SNC-HMX70

SONY

360-degree Hemispheric-view Camera with a 12-megapixel CMOS Sensor

- ■ 12MP / 30fps capability
- ■ Sony 1/2.3-inch CMOS sensor
- ■ 360 degree hemispheric imaging technology with E-PTZ functionality
- ■ Edge or client-side de-warping for easy integration
- ■ Smart codec with intelligent noise reduction
- ■ In-camera video analytics
- ■ Video authentication capability
- ■ SD card slot supports SDHC and SDXC
- ■ Built-in microphone
- ■ 180 degree mode for wall mount applications

KEY FEATURES

- • 360° hemispheric image capture for wide area surveillance and situational awareness.

360° view of SNC-HMX70

- • 30fps full framerate overview video to capture every incident.
- • Wide Dynamic range of 92dB with electronic tone adjustment to get the best exposure over the whole image area.
- • Client-side dewarping, the camera streams a single circular non-dewarped image at 30 fps.
- • The edge dewarping in the camera provides three separate video channels simultaneously at 12.5 fps:
  – Full image circle (Video 1 channel)
  – Dewarped view mode (Video 2 channel)
  – E-PTZ (Video 3 channel)
- • Built-in microphone to allow live/recording audio during critical incidents to support the video evidence.
- • True Day /Night with IR corrected lens can provide 360° coverage in complete darkness when used with suitable IR illuminator(s).

- • Smart codec H.264 combined with intelligent noise reduction, ensures bandwidth optimized video streams and cost effective storage.
- • Essential video analytics are built in to the camera, providing reliable object detection, line cross detection, loitering, left/removed object detection, object counting, route detection and other features.
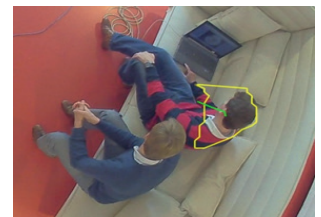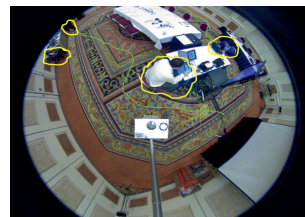
With latest Essential Video Analysis (EVA)

- • ONVIF (Open Network Video Interface Forum) Profile S conformance firmware that ensures greater interoperability and more flexibility in building multi-vendor systems
- • Edge Storage – the camera is equipped with internal RAM that supports 10 sec of pre-alarm recording, it also has an SD card slot to expand on-board storage.
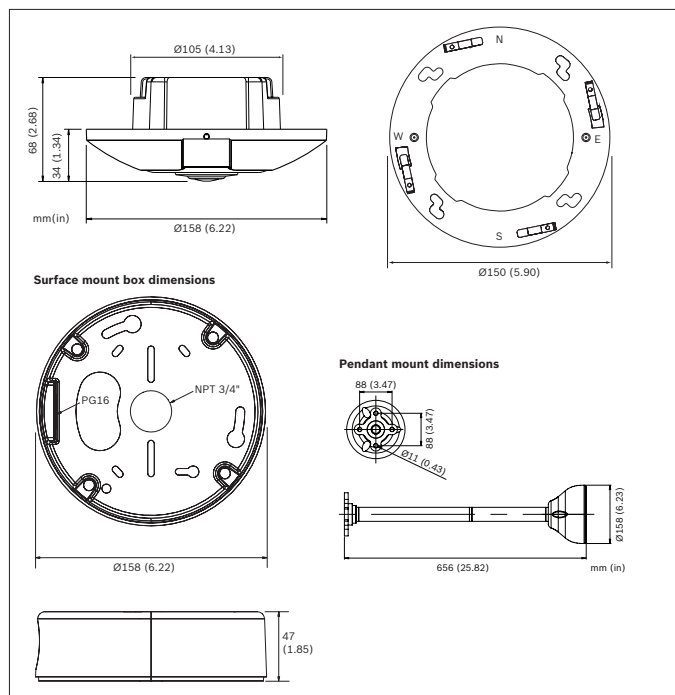

Sony Video Security driven by Bosch

Technical specifications

Power

Power Supply	Power-over-Ethernet 48 VDC nominal
Power Consumption	140 mA
PoE	IEEE 802.3af (802.3at Type 1)

Sensor

Type	1/2.3-inch CMOS
Total sensor pixels	12MP
Used pixels (360° version)	2640 x 2640

Video performance – Sensitivity – 360° lens

(3100K, reflectivity 89%, F2.8, 30IRE)	
Color	0.55 lx
B/W	0.18 lx

Video performance – Dynamic range

Dynamic range	92 dB WDR (+16 dB IAE)

Video streaming

Video compression	H.264 (MP); M-JPEG
Streaming	Multiple configurable streams in H.264 and M-JPEG, configurable frame rate and bandwidth. Multiple channels with edge dewarping. Regions of Interest (ROI)
Overall IP Delay	Min. 120 ms, Max. 340 ms
Encoder Regions/Region of interest (ROI)	Eight independent areas for setting encoder quality to optimize bitrate.

Video resolution (H x V) – 360° version

Video 1 channel	Full image circle	2640 x 2640
Video 2 channel	Full panoramic	3584 x 504
	E-PTZ	1536 x 864
	Quad	1536 x 864
	Panoramic	2688 x 800
	Double panoramic	1920 x 1080
	Corridor	1600 x 1200
Video 3 channel	E-PTZ	1280 x 720

Video functions

Day/Night	Color, Monochrome, Auto (adjustable switchover points)
Adjustable picture settings	Contrast, Saturation, Brightness
White Balance	2500 to 10000K, 4 automatic modes (Basic, Standard, Sodium vapor, Dominant color), Manual mode and Hold mode
Shutter	1/30 to 1/15000 sec
Sharpness	Sharpness enhancement level selectable
Backlight compensation	Off / On / Intelligent Auto Exposure (BLC)
Noise reduction	Intelligent Dynamic Noise Reduction with separate temporal (2D) and spatial (3D) adjustments
Intelligent defog	Intelligent Defog automatically adjusts parameters for best picture in foggy or misty scenes (switchable)
Privacy Masking	Eight independent areas, fully programmable
Video Analytics	Essential Video Analytics
Display stamping	Individual names and stamps for all video channels
Other functions	Pixel counter, Video watermarking, Location
Video Authentication	Watermark, MD5, SHA-1, SHA-2561.6

Optical

Lens (360° version)	1.6 mm fixed-focus lens (IR corrected), F2.8
Lens mount	Board mounted
Iris control	Fixed iris
Field of view (360° version)	180° (H) x 180° (V)
Minimum object distance	0.1 m
True Day/Night	Switched mechanical IR filter

Audio

Audio input	Integrated microphone

Audio streaming

Standard	G.711, 8 kHz sampling rate L16, 16 kHz sampling rate AAC-LC, 48 kbps at 16 kHz sampling rate AAC-LC, 80 kbps at 16 kHz sampling rate
Signal-to-Noise Ratio	>50 dB

Local storage

Internal RAM	10 s pre-alarm recording
Memory card slot	Supports up to 32 GB SDHC / 2 TB SDXC card. (An SD card of Class 6 or higher is recommended for HD recording)
Recording	Continuous recording, ring recording. alarm/events/schedule recording

Software

Unit discovery	SNC-Toolbox
Unit configuration	Via web browser or SNC toolbox
Firmware update	Remotely programmable
Software viewing	Web browser; Video Security Client; Video Security App; Bosch Video Management System; Bosch Video Client; or third party software
Latest firmware and software	https://pro.sony/support/software/

Network

Protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, MIB-II), 802.1x, DNS, DNSv6, DDNS (DynDNS.org, selfHOST.de, no-ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox, CHAP, digest authentication
Encryption	SSL, TLS1.0/1.2, AES128, AES256
Ethernet	10/100 Base-T, auto-sensing, half/full duplex
Connectivity	Auto-MDIX
Interoperability	ONVIF Profile S; GB/T 28181

Mechanical

Dimensions	158 x 33 mm (6.22 x 1.30 in)
Weight	445 g (0.98 lb)

Environmental

Operating Temperature	-20°C to +40°C (-4°F to 104°F)
Storage Temperature	-20°C to +60°C (-4°F to 140°F)
Operating humidity	20% to 93% RH
Storage humidity	up to 98% RH
Safety regulations	IK06

Accessories

Conduit Box	UNI-IBBHMX70
Pole Adapter	UNI-P1C15 UNI-C1CHMX70
Plenum Enclosure	UNI-ILDHMX
SD Card	SR-32VMA

DIMENSIONS

Ø105 (4.13)
68 (2.68)
34 (1.34)
mm(in)
Ø158 (6.22)

N
W
E
S
Ø150 (5.90)

Surface mount box dimensions
PG16
NPT 3/4"
Ø158 (6.22)
47 (1.85)

Pendant mount dimensions
88 (3.47)
88 (3.47)
Ø11 (0.43)
Ø158 (6.23)
656 (25.82)
mm (in)

MK11125V3OHB14JUN