Product Information

SNC-CH280

V Series bullet Full HD (1080p) resolution outdoor network security camera with IR illumination

The SNC-CH280 is an outdoor high definition (1080p, supporting H.264 at 30fps) 3 Megapixel bullet camera with Optical Day/Night function, IR Illumination, DEPA Advanced and ONVIF compliance. It supports dual streaming, e-PTZ and triple codec encoding.

Sony's Exmor CMOS sensor provides excellent pictures and event detection for effective evidence gathering.

Sony's V-Series cameras have outstanding picture quality and a range of features at an affordable price.

1-year PrimeSupport is included as standard within the EU, Norway and Switzerland. This gives users access to an expert helpdesk and, in the unlikely event of a failure, will arrange for an advance replacement unit to be delivered within a target time of one working day. An additional 2-years support is also available as an option.

Features

DEPA Advanced

DEPA Advanced Intelligent Video and Audio Analytics can analyse images to detect whether pre-selected objects have moved, raising an alarm if an event is detected. Users create a set of rules that determine exactly how and when this happens.

XDNR

XDNR utilises advanced signal processing to remove noise and image ghosting, and eliminates the motion blur normally associated with the capture of moving images in low light. Delivering superior image quality in low light, Sony's XDNR offers the optimum in noise reduction performance for IP CCTV solutions.

EXMOR® and CMOS Sensor®

High resolution CMOS sensor® with low noise characteristics for improved image acquisition. Derived from Sony's broadcast product range, EXMOR® is one of the highest quality image sensors available.

Power over Ethernet (PoE) capability

Supporting Power over Ethernet (PoE), the camera can be powered using the same Ethernet cable it uses for data transfer. This feature greatly reduces the physical infrastructure costs and speed of deployment.

ONVIF (Open Network Video Interface Forum) compliance

The ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices including automatic device discovery and video streaming. Allows interoperability between network video devices.

Solid State PTZ

Allows users to electronically pan, tilt, and zoom within the camera's field of view.

CF card slot

Compact Flash card slot for onboard recording or wireless networking (with optional SNCA-CFW5 card)

Full HD (1920x1080p) resolution

Detailed Full HD progressive images. Progressive acquisition (as opposed to interlace) means that images are more stable to view, contain more information and compress more efficiently - without "interlace artifacts".

Supports multiple industry standard codecs: H264, MPEG-4 and JPEG with dual streaming capability

This multi-codec camera supports three compression formats: JPEG, the best choice of high-quality still images; MPEG-4, the format that provides clear moving images efficiently over limited-bandwidth networks; and H.264, the alternative for severely limited-bandwidth networks, providing twice the efficiency of MPEG-4. The camera can generate multiple streams simultaneously.

Optical Day/Night

Optimises sensitivity in day and night conditions. As night falls, an infra-red filter is automatically removed and the camera switches to monochrome. In this mode, the camera can acquire images extremely low light conditions.

IR Illuminators

Built-in IR (Infrared) illuminators provide assistance to the camera when capturing objects in the dark.

Easy Focus/Easy Zoom

Easy Focus/Easy Zoom simplifies installation by making it easy to set up the focus and zoom settings of the camera.

Built-in heater

Ensures that the camera will operate correctly in cold weather.

Analogue Monitor Output

This allows an analogue video monitor to be connected directly to the camera.

Technical Specifications

Camera

Image device	1/2.8 type progressive scan "Exmor" CMOS sensor
Minimum illumination	Color: 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 (H x V)	Approx. 3.27Megapixel (2096×1561)
Electronic shutter speed	1s to 1/10000s

Gain control	Auto (3 levels)
Exposure control	Auto, EV Compensation *1, Auto Slow Shutter *2
White balance mode	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: 21pcs)

Camera Features

Day/Night *3	Yes

Wide-D   View-DR (90dB)

Image enhancementImage 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 compressionH.264, MPEG-4, JPEG format

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 compressionG.711/G.726

Scene Analytics

Intelligent motion detectionYes (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
Wireless network	No
Number of clients	10
Authentication	IEEE802.1X

Analog Monitor Output

Signal system	NTSC / PAL
Horizontal resolution	600 TV lines
S/N ratio	More than 50 dB

Interface

Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Analog video output	BNC x 1

Analog 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

Mass	1400g (3 lb 1 oz)
Dimensions	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)
Working 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

Safety regulation	UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A

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

Supplied Accessories	CD-ROM (User's Guide, SNC Toolbox), Installation manual, Wire rope, M4 screw, Warranty Booklet, Template

Notes

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

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