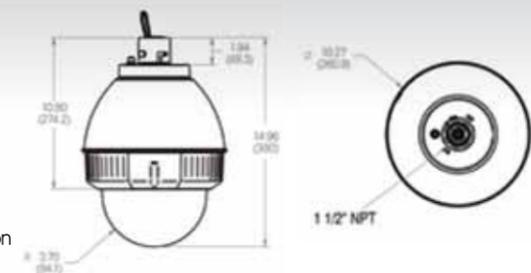
The SNCA-HRX550/PRE dome housing offers versatility and camera protection in a compact size. This IP66 dome housing is specifically designed to accommodate SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras.



Features and Benefits

- IP66 pressurized outdoor dome housing
- Designed for SNC-RZ25, RX series, EP/ER series and RS/RH series indoor cameras
- Constructed of durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Includes both Schrader and pressure relief valves
- Pressurized to 7psi, able to maintain pressure for 2-3 years
- Optically clear 1.18" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRX550/PRE	Outdoor dome camera housing	IP66	-29 to +50°C -44 to +50°C with optional heater/blower kit added (SNCA-HEATER)	24VAC	SNC-RZ25 SNC-RX530 SNC-RX550 SNC-RX570 SNC-RS44 SNC-RS46 SNC-RH124 SNC-EP521 SNC-EP550 SNC-EP580 SNC-ER521 SNC-ER550 SNC-ER580	SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED/2 SNCA-CLEAR/2 (included) SNCA-POWERBOX (with SNCA-WM accessory)	DuPont Sky White PFW-510-S9

*These products are manufactured by Videolarm

SNCA-HRZ25*

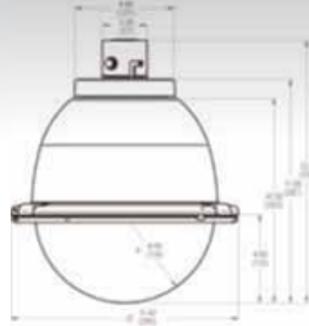
The SNCA-HRZ25 outdoor dome housing with clear dome, 24 VAC input, with heater & blower offers versatility and camera protection in a compact size. This IP66 dome housing is specifically designed to accommodate Sony's SNC-RZ25 Network camera.



Features and Benefits

- Constructed of a durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 1 1/8" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRZ25	Outdoor 8" dome housing, pendant mount with clear dome for SNC-RZ25 camera	IP66	-6.67 to +40°C	24VAC	SNC-RZ25P	SNCA-CEILING (always with SNCA-POLE30) SNCA-POLE30 SNCA-WM20G SNCA-WM20FC SNCA-WM30G SNCA-WM40 SNCA-CA2 (with SNCA-WM accessory) SNCA-PM3 (with SNCA-WM accessory) SNCA-HEATER SNCA-TINTED SNCA-CLEAR (included) SNCA-POWERBOX (with SNCA-WM accessory)	DuPont Sky White PFW-510-S9

SNCA-HRZ50/EXT/R*

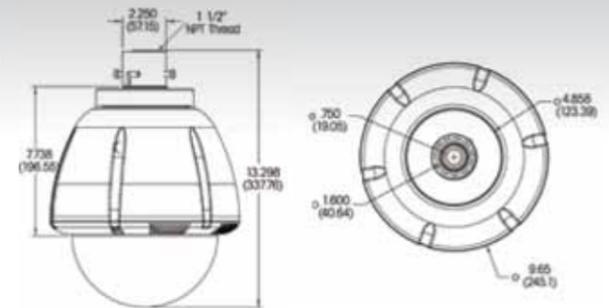
The SNCA-HRZ50/EXT/R 7" Dome offers heavy duty, vandal resistant, IK10 rated protection for the camera. This tough dome housing is specifically designed to accommodate Sony's SNC-RZ30 and SNC-RZ50 cameras. This housing offers versatility and outstanding camera protection in a compact size.



Features and Benefits

- Outdoor dome, UV protected
- Strong cast aluminium top and trim ring offers IK10 vandal protection
- Optically clear 1 1/8" (3mm) thick aspheric polycarbonate dome
- Thermostatically controlled 24VAC heater
- 24 Hour fan operation for effective heating and condensation protection
- Separate power input for heater and blower and camera power
- Pendant mount, 1 1/2" NPT quick connect coupling
- Accepts the SNC-RZ25N and SNC-RZ30N cameras

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRZ50/EXT/R	Heavy duty, indoor dome housing	IP66	-29 to +50°C (-44 to +50°C with optional heater blower kit)	24VAC	SNC-RZ30P SNC-RZ50P	SNCA-CLEAR/2 (included) SNCA-TINTED/2 SNCA-HEATER	DuPont Sky White PFW-510-S9

SNCA-HRZ50/EXT*

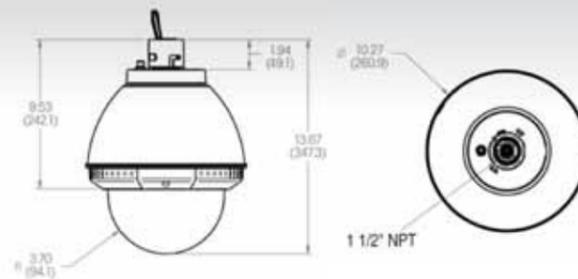
The SNCA-HRZ50/EXT Dome offers versatility and camera protection in a compact size. This inconspicuous dome housing is specifically designed to accommodate Sony's SNC-RZ30 and SNC-RZ50 cameras. The housing offers versatility and outstanding camera protection in a compact size.



Features and Benefits

- Constructed of a durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 1 1/8" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRZ50/EXT	External dome housing	IP66	-29 to +50°C (-44 to +50°C with optional heater blower kit)	24VAC	SNC-RZ30P SNC-RZ50P	SNCA-CLEAR/2 (included) SNCA-TINTED/2 SNCA-HEATER	DuPont Sky White PFW-510-S9

SNCA-HRZ50/EXT/W*

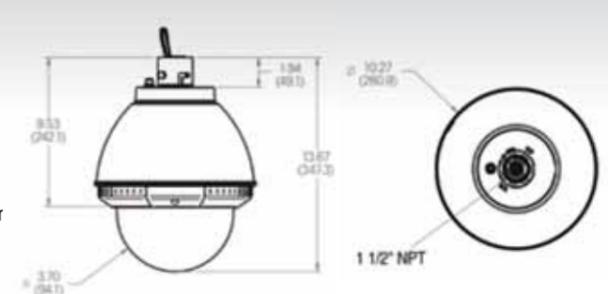
The SNCA-HRZ50/EXT/W Dome offers versatility and camera protection in a compact size. This inconspicuous dome housing includes a pre-run wireless antenna cable that works with the SNCA-CFW1 wireless card & SNCA-AN1 antenna. This housing offers versatility and outstanding camera protection in a compact size.



Features and Benefits

- Constructed of a durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 1 1/8" (3mm) thick aspheric polycarbonate dome
- 24 Hour fan operation for effective heating and condensation protection
- Thermostatically controlled 24VAC heater
- Separate power input for heater and blower and camera power
- Wireless ready model

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRZ50/EXT/W	External dome housing (wireless)	IP66	-29 to +50°C (-44 to +50°C with optional heater blower kit)	24VAC	SNC-RZ30P SNC-RZ50P	SNCA-CLEAR/2 (included) SNCA-TINTED/2 SNCA-HEATER SNCA-CFW1 SNCA-AN1	DuPont Sky White PFW-510-S9

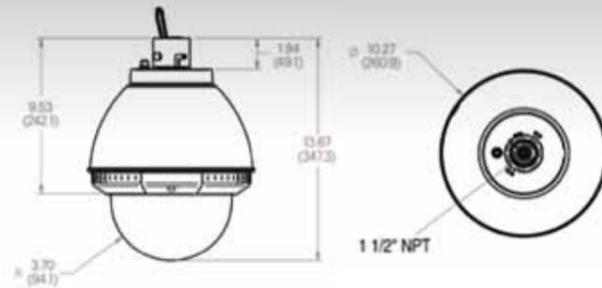
SNCA-HRZ50/INT*

The SNCA-HRZ50/INT Dome offers versatility and camera protection in a compact size. This inconspicuous dome housing is specifically designed to support Sony's SNC-RZ30 and SNC-RZ50 cameras in indoor installations. The housing offers versatility, easy installation and outstanding camera protection in a compact size.



Dimensions

- Constructed of a durable engineered plastic top, 94VO, with UV protected lower dome
- Cast aluminium pendant mount is standard
- Optically clear 118" (3mm) thick aspheric polycarbonate dome



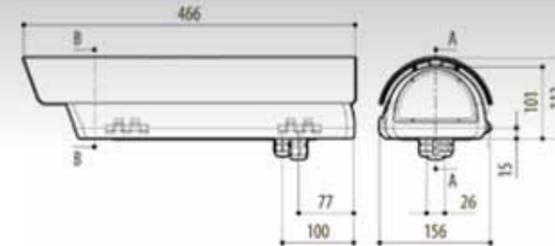
Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour
SNCA-HRZ50/INT	Internal dome housing	IP66	0 to +50°C	12VDC	SNC-RZ30P SNC-RZ50P	SNCA-CLEAR/2 (included) SNCA-TINTED/2 SNCA-HEATER	DuPont Sky White PFW-510-S9

SNCA-HFIXSML/24*

A 12VDC/24VAC Polycarbonate Housing with a Cable Managed Aluminium bracket, designed for use with the smaller cameras. This IP66 aesthetically pleasing housing should protect the camera against all that the elements can throw at it.



Dimensions



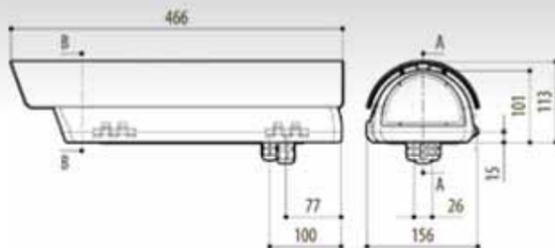
Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions	
SNCA-HFIXSML/24	Fixed housing, c/w sunshield, heater, wall bracket	IP66	-28 to 48°C	24VAC	SNC-CS10 SNC-CS11 SSC-DC172P SSC-DC198P SSC-DC372P SSC-DC378P	SSC-E453P SSC-E458P SSC-E473P SSC-E478P SSC-M383CE SSC-M388CE	SNCA-CAFIX1 SNCA-CA2 SNCA-PMFIX1 SNCA-POWER-BOX	DuPont Sky White PFW-510-S9	L400 x H106 x W127.5mm

SNCA-HFIXSML/230**

A 115VAC/230VAC Polycarbonate Housing with a Cable Managed Aluminium bracket, designed for use with the smaller cameras. This IP66 aesthetically pleasing housing should protect the camera against all that the elements can throw at it.



Dimensions



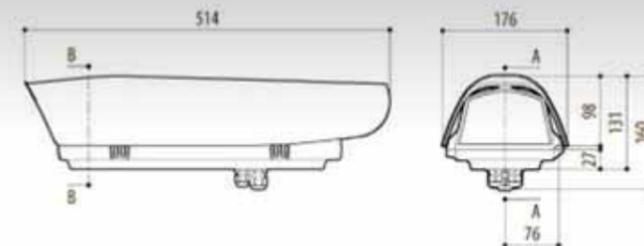
Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions	
SNCA-HFIXSML/230	Fixed housing, c/w sunshield, heater, wall bracket	IP66	-28 to 48°C	230VAC	SNC-CS10 SNC-CS11 SSC-DC172P SSC-DC198P SSC-DC372P SSC-DC378P	SSC-E453P SSC-E458P SSC-E473P SSC-E478P SSC-M383CE SSC-M388CE	Additional camera PSU may be required (SNCA-PSV1SML230) when using 230VAC model	DuPont Sky White PFW-510-S9	L400 x H106 x W127.5mm

SNCA-HFIXSTD/230*

A 115VDC/230VAC die cast aluminium side opening housing with a cable managed bracket designed to the highest specification, IP66 rated to protect cameras against the weather.



Dimensions



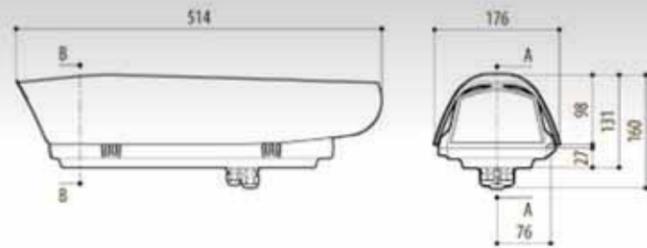
Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions	
SNCA-HFIXSTD/230	Fixed housing, c/w sunshield, heater, wall bracket	IP66	-28 to 48°C	230VAC	SNC-CS3P SNC-CS10P SNC-CS11P SNC-Z20P SNC-CS20 SNC-CM120 SNC-CS50P SNC-CH140	SSC range SNC-CH120 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280	Additional camera PSU may be required (SNCA-PSV1STD230) when using 230VAC model SNCA-CAFIX1 SNCA-PMFIX1 SNCA-PSV1STD24	DuPont Sky White PFW-510-S9	L514 x H131 x W176mm

SNCA-HFIXSTD/24*

A 12VDC/24VAC die cast aluminium side opening housing with a cable managed bracket designed to the highest specification, IP66 rated to protect cameras against the weather.



Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions	
SNCA-HFIXSTD/24	Fixed housing, c/w sunshield, heater, wall bracket	IP66	-28 to 48°C	24VAC, 50Hz	SNC-CS3P SNC-CS10P SNC-CS11P SNC-Z20P SNC-CS20 SNC-CM120 SNC-CS50P SNC-CH140	SSC Range SNC-CH120 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280	SNCA-CAFIX1 SNCA-CA2 SNCA-PMFIX1 SNCA-POWERBOX	DuPont Sky White PFW-510-S9	L514 x H131 x W176mm

SNCA-ICPTZ/C & SNCA-ICPTZ/T

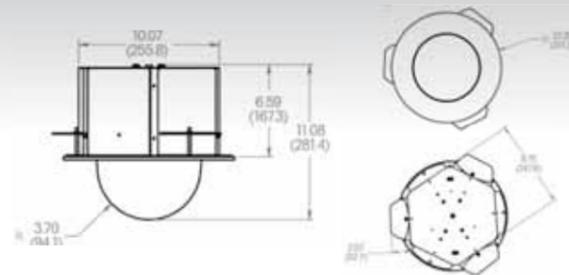
The SNCA-ICPTZ/C is a low profile indoor ceiling housing. It features a 7" optically clear polycarbonate dome, which accommodates Sony PTZ Cameras. The upper body is made of steel with a white powder coat trim ring and an injection molded 3mm thick, optically clear thermoplastic polycarbonate dome.



Features and Benefits

- 7" polycarbonate dome for easy installation and servicing from below the ceiling
- Housing extends only 3.5" below ceiling
- For the SNC-RZ25, SNC-RZ30, SNC-RZ50, SNC-RS44/46, SNC-RH124 and SNC-RX series ptz cameras
- Includes a decorative trim ring with quick-release pressure springs
- Optically clear .118" (3mm) thick aspheric polycarbonate dome
- A tinted lower dome is available as p/n SNCA-TINTED/2

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions	
SNCA-ICPTZ/C	Clear dome in ceiling bracket	N/A	N/A	N/A	SNC-RX530P SNC-RX550P SNC-RX570P SNC-RZ50P SNC-RX530P SNC-RX550P SNC-RX570P SNC-RZ50P	SNC-RZ25P SNC-RZ30P SNC-RS44/46P SNC-RH124 SNC-RZ25P SNC-RZ30P SNC-RS44/46P SNC-RH124	N/A	Clear	H9.1" x W12" x D12"
SNCA-ICPTZ/T	Tinted dome in ceiling bracket	N/A	N/A	N/A	SNC-RX530P SNC-RX550P SNC-RX570P SNC-RZ50P	SNC-RZ25P SNC-RZ30P SNC-RS44/46P SNC-RH124	N/A	Tinted	H9.1" x W12" x D12"

SNCA-HP5

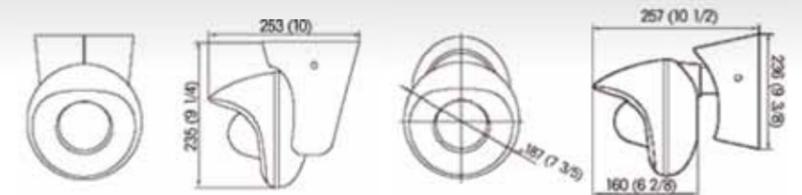
The SNCA-HP5 is a unique outdoor housing for the SNC-P5 camera.



Features and Benefits

- Easy camera installation
- Waterproof to IP x 3
- Operating Temperature -10C to +50C

Dimensions



Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions
SNCA-HP5	Camera housing for SNC-P5		-10 to +50°C		SNC-P5	N/A	DuPont Sky White PFW-510-S9	187 x 238 x 257mm (wall mounted)

SNCA-CEILING*

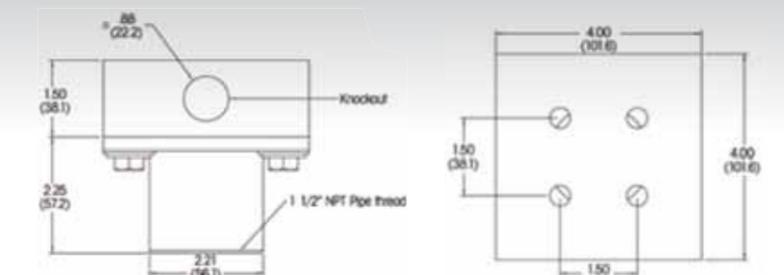
The SNCA-CEILING is a ceiling mount adapter with Junction Box and 1 1/2" NPT coupling.



Features and Benefits

- Constructed of heavy duty steel

Dimensions



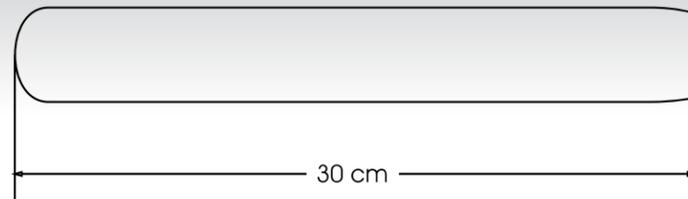
Model	Description	Applicable/compatible housing models	Optional accessories	Colour	
SNCA-CEILING	Ceiling mounting kit	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT	SNCA-HRZ50/EXT/W SNCA-HRZ50/INT SNCA-HRZ50/EXT/R SNC-RS84P SNC-RS86P SNC-RH164	SNCA-POLE30 (Ceiling mount adapter) SNCA-RX550EXT12V	Black

SNCA-POLE30*

Extension pipe, 305mm (12") long for use with SNCA-CEILING.



Dimensions



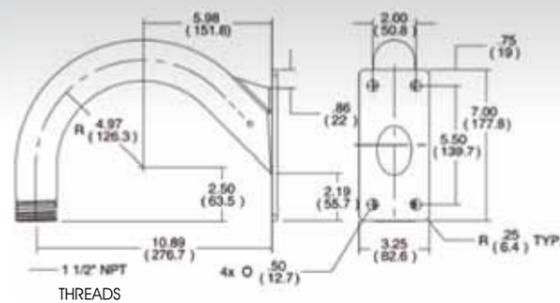
Model	Description	Applicable/compatible housing models	Optional accessories	Colour
SNCA-POLE30	Extension pole for ceiling mount housings	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT	SNCA-RX550EXT12V	Black

SNCA-WM20G*

The SNCA-WM20G is an aluminium gooseneck wall mount bracket for use with all dome enclosures.



Dimensions



Model	Description	Applicable/compatible housing models	Optional accessories	Colour
SNCA-WM20G	Gooseneck wall mount	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT	SNCA-PM3 (Pole mount adaptor) SNCA-CA2 (Corner adaptor) SNCA-POWERBOX	DuPont Sky White PFW-510-S9

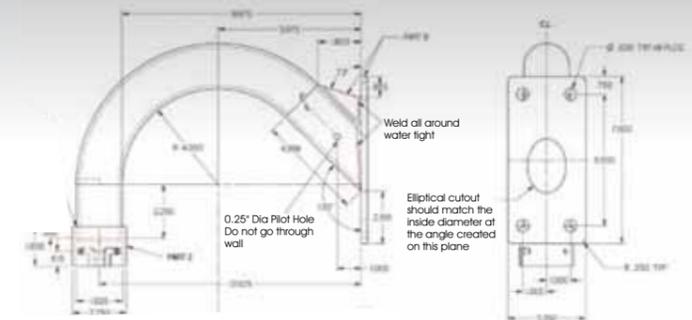
*These products are manufactured by Videolarm

SNCA-WM20FC*

The SNCA-WM20FC is an aluminium gooseneck wall mount bracket with fixed coupling for use with all dome enclosures.



Dimensions



Model	Description	Applicable/compatible housing models	Optional accessories	Colour
SNCA-WM20FC	Wall mounted bracket with fixed coupling	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE	SNCA-PM3 (Pole mount adaptor) SNCA-CA2 (Corner adaptor) SNCA-POWERBOX SNCA-RX550EXT12V	DuPont Sky White PFW-510-S9

SNCA-WM30G*

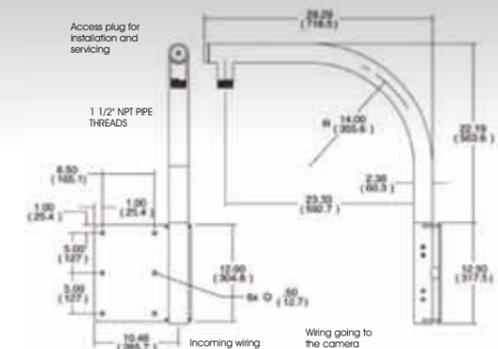
The SNCA-WM30G is a roof top parapet bracket designed to mount the camera dome out & away from the roof top for an unobstructed view. It features a 1 1/2 inch pipe thread to mount to any Sony dome. The design allows the dome to be swung back over the roof for servicing.



Features and Benefits

- All aluminium construction
- Durable powder coat finish
- 1 1/2 inch pipe thread for quick and easy mounting
- 50 lb load rating

Dimensions



Model	Description	Applicable/compatible housing models	Optional accessories	Colour
SNCA-WM30G	Gooseneck wall mount	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE	SNCA-PM3 (Pole mount adaptor) SNCA-CA2 (Corner adaptor) SNCA-POWERBOX	DuPont Sky White PFW-510-S9

*These products are manufactured by Videolarm

SNCA-WM40*

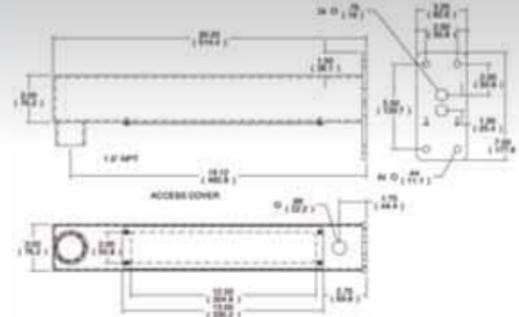
Heavy-duty wall mount with removable panel. Durable off-white polyurethane powder coat finish for corrosion resistance in outdoor use.



Features and Benefits

- Heavy duty wall mount for use with all Sony domes

Dimensions



Model	Description	Applicable/compatible housing models		Optional accessories	Dimensions	Colour
SNCA-WM40	Extended wall mount bracket	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT	SNCA-HRZ50/EXT/W SNCA-HRZ50/INT SNCA-HRZ50/EXT/R SNC-RH164	SNCA-PM3 (Pole mount adapter) SNCA-CA2 (Corner adapter)	L53cm	DuPont Sky White PFW-510-S9



SNCA-CA2*

The SNCA-CA2 is an aluminium corner mount bracket with female inserts, which can accommodate the SNCA-WM20G, SNCA-WM20FC and SNCA-WM40.

SNCA-PM3*

The SNCA-PM3 is an aluminium pole mount adapter.

UNI-WMBB1

Bracket back box for pole or wall mounting compatible with gooseneck SNCA-WM models

Model	Description	Applicable/compatible housing models			Colour
SNCA-CA2	Corner mount bracket, 22Kg max load rating	SNCA-WM20G SNCA-WM40	SNCA-WMMD1 SNCA-WMMD2	SNCA-WM20FC SNCA-WMMD4	DuPont Sky White PFW-510-S9
SNCA-PM3	Pole mount adaptor bracket	SNCA-WM20G SNCA-WM40	SNCA-WMMD1 SNCA-WMMD2		White
UNI-WMBB1	Aluminium wall/pole mount back box	SNCA-WMMD3 SNCA-WM20FC	SNCA-WM20G		Dupont SKY white PFW-510-S9



SNCA-CAFIX1**

This is a Corner mount fixing for the Housings and wall brackets to fit to.

SNCA-PMFIX1**

This pole mount adaptor allows the Housing range with Brackets to be attached to a pole of Diameter between 65mm and 110mm.

SNCA-WMFX10PC

A Camera Bracket for indoor usage, it is 14cm long and has an adjustment that allows for Wall or Ceiling mounting.

UNI-XBB1/T10PC

Wall-mount bracket design for X series box-type black cameras.

UNI-XBS1/T10PC

Wall-mount bracket design for X series box-type silver cameras.

Model	Description	Applicable/compatible housing models			Dimensions	Colour
SNCA-CAFIX1	Corner mount adapter	SNCA-HFIXSML/24 SNCA-HFIXSML/230	SNCA-HFIXSTD/24 SNCA-HFIXSTD/230		L22cm	
SNCA-PMFIX1	Pole mount adapter	SNCA-HFIXSML/24 SNCA-HFIXSML/230	SNCA-HFIXSTD/24 SNCA-HFIXSTD/230		L17.27cm	
SNCA-WMFX10PC	Wall/ceiling camera bracket	SNC-CS10 SNC-CS11	SNC-CS20 SNC-CS50P	SNC-CM120 SNC-Z20P	H14.1cm	
UNI-XBB1/T	Black bracket for X series		SNC-CH110B SNC-CH210B		H6.8cm x D5.05cm	Black
UNI-XBS1/T	Silver bracket for X series		SNC-CH110S SNC-CH210S		H6.8cm x D5.05cm	Silver

*This product is manufactured by Videolarm **These products are manufactured by Videotec

SNCA-WMMD1*

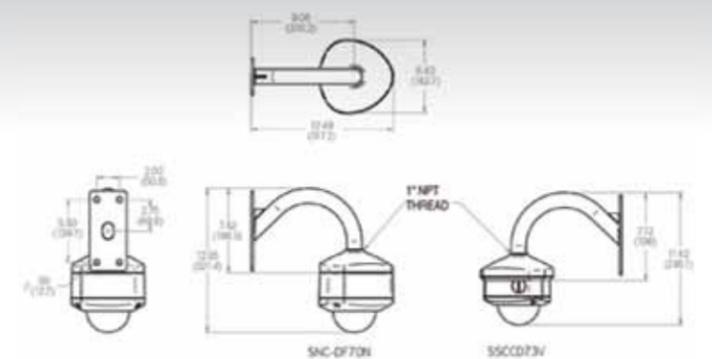
The SNCA-WMMD1 is a cast aluminium mini dome bracket kit that bolts directly the SSC-CD73 or SNCDF70 to allow the camera to be wall or pendant mounted. A 1" NPT pipe thread, aluminium gooseneck wall mount is included. The wall mount can be combined with the SNCA-CA2 for corner mount applications and with the SNCA-PM3 for pole mount applications. The kit includes Teflon thread sealant tape, gaskets and a sealing grommet for protection outdoors.



Features and Benefits

- Wall mount or pendant mount the SSC-CD73V or SNCDF70N
- All aluminium construction
- 1" pipe thread for pendant mounting
- Gooseneck bracket for wall mounting
- Outdoor or indoor use

Dimensions



Model	Description	Applicable/compatible housing models	Optional accessories	Colour
SNCA-WMMD1	Wall mounted mini dome bracket DF70/CD73	SNC-DF70 SSC-CD73	SNCA-CA2 SNCA-PM3 SNCA-POWERBOX	DuPont Sky White PFW-510-S9

*These products are manufactured by Videolarm

SNCA-POWERBOX*

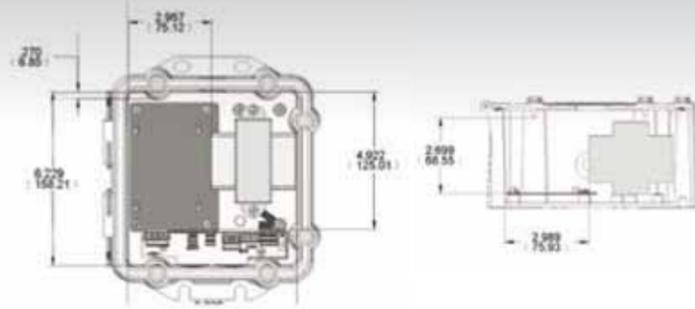
The SNCA-POWERBOX is a rugged, outdoor NEMA rated, cast aluminium power supply with 220/115Vac input converting to 24Vac and 96w output power. Pole mounting clips included.



Features and Benefits

- Rugged cast aluminium NEMA 4 enclosure
- Meets IP 66 standards to prevent the induction of minute particles
- Designed for direct conduit connections
- The SNCA-WM20G and SNCA-WM20FC mount directly to the door for simple installation and a clean look
- Provides 4 amps of power at 24Vac
- Pole mounting clips included

Dimensions



Model	Description	Applicable/compatible camera models	Key features	Operating voltage	Approx. Weight	Colour
SNCA-POWERBOX	IP66 rated power supply with bracket connection	SNCA-WM20G SNCA-WM20FC SNCA-WM40 SNCA-WMMD1 SNCA-WMMD2	Ideal for powering 24VAC housings and the cameras	110VAC / 230VAC (selectable)		White

SNCA-HPOE1*

The SNCA-HPOE1 is a single port, high-power solution for remote powering of current and emerging high power applications. Generating up to 30W, the SNCA-HPOE1 enables remote power for a new range of applications including 802.11 Access Points, pan-tilt-zoom (PTZ) cameras and video-phones. It complies to IEEE 802.3at PoE standard and is backward compatible to IEEE802.3af. It can power both existing 10/100Base-T network devices and emerging wireless 1000Base-T devices such as Wi-MAX and wireless IEEE 802.11n access points.



Features and Benefits

- Up to 30W of Power on 2-pairs
- IEEE 802.3at Compliant with 2-event classification
- IEEE 802.3af backward compatible
- Compatible With All IEEE 802.3af or Legacy Cisco-Powered Devices
- Safe: Low Power Devices Receive Only the Power They Need
- Safe and Reliable Power to WLAN Access Points
- Automatic Detection and Protection of Non-standard Ethernet Terminals
- Supports 10/100/1000Base-T applications
- Compact Design Fits Easily in WLAN Access Point Installations

Specifications

General	
No. of Ports	1
Pass Through Data Rates	10/100/1000 Mbps
Power over Ethernet Output	Pin Assignment and Polarity, Output 4/5 (+), 7/8 (-)
Output Power Voltage	55Vdc
User Port Power	30Watts
Input Power Requirements	AC Input Voltage: 100 to 240 Vac
AC Input Current	0.8A @ 100-240 Vac
AC Frequency	50 to 60 Hz
Dimensions	87.9 mm x 51.3 mm x 166 mm, 3.46 in. x 2.0 in. x 6.53 in
Weight	.771 lbs (350g)
Indicators	
System Indicator	AC Power (Green)
User Indicator	Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	
Operating Ambient Temperature	14° to 113°F (-10 to 45°C)
Operating Humidity	Maximum 90%, Non-condensing
Storage Temperature	32° to 104°F (0° to 40°C)
Storage Humidity	Maximum 95%, Non-condensing
Operating Altitude	-1000 to 10,000 ft. (-304.8 to 3048 m)
Reliability	
MTBF	100,000 hrs. @25°C
Thermal Rating	27 BTU/Hr (@240VAC)
Warranty	1-year

SNCA-POE1**

Compact and Cost-Effective 1-Port Power over Ethernet Midspan. Power over Ethernet (PoE) single port Midspan (PoE injector) offers a compact and cost effective, fully IEEE 802.3af compliant solution for remote powering of wireless LAN (WLAN) access points, and other low port density installations. The 3001 PoE Midspan eliminates the need for external power supply and its associated AC/DC power cabling, providing a compact, affordable, safe and reliable power solution over existing Ethernet infrastructure.



Features and Benefits

- Cost-effective power distribution for WLAN access point installations
- Safe powering of standard compliant, as well as Pre-standard end-terminals
- Investment protection of existing Ethernet switches and cabling infrastructure
- Saves time and reduces installation costs
- Easy plug-and-play installation
- Several units can be mounted adjacently for powering more than one Ethernet terminal
- Cleans up low-density wireless LAN deployment and eliminates the need for multiple one-port PoE solutions
- Supports Gigabit Ethernet data transmission for applications such as Wi-Max access points, Gig IP phones, and IP cameras

Specifications

General	
No. of Ports	1
Data Rates	3001/AC: 10/100 Mbps 3001G/AC: 10/100/1000 Mbps
Power over Ethernet Output	Pin Assignment and Polarity: 4/5 (+), 7/8 (-)
Output Power Voltage	48
User Port Power	15.4W min.
Input Power Requirements	AC Input Voltage: 90 to 264 Vac
AC Input Current	0.5A @110-220 Vac
AC Frequency	47 to 63 Hz
Dimensions	60 mm (W)x 31 mm (H)x 145 mm (L)
Weight	1 lbs (450 g)
Indicators	
System Indicator	AC Power (Green)
User Indicator	Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	
Operating Ambient Temperature	32° to 104°F (0 to 40°C)
Operating Humidity	Maximum 90%, non-condensing
Storage Temperature	-4° to 158°F (-20° to 70°C)
Storage Humidity	Maximum 93%, Non-condensing
Operating Altitude	-1000 to 10,000 ft.(-304.8 to 3048 m)

Dimensions



*This product is manufactured by Videolarm **This product is manufactured by Powersine

SNCA-POE6* / SNCA-POE12*

The SNCA-POE6 & POE12 offers a cost effective, fully IEEE 802.3af compliant solution to upgrade existing infrastructure with PoE, providing a maximum of 15.4 Watts of power through each port and ensuring safe operation of any standard PoE data terminal. It allows IP telephones, wireless LAN access points, security network cameras and IP terminals to receive power, along with data, over standard Ethernet cables, leaving network infrastructure completely unaltered.



Features and Benefits

- A cost-effective solution to upgrade existing infrastructure to PoE
- Safe & reliable power over existing Ethernet infrastructure
- Safe solution that Protects network infrastructure
- Scalable 6 & 12 port models for optimised installation
- Fully 802.3af standard compliant
- Cisco and legacy PoE support

Specifications

General	
No. of Ports	6 or 12
Pass Through Data Rates	10/100 Mbps
Power over Ethernet Output	Pin Assignment and Polarity, 4/5 (+), 7/8 (-)
Output Power Voltage	48Vdc
User Port Power	15.4Watts Max.
Aggregate Power	up to 200Watts
Input Power Requirements	AC Input Voltage: 90 to 264 Vac
AC Input Current	4A @ 110 Vac, 2A @ 240 Vac
AC Frequency	50 to 60 Hz
Dimensions	438 mm x 272 mm x 44 mm, 17.3 in. x 17.7 in. x 1.73 in
Weight	8.8 lbs (4 kg)
Indicators	
System Indicator	AC Power (Green)
User Indicator	Channel Power (Green)
Connectors	Shielded RJ-45, EIA 568A and 568B
Environmental Conditions	
Operating Ambient Temperature	32° to 104°F (0 to 40°C)
Operating Humidity	Maximum 90%, Non-condensing
Storage Temperature	-4° to 158°F (-20° to 70°C)
Storage Humidity	Maximum 95%, Non-condensing
Operating Altitude	-1000 to 10,000 ft. (-304.8 to 3048 m)
Reliability	
MTBF	100,000 hrs. @25°C
Thermal Rating	300 BTU/Hr (@240VAC)
Warranty	1-year

*These products are manufactured by Powersine

SNCA-PS12/1*

A 12V DC 500mA in-line power supply that provides a single regulated DC output. The unit's mains and output leads are wire ended to allow easy connection to terminal blocks etc. ABS cased. These power supplies are intended for CCTV use and their size makes them suitable for mounting inside a camera housing, space permitting.



Features and Benefits

- 12V DC in-line PSU
- 1 x 500mA output
- Output leads are wire ended
- Suitable for mounting inside camera housings etc.
- ABS cased
- Dimensions are 65 x 115 x 45

Model	Description	Applicable/compatible camera models				Key features	Current (Amps)	Voltage (nominal)	Case	Approx. Weight	Approx. Dimensions W x H x D	Colour
SNCA-PS12/1	An indoor, in-line power supply with one output rated at 1 Amp, 12VDC	SSC-DC83 SSC-DC593 SSC-E473 SSC-E453 SSC-DC374 SSC-DC174 SSC-DC193P SSC-M383	SSC-M183 SSC-CD43VP SSC-CD73VP SNC-CS50P SNC-DF40P SNC-DF70P SNC-Z20P SNC-CS3P	SNC-CH120 SNC-CH140 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280	SNC-DH140T SNC-DH140 SNC-DH240 SNC-DH240T	Ideal for powering 12VDC cameras	1A	12V DC	ABS	0.8Kg	70 x 102 x 60	Black

SNCA-PS24/1*

A 1 Amp 24V AC in-line power supply. Ideal for powering 24V AC CCTV cameras and camera housing heaters. The unit has a black plastic case that can be wall mounted or placed directly inside the camera housing (space permitting). It is pre-wired with a Euro mains plug and terminals for connecting to the output are provided inside the case.



Features and Benefits

- 24V AC in-line PSU
- 1 x 1A output
- Suitable for mounting inside camera housings etc.
- ABS cased
- Dimensions are 68 x 115 x 70mm

Model	Description	Applicable/compatible camera models				Key features	Current (Amps)	Supply Voltage (nominal)	Output Voltage (nominal)	Case	Approx. Weight	Approx. Dimensions W x H x D	Colour
SNCA-PS24/1	An indoor, in-line power supply with one output rated at 1 Amp, 24VAC, 50Hz	SSC-DC83 SSC-DC593 SSC-E473 SSC-E453 SSC-DC374 SSC-DC174 SSC-DC193P SSC-M383 SSC-M183	SSC-CD43VP SSC-CD73VP SNC-CS50P SNC-DF40P SNC-DF70P SNC-Z20P SNC-CS3P SNC-RX550P SNC-RZ25P	SNC-CH120 SNC-CH140 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280 SNC-DH140	SNC-DH140T SNC-DH240 SNC-DH240T	Ideal for powering 24VAC cameras	1A	240V AC 50Hz	24V AC	Plastic	1Kg	68 x 115 x 70	Black

SNCA-PS24/4*

A 4 Amp 24V AC power supply with 1 x 4 Amp fused output. Ideal for powering 24V AC CCTV cameras and camera housing heaters. Steel cased.



SNCA-PS24/4E*

A 4 Amp 24V AC power supply with 1 x 4 Amp fused outputs in an IP66 enclosure. Ideal for powering 24V AC CCTV cameras and camera housing heaters. Grey ABS cased.



Features and Benefits

- Comes with wall mounting kit
- Individually fused outputs
- Comes with wall mounting kit
- Weather proof enclosure
- Individually fused outputs

Model	Description	Applicable/compatible camera models				Key features	Current (Amps)	Supply Voltage (nominal)	Output Voltage (nominal)	Case	Approx. Weight	Approx. Dimensions W x H x D	Colour
SNCA-PS24/4	An indoor, in-line power supply with one output rated at 4 Amps, 24VAC, 50Hz	SNCA-HFIXED SNCA-HRZ25 SNCA-HRZ30 SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/EXT/R SNCA-HRX550/INT SNCA-HRZ50/EXT SNCA-HRZ50/EXT/W SNCA-HRZ50/EXT/R	SNCA-HRZ50/INT SNC-CH120 SNC-CH140 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280 SNC-DH140	SNC-DH140T SNC-DH240 SNC-DH240T SNC-DH160 SNC-DH180 SNC-DH260 SNC-DH280 SNC-RZ25P SNC-RZ50P SNC-RX530P	SNC-RX550P SNC-RX570P SNC-RS44P SNC-RS46P SNC-RH124 SNC-RS84P SNC-RS86P SNC-RH164	Ideal for powering 24VAC cameras	1 x 4A	240V AC 50Hz	24V AC	Metal	2.05Kg	118 x 200 x 70mm	White
SNCA-PS24/4E	An external, in-line power supply with one output rated at 4 Amps, 24VAC, 50Hz	SNCA-HFIXED SNCA-HRZ25 SNCA-HRZ30 SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/EXT/R SNCA-HRZ50/INT SNCA-HRZ50/EXT SNCA-HRZ50/EXT/W SNCA-HRZ50/EXT/R	SNCA-HRZ50/INT SNC-CH120 SNC-CH140 SNC-CH220 SNC-CH240 SNC-CH160 SNC-CH180 SNC-CH260 SNC-CH280 SNC-DH140	SNC-DH140T SNC-DH240 SNC-DH240T SNC-DH160 SNC-DH180 SNC-DH260 SNC-DH280 SNC-RZ25P SNC-RZ50P SNC-RX530P	SNC-RX550P SNC-RX570P SNC-RS44P SNC-RS46P SNC-RH124 SNC-RS84P SNC-RS86P SNC-RH164	Ideal for powering 24V AC housings and the cameras	1 x 4A	240V AC 50Hz	24V AC	Grey ABS	2.13Kg	150 x 250 x 100	White

Model	Description	Applicable/compatible camera models	Key features	Operating voltage	Approx. Weight	Approx. Dimensions	Colour
SNCA-PSVSM24**	This camera power supply converts 230VAC to 24VAC to power the camera and fits perfectly inside the SNCA-HFIXSML/230 Housing.	SNCA-HFIXSML/230	Can be mounted in housing	230VAC, 50Hz			N/A
SNCA-PSVSTD24**	The OHOVPS2B converts 230VAC to 24VAC and is designed to fit into the SNCA-HFIXSTD/230	SNCA-HFIXSTD/230	Can be mounted in housing	230VAC, 50Hz			N/A
SNCA-POWER/PCB***	Red network camera power PCB with 12vdc output for all outdoor model dome enclosures.		Controls the blower and heater				

*These products are manufactured by Dantech

**These products are manufactured by Videotec

***This product is manufactured by Videolarm

SNCA-IR20*

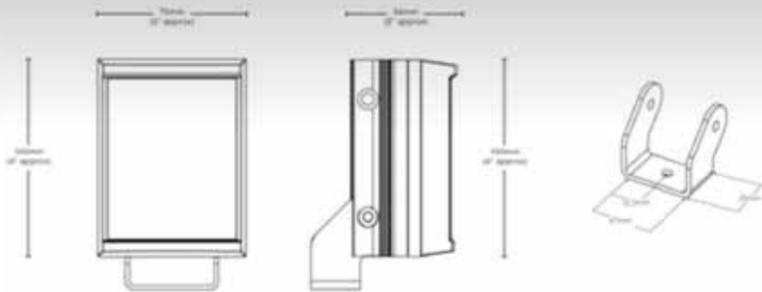
The SNCA-IR20 Infra-Red Illuminator is designed to provide dedicated lighting for network cameras via a PoE (Power over Ethernet) enabled infrastructure. Installation is as simple as plugging in the PoE enabled network cable. With an in-built photocell plus internal Command and Control™ electronics the SNCA-IR20 is truly 'plug and play'.



Features and Benefits

- Operates from PoE
- In Built Photocell
- Command and Control™ technology
- 24/7 Illumination
- 20m range
- 30° spread

Dimensions



Model	Description	Key features	Operating Voltage	IP Rating	Colour
SNCA-IR20	IR light indoor 20m	20m range, 30° spread	PoE, 12-24V AC/DC	N/A	Black

SNCA-IR40/OUTDR*

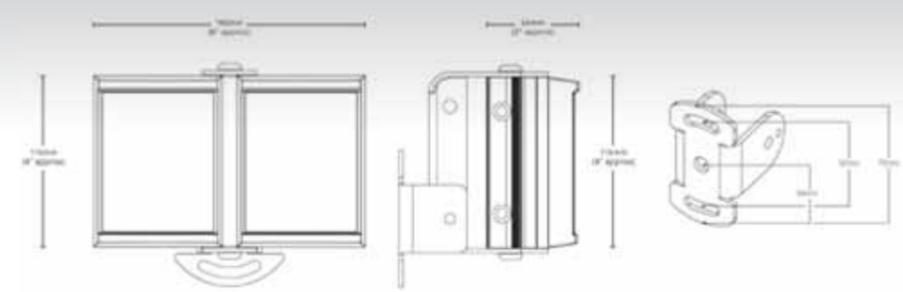
The SNCA-IR40/OUTDR Infra-Red Illuminator is designed to work in conjunction with B&W or Day and Night Cameras for short - medium distance applications. Adaptive Illumination™ allows for the onsite adjustment of beam patterns from 30-60°, includes PSU with photocell.



Features and Benefits

- Adaptive Illumination™
- Surface Mount LED Technology
- Active LED Life Control
- Vandal Resistant
- Low Running Cost
- 5 Year Warranty
- 40m range
- 30-60° spread

Dimensions



Model	Description	Key features	Operating Voltage	Power Consumption	Operating Temperature	Dimensions	Weight	IP Rating	Colour
SNCA-IR40/OUTDR	IR light outdoor (850nm)	40m range, 30-60° spread	100-240V AC auto-sensing	20W max	-50°C to +50°C	160 x 115 x 54mm	1.7kg	IP66	Black

SNCA-IR20/OUTDR*

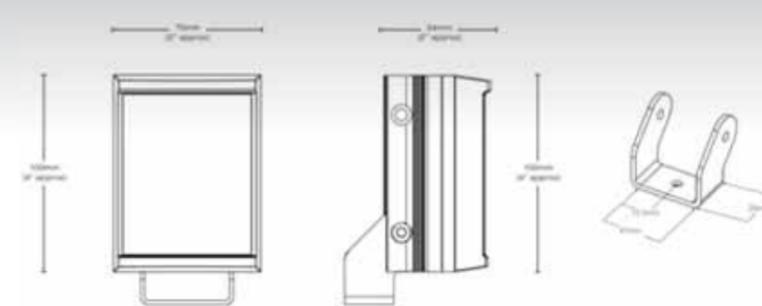
The SNCA-IR20/OUTDR Infra-Red illuminator is designed to work in conjunction with B&W or Day and Night Cameras for short range applications, includes PSU with photocell.



Features and Benefits

- Surface Mount LED Technology
- Active LED Life Control
- Vandal Resistant
- Low Running Cost
- 5 Year Warranty
- 20m range
- 30° spread

Dimensions



Model	Description	Key features	Operating Voltage	IP Rating	Colour
SNCA-IR20/OUTDR	IR light outdoor 20m	20m range, 30° spread	12/24V AC/DC	IP66	Black

SNCA-IR80/OUTDR*

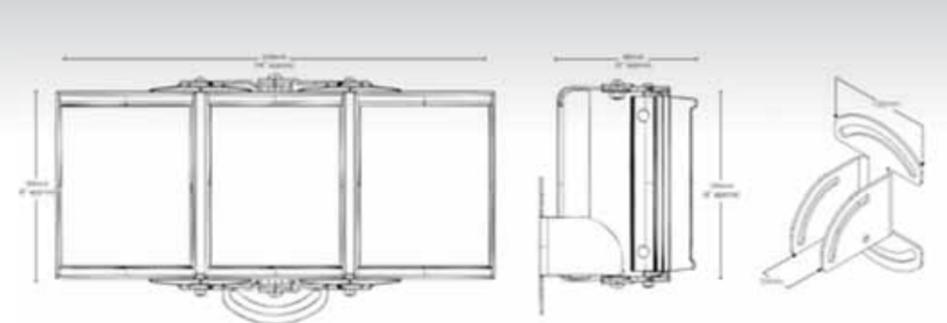
The SNCA-IR80/OUTDR Infra-Red illuminator is designed specifically to work in conjunction with B&W or Day and Night Dome Cameras. Ultimate Adaptive Illumination™ allows for the onsite adjustment of beam patterns from 50-180° achieving 360° with only 2 units. Includes PSU with photocell.



Features and Benefits

- Adaptive Illumination™
- Surface Mount LED Technology
- Active LED Life Control
- Vandal Resistant
- Low Running Cost
- 5 Year Warranty
- max 100m range
- 50-180° spread

Dimensions



Model	Description	Key features	Operating Voltage	IP Rating	Colour
SNCA-IR80/OUTDR	IR light for PTZ		100-240V AC auto-sensing	IP66	Black

SNCA-WL15/OUTDR*

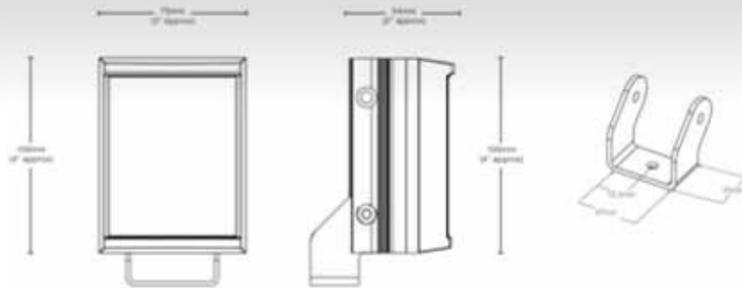
The SNCA-WL15/OUTDR Illuminator is designed to work in conjunction with colour CCTV systems providing a visible White-Light with accurate colour representation for the CCTV camera, includes PSU with photocell.



Features and Benefits

- Accurate Colour Representation
- Surface Mount LED Technology
- Active LED Life Control
- Vandal Resistant
- Low Running Cost
- 5 Year Warranty
- 20m range
- 30° spread

Dimensions



Model	Description	Key features	Operating Voltage	IP Rating	Colour
SNCA-WL15/OUTDR	White light outdoor 15m	15m range	12/24V AC/DC	IP66	Silver

SCA-M30

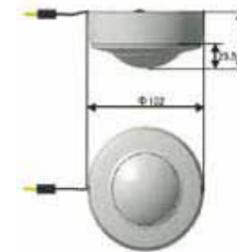
The SCA-M30 is a ceiling microphone, designed to work with Sony Security Network Cameras for indoor use.



Features and Benefits

- Compatible with Sony Network Cameras
- Clearly picks up sound
- Strong structure against external vibration
- Easy installation
- Input sensitivity can be selected

Dimensions



Specifications

General	
Capsule type	Electret condenser
Directivity	Uni-directional
Frequency response	300 Hz to 10kHz
Sensitivity (at 1 kHz)	-40dB ¹ ±3.5dB
Signal-to-noise ratio	60dB and more (IEC179 A weighted, 1kHz, 1Pa)
Power supply	Plug in Power DC 1.5 V - 9 V
Current consumption	0.5mA and less
Output connector	φ3.5mm mini-plug (3poles) Tip-Ring short connected
Connector cable length	Approx.300 cm
Dimensions	φ126 X 55 mm
Mass	Approx. 146g (Not included cable) Approx. 225g with Bracket (Not included cable)
Supplied accessories	Bracket(1), +BV 4 x 20(2), +K 2.6 x 20(3), Operating instruction(1), Warranty booklet(1)
Applicable/compatible models	
SNC-DH180, SNC-RS84P, SNC-DH140, SNC-RS84N, SNC-RH164, SNC-CH140, SNC-RS44N, SNC-RS44P, SNC-RS46N, SNC-RS46P, SNC-RH124	

Network and Connectivity

	Model	Description	Applicable/compatible camera models	Key features	Operating Temperature	IP Rating
	SNCA-AN1	Wireless Outdoor LAN Antenna	SNCA-CFW1 SNCA-CFW5	50Ω Impedance Fixing pole included	-20°C to 60°C	IP66
	SNCA-CFW1	Wireless CF LAN card	SNC-CS50P (SNCA-CFADAPT req'd) SNC-RZ50P SNC-RX550P (SNCA-CFADAPT req'd) SNC-RZ25P SNC-P5	11Mb/s, 2.4GHz Powered by camera Built-in antenna External antenna connector Supports WEP/WPA/WPA2 IEEE-802.1 authentication Wireless diversity mode (TX/RX)	-20°C to 60°C	N/A
	SNCA-CFW5	Sim compact flash (Sony MESH compatible)	SNC-CS50P (SNCA-CFADAPT req'd) SNC-RZ50P SNC-RX550P (SNCA-CFADAPT req'd)	54Mb/s, 2.4GHz Powered by camera Built-in antenna External antenna connector Supports WEP/WPA/WPA2 IEEE-802.1 authentication Wireless diversity mode (TX)	-20°C to 60°C	N/A
	SNCA-CW5	Outdoor Antenna Kit	SNCA-CFW5			
	SNCA-CFADAPT**	CF to PCMCIA adaptor	SNCA-CFW1 SNCA-CFW5	Powered by the connecting device	-20°C to 60°C	N/A

*This product is manufactured by Raytec **This product is manufactured by Jactron Ltd

SCA-S30

The SCA-S30 is a highly durable speaker for outdoor environments. It is designed to work with Sony Network cameras and can generate loud sound by its high efficiency digital amplifier.



Features and Benefits

- Built-in high efficiency digital amplifier
- Seamless integration with Sony Network Cameras
- Reliable and durable in outdoor environments
- Easy Installation (wall/pole fixing)

Dimensions



Specifications

General	
Frequency response	100 Hz to 15,000Hz (at 5W output power)
Reference input level (at 1 kHz)	-10dBu (0dBu = 0.775Vrms)
Output	30W and more (AC24V, 1kHz -10dBu input)
Maximum Output	35W and more (AC24V, 1kHz input)
Input impedance	20kohm +/-20% (at 1kHz)
Distortion	Less than 1% (AC24V, 30W output at 1kHz)
Signal to Noise ratio	80dB and more (IEC179A weighted, 30W,1kHz)
Power supply	AC24 V +/- 10% 50Hz/60Hz
Power consumption	8W (AC24V, 1/8 output power)
Dimensions	φ150 x 245mm (included mount frame)
Mass	Approx. 2.4kg (included mount frame)
Operating temperature	0°C to 50°C
Storage temperature	-20°C to +60°C
Supplied accessories	Wire rope (1), +M4 x 16(1), Operating instruction(1), Warranty booklet(1)
Applicable/compatible models	
SNC-DH180, SNC-DH140, SNC-RS84P, SNC-RS84N, SNC-RH164, SNC-CH140, SNC-RS44N, SNC-RS44P, SNC-RS46N, SNC-RS46P, SNC-RH124	

SNCA-JOYSTICK1 *

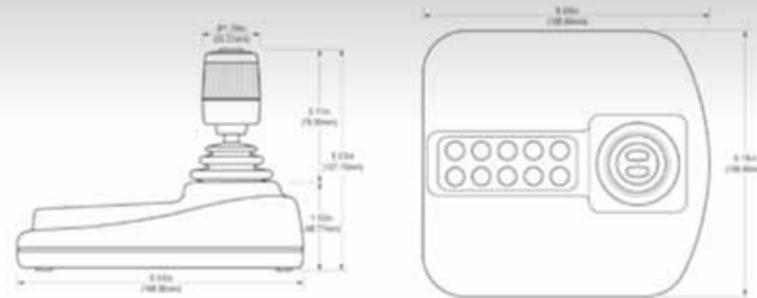
The IP Desktop USB joystick provides security professionals with intuitive P/T/Z camera control for network video surveillance applications. Featuring a three axis Hall effect joystick, twelve programmable pushbutton switches and USB interface, the IP Desktop integrates seamlessly with any software application recognizing joystick inputs via Microsoft's DirectX.



Features and Benefits

- Three axes joystick for P/T/Z control
- Programmable pushbuttons
- USB 1.1 HID compliant "game controller" device
- Easy to use and operate

Dimensions



Model	Centering	Housing	Breakout force	Operation force	Maximum force	Operating temperature	Life cycles	Supply voltage (USB bus)	Supply current (USB bus)	Colour
HFX Series I, Model 1400 Option 5	Single spring, omnidirectional	High impact, glass-filled nylon	.109Nm	.151Nm	.169Nm	-40°C to +85°C	10,000,000	Vdd = 5V ± .5V	32mA	N/A

SNCA-TINTED*

Tinted Replacement capsule for SNCA-HRZ25 & SNCA-HRZ30.



SNCA-TINTED/2*

Tinted replacement capsule for Sony 7" dome housings.

Features and Benefits

- | | |
|--|--|
| <p>SNCA-TINTED</p> <ul style="list-style-type: none"> • Acrylic construction | <p>SNCA-TINTED/2</p> <ul style="list-style-type: none"> • Polycarbonate construction |
|--|--|

Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions
SNCA-TINTED	Tinted dome	N/A	N/A	N/A	SNCA-HRZ25 SNCA-HRZ30	N/A	Tinted	8" (20.32cm) Diameter
SNCA-TINTED/2	Tinted dome, new 7" version	N/A	N/A	N/A	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT SNCA-HRZ50/EXT/W SNCA-HRZ50/INT SNCA-HRZ50/EXT/R	SNCA-RX550EXT12V	Tinted	7" (17.78cm) Diameter



SNCA-HEATER**

The SNCA-HEATER is a 24Vac Cold Weather Kit for an additional heater and blower. It is designed for outdoor dome housings in extremely cold weather. Extends the low temperature operating conditions by approx. 15°C.

SNCA-CONNECTOR/PCB** YT-HU75

Green control PCB board.

Model	Description	Key features	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions
SNCA-HEATER	Heater blower kit		Extends lower operating temperature of housing/device by 15°C	24V, 25W	SNCA-HRX550/EXT SNCA-HRX550/EXT/W	N/A	N/A	N/A
SNCA-CONNECTOR/PCB	PC board	Controls the blower and heater For outdoor models only Replacement part			SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT	SNCA-HRZ50/EXT/W SNCA-HRZ50/EXT/R SNCA-HRZ25 SNCA-HRZ30		
YT-HU75	Heater unit							

SNCA-CLEAR*

Clear replacement capsule for SNCA-HRZ25 & SNCA-HRZ30.



SNCA-CLEAR/2*

Clear replacement capsule for Sony 7" dome housings.

Features and Benefits

- | | |
|---|---|
| <p>SNCA-CLEAR</p> <ul style="list-style-type: none"> • Acrylic construction | <p>SNCA-CLEAR/2</p> <ul style="list-style-type: none"> • Polycarbonate construction |
|---|---|

Model	Description	Rating	Operating temperature	Operating voltage	Applicable Camera Models	Optional accessories	Colour	Approx. Dimensions
SNCA-CLEAR	Clear dome	N/A	N/A	N/A	SNCA-HRZ25 SNCA-HRZ30	N/A	Clear	8" (20.32cm) Diameter
SNCA-CLEAR/2	Clear dome, new 7" version	N/A	N/A	N/A	SNCA-HRX550/EXT SNCA-HRX550/EXT/W SNCA-HRX550/INT SNCA-HRX550/EXT/R SNCA-HRX550/EXT/PRE SNCA-HRZ50/EXT SNCA-HRZ50/EXT/W SNCA-HRZ50/INT SNCA-HRZ50/EXT/R	SNCA-RX550EXT12V	Clear	7" (17.78cm) Diameter

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