

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 dual streaming capability
- The Exmor[™] CMOS sensor incorporated to deliver high image quality and low noise







KEY FEATURES

• Built-in IR (Infrared) illuminators to assist capturing objects in the dark even under 0 lx, up to 49 feet (15 m) away.

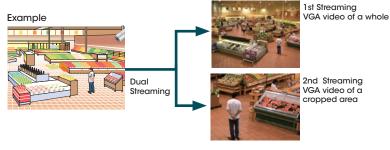




ON

Actual images of one of Sony's HD cameras with IR illuminators.

- IP66-rated waterproof and dust-tight feature for outdoor surveillance, or indoor where water ingress may pose an issue.
- Easy Focus/Easy Zoom functions for easy installation.
- Optical Day/Night function to switch to Day or Night mode depending on the light level.
- 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. User 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. With this feature, the SNC-CH160 can replace two SD cameras installed in the same line of view.



· Intelligent Motion Detection that supports DEPA™ analytics.



- Analog 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) software that ensures greater interoperability and more flexibility in building multiplevendor systems.

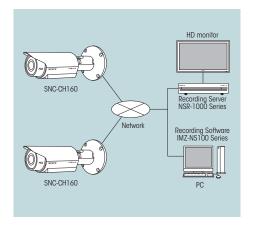


SPECIFICATIONS

	SNC-CH160
Camera	
Image device	1/3 type progressive scan Exmor CMOS sensor
Minimum illumination	0.50k (Color), 0 lx (8W) (IR 0N) (F1.2/AGC 42dB/50IRE [IP])
Number of effective pixels (H x V)	1.4 Megapixel (1329 x 1049)
Electronic shutter speed	1 s to 1/10000 s
Gain control	Auto
Exposure control	Auto, EV Compensation, Auto Slow Shutter
White balance mode	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 object distance	300 mm
Powered focus	Yes (Easy Focus)
Powered zoom	Yes (Easy Zoom)
IR illuminators	Yes
IK IIIUIIIIIUI013	(Wave Length: 850nm [Typical], IR LED: 21 pcs)
Camera Features	
Day/Night *1	Yes
Noise reduction	Yes
Image	
Codec image size (H x V)	$1280 \times 1024, 1280 \times 960, 1280 \times 800, 1280 \times 720, 1024 \times 768, 1024 \times 576, 800 \times 480, 768 \times 576, 720 \times 576, 720 \times 480, 704 \times 576, 640 \times 480, 640 \times 368, 384 \times 288, 320 \times 240, 320 \times 192 \text{ (H.264, MPEG-4, JPEG)}$
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 software	Yes
Number of clients	5
Authentication	IEEE802.1X
Angles Meniter Order	
Analog Monitor Output	
Signal system	NTSC / PAL
	NTSC / PAL
Signal system Interface Ethernet	NTSC / PAL 10BASE-T / 100BASE-TX (RJ-45)
Signal system Interface Ethernet Analog monitor output	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1
Signal system Interface Ethernet	10BASE-T / 100BASE-TX (RJ-45)
Signal system Interface Ethernet Analog monitor output	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight	DIBASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) Ø 3 3/4 x 7 3/8 inches (93 x 186 mm) Ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) 9 3 3/4 x 7 3/8 inches (93 x 186 mm) 9 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) POE 12.9 W max -4°F to +122°F (-20°C to +50°C)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) 3 3/4 x 7 3/8 inches (93 x 186 mm) 6 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C) IP66
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safety regulation	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safely regulation System Requirements	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C) IP66 UIL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) a 3 3/4 x 7 3/8 inches (93 x 186 mm) b 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max -4°F to +122°F (-20°C to +50°C) -2°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XPTM, Windows Vista TM (32bit), Windows® 7 (32bit)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safety regulation System Requirements Operating system Processor	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) 3 3/4 x 7 3/8 inches (93 x 186 mm) 6 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -42°F to +122°F (-30°C to +50°C) -49°F to +122°F (-30°C to +50°C) -49°F to +120°F (-30°C to +50°C) -49°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XP TM , Windows Vista TM (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A Microsoft Windows XP™, Windows Visto™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 1 GB or more
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safety regulation System Requirements Operating system Processor	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A Microsoft Windows XP™, Windows Visto™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 1 GB or more Microsoft Internet Explorer® Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefor® Ver. 3.5 (Plug-in free viewer only)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory Web browser	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 /8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -42°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XP TM , Windows Vista TM (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher I GB or more Microsoft Internet Explorer® Ver. 6.0, Ver. 7.0, Ver. 8.0 Firetox® Ver. 3.5 (Plug-in free viewer only)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory	Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) 3 3/4 x 7 3/8 inches (93 x 186 mm) 9 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -42°F to +120°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XP™, Windows Vista™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 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) Safon® Ver. 4.0 (Plug-in free viewer only) Google® Chrome Ver. 4.0 (Plug-in free viewer only)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory Web browser	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -4°F to +140°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A Microsoft Windows XP™, Windows Visto™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 1 GB or more Microsoft Internet Explorer® Ver. 6.0, Ver. 7.0, Ver. 8.0 Firefor® Ver. 3.5 (Plug-in free viewer only)
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory Web browser	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -22°F to +122°F (-30°C to +50°C) -40°F to +120°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XP™, Windows Vista™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 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) Sofari® Ver. 4.0 (Plug-in free viewer only) Google® Chrome Ver. 4.0 (Plug-in free viewer only) CD-ROM (User's Guide, SNC Toolbox) Installation manual Wire rope
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory Web browser	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) ø 3 3/4 x 7 3/8 inches (93 x 186 mm) ø 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PoE 12.9 W max -4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-20°C to +50°C) -4°F to +122°F (-30°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCI Class A, C-Tick Class A Microsoft Windows XP™, Windows Vista™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 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) Softor® Ver. 4.0 (Plug-in free viewer only) Google® Chrome Ver. 4.0 (Plug-in free viewer only) CCP-ROM (User's Guide, SNC Toolbox) Installation manual Wire rope + M4x8 screw
Signal system Interface Ethernet Analog monitor output Sensor input Alarm output General Weight Dimensions Power requirements Power consumption Starting temperature Working temperature Storage temperature Ingress protection Safety regulation System Requirements Operating system Processor Memory Web browser	10BASE-T / 100BASE-TX (RJ-45) Phono jack x 1 x 1, make contact, break contact x 1, 24V AC/DC, 1A (Mechanical relay outputs electrically isolated from the camera) 3 lb 6 oz (1520 g) g 3 3/4 x 7 3/8 inches (93 x 186 mm) g 5 5/8 x 13 1/4 inches (140 x 334.8 mm) (including arm) PDE 12.9 W max 4°F to +122°F (-20°C to +50°C) -22°F to +122°F (-30°C to +50°C) -22°F to +122°F (-30°C to +50°C) -40°F to +120°F (-20°C to +60°C) IP66 UL2044, FCC 15B Class A, IC Class A, IEC60950-1, EN55022(A)+EN55024+EN50130-4, VCCl Class A, C-Tick Class A Microsoft Windows XP™, Windows Vista™ (32bit), Windows® 7 (32bit) Intel Core2 Duo 2 GHz or higher 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) Sofari® Ver. 4.0 (Plug-in free viewer only) Google® Chrome Ver. 4.0 (Plug-in free viewer only) CD-ROM (User's Guide, SNC Toolbox) Installation manual Wire rope

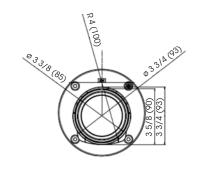
*1 Removable IR Cut Filter.

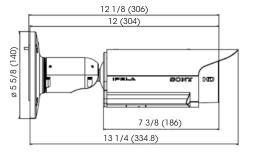
SYSTEM CONFIGURATIONS

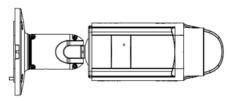


DIMENSIONS

Unit: inches (mm)







All other trademarks are the property of their respective owners.

^{*}The SNC-CH160 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).