SONY

SNC-CH180

Outdoor IR Bullet 720p/30 fps Camera - V
Series

Overview

An important addition to Sony's superlative range of network security systems, the SNC-CH180 is an HD camera that can see in the dark, with infra-red IR Illuminator. It captures clear pictures even without any visible light.

This feature-rich HD fixed security camera comes with Sony's image enhancement expertise. It includes View-DR for a very wide dynamic range in difficult lighting conditions, and XDNR for incredibly powerful noise reduction. Couple these with the SNC-CH180's IR Illuminator, and you have a powerful HD network security camera.

The SNC-CH180 projects infra-red light 15 metres from the lens and beyond, effortlessly capturing clear images where other devices would see only darkness*.

Sony's DEPA Advanced Intelligent Video and Audio Analytics means the SNC-CH180 delivers crystal-clear images and automatic alarm triggers and alerts - based on user-defined rules. The SNC-CH180 also offers excellent protection against vandals and the weather.

This is a camera that's ready for anything.

Captures images in complete darkness using IR illuminators.

Captures clear images in complete darkness, up to 15m from the lens, and often beyond. In low light, or even in no light, the SNC-CH180 still gets the picture

High Definition image capture

Resolve smaller details in images thanks to 720p 30fps capture resolution

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

View-DR (Visibility Enhanced Wide Dynamic Range) for extra dynamic range in images captured by the camera

With Sony's View-DR (Visibility Enhanced Wide Dynamic Range) innovation, you can achieve a high contrast ratio of 125dB. This ensures realistic tonal detail, and state-of-the-art image enhancement with a wide, dynamic range capability.

XDNR eXcellent Dynamic Noise Reduction to improve pictures in low illumination

XDNR (Excellent Dynamic Noise Reduction) technology virtually eliminates image blur in low-light conditions, enabling users to clearly capture images that have not been

easy to portray in the past. It also overcomes the problems associated with many competitor camera models. What's more, when both XDNR and Visibility Enhancer are turned on, the cameras can achieve four times the sensitivity compared to when they are off. This technology is ideal for any outdoor surveillance monitoring, such as in a car park at night.

DEPA Advanced analytics triggers alarms and alerts based on user-created rules

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

Power over Ethernet (PoE) capability

Supporting Power over Ethernet (PoE), the SNC-CH180 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

Built-in heater for cold weather

With a built-in heater, the SNC-CH180 will work in temperatures from -20 to 50°C (does not work with PoE).

IP66 rating against water ingress/damage

The SNC-CH180 is rain and splash-proof – essential for serious outdoor use

ONVIF (Open Network Video Interface Forum) compliance

Compliance with ONVIF Open Network Video Interface Forum) ensures interoperability and maximum flexibility between a wide range of manufacturers' network video products.

Specifications

Camera	
Image Sensor	1/3 type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 1.4 Megapixels
Signal System	NTSC color system/PAL color system (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.22lx (F1.2 / View-DR OFF/VE OFF / AGC High / XDNR Middle / 50 IRE) B/W: 0 lx (IR ON) (F1.2 / View-DR OFF/VE OFF / AGC High / XDNR Middle / 50 IRE)
Minimum Illumination (30 IRE)	Color: 0.10 lx (F1.2, View-DR OFF, VE OFF, AGC High, XDNR Middle, 1/30 s) B/W: 0.00 lx (F1.2, View-DR OFF, VE OFF, AGC High, XDNR Middle, 1/30 s)
Dynamic Range	Equivalent to 130 dB by View-DR Technology
Gain	Auto (3 levels)
Shutter Speed	1 s to 1/10000 s
Exposure Control	Auto, EV Compensation*1, Auto Slow

	Shutter*2
White Balance	Auto(ATW, ATW-PRO), Preset, One-push WB, Manual
Lens	Built-in varifocal lens
Powered Zoom	No
Easy Zoom	Yes
Zoom Ratio	Optical zoom 2.9x Digital zoom 4x Total zoom 11.6x
Powered Focus	Yes (Easy Focus)
Horizontal Viewing Angle	85.4° to 31.2°
Focal Length	f =3.1 mm to 8.9 mm
F-Number	F1.2 (Wide), F2.1 (Tele)
Minimum Object Distance	300 mm
IR Illuminator	Yes (Wave Length: 850 nm [Typical], IR LED: 27 pieces)

Camera Features

Day/Night	True D/N
Wide-D	View-DR
Tone Correction	VE (VE)
Noise Reduction	XDNR
Image Stabilizer	No
Vandal Resistant	No
Ingress Protection	IP66

Video

Resolution	1280 x 1024, 1280 x 960, 1280 x 800, 1280 x 720, 1024 x 768, 1024 x 576, 800 x 600, 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)
Compression Format	H.264, MPEG-4, JPEG
Maximum Frame Rate	H.264: 30 fps (1280 x 720)/20 fps (1280 x 1024) MPEG-4: 30 fps (1280 x 720)/25 fps (1280 x 1024) JPEG: 30 fps (1280 x 720)/30 fps (1280 x 1024)

Multi streaming Capability	Dual streaming*3
Number of Clients	10

Intelligent Video/Audio Analytics

Analytics Architecture	DEPA Advanced
Intelligent Motion Detection	Yes (with built in Post Filter)

Audio

Compression Format	G.711/G.726

System Requirements

Operating System	Microsoft Windows XP Windows Vista (32 bit) Windows 7 (32 bit, 64 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)

Network

Protocols	IPv4, IPv6, UDP, TCP, ARP, ICMP, IGMP, HTTP, HTTPS, FTP(client/server), SMTP,DHCP, DNS,NTP, RTP/RTCP, RTSP, SNMP (MIB-2)
Number of IP Address/Mac ADDRESS	1
ONVIF Conformance	Profile S
Wireless Network	Yes (with optional SNCA-CFW5)
Authentication	IEEE802.1X

Interface

Analog Video Output	BNC x1
Analog Monitor Output for Setup	Phono jack x1
Microphone Input	Mini jack (monaural), MIC IN/LINE IN: DC 2.5 V plug-in power

Line Input	Mini jack (monaural)
Line Output	Mini jack (monaural), Maximum output level: 1 Vrms
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x1
Alarm Output	x2
Card Slots	CF card x1
USB Slots	No

General

Power Requirements	IEEE 802.3af compliant (PoE) Class 0, AC 24 V, DC 12 V
Power Consumption	30 W max.
Operating Temperature	AC 24 V/DC 12 V : -30 to +50℃ PoE (IEEE802.3af) : -10℃ to +50℃
Cold Start Temperature	AC 24 V/DC 12 V : -20 to +50℃ PoE (IEEE802.3af) : 0 to +50℃
Storage Temperature	-20℃ to +60℃ -4°F to +140°F
Operating Humidity	20% to 80%
Storage Humidity	20% to 95%
Dimensions*4	φ93 x 186 mm φ3 3/4 x 7 3/8 inches φ140 x 334.8 mm (including arm) φ5 3/8 x 13 1/4 inches (including arm)
Mass	Approx. 1650 g
Safety Regulations	UL2044, FCC Class A Digital Device, IC Class A Digital Device, IEC60950-1, EN55022(A)+EN55024+EN50 130-4, VCCI Class A, AN/NZS CISPR22
Supplied Accessories	CD-ROM (User's Guide, SNC Toolbox) (1) Installation Manual (1) Wire rope (1) +M4x8 screw (1) B&P warranty booklet (1) Template (1)

Notes

*1	VE off mode only.
*2	View-DR off mode only.

*3	Dual streaming (Any combination with JPEG/MPEG-4/H.264, including multiple streams of the same format)
*4	The values for dimensions are approximate.

Accessories

NSR-500

NSR-500 Network Surveillance Recorder with 16-channel Full HD image capture, up to 12TB of storage and RAID implementation

RealShot Manager Advanced

Video Management Software for 1 camera. Order Code: IMZ-NS101M

Gallery