

## SNC-HMX70

360-degree Hemispheric-view  
Camera



### Overview

#### **Superb image quality, all-round vision**

The SNC-HMX70 is a discreet, low-profile 360-degree Hemispheric-view Camera for indoor use. The camera's fixed lens and high-resolution 12 megapixel CMOS sensor offer full 360-degree panoramic surveillance with excellent image quality and complete area coverage - providing full situational awareness plus simultaneous Electronic pan/tilt/zoom (ePTZ) views in high resolution.

The camera lens captures a circular image that can be transformed using in-camera dewarping into several different distortion-free rectangular views.

Video Analytics can accurately track movement through the whole coverage area, making the SNC-HMX70 ideal for applications such as people counting or complex rule-based alarm triggering.

The camera's slim, low-profile styling makes it ideal for a wide range of video monitoring and surveillance environments including retail stores, commercial buildings, schools, offices and videoconferencing suites.

### Features

#### **High resolution 12 megapixel sensor**

The camera's high resolution CMOS sensor captures smooth, detailed panoramic video images at 30fps.

## **Electronic pan/tilt/zoom (ePTZ) and Regions of Interest (ROI)**

Remote Electronic pan/tilt/zoom (ePTZ) allows selection and monitoring of specific Regions of Interest (ROI) at high resolution, ensuring that important details aren't lost even when using electronic zoom. Wide area situational awareness is still retained even when zoomed in on a particular object of interest.

## **Choice of view modes**

Enjoy greater monitoring flexibility with choice of Panoramic, Quad, ePTZ and Corridor viewing modes.

## **Great pictures in any environment**

Nine configurable scene modes optimise exposure settings for wide range of daytime or night applications.

## **In-camera dewarping**

In-camera edge dewarping provides three simultaneous video channels (full image circle, dewarped view, ePTZ).

## **Video analytics**

Built-in analytics allow the camera to reliably detect, track and analyse objects, providing alerts in response to predefined alarm rules. Since the camera continuously monitors the full image circle, alarms are still generated even when the viewer is zoomed in on a different region of the image.

## **Support Detect, Observe, Recognize and Identify**

Complies with Detect, Observe, Recognize and Identify, specifying the camera's ability to distinguish persons or objects within a defined area.

## **Record exactly what you want**

The full resolution circular image is always recorded, even if only

a portion of the scene is being viewed. Retrospective dewarping can be performed on the entire area, with zooming in on any region of interest. Alternatively, only relevant parts of the scene can be recorded to reduce bitrates significantly.

### **Intelligent Dynamic Noise Reduction**

Intelligently distinguishes between noise and relevant image information, reducing bitrate without compromising video quality.

### **Area-based encoding**

Adjust compression for user-definable regions, prioritising bandwidth for important parts of the scene.

### **Outstanding dynamic range**

Wide 92dB dynamic range (plus additional 16dB combined with Intelligent Auto Exposure) captures crucial image detail, even in high-contrast scenes with extreme lighting levels.

### **Priority exposure control**

Optimise image quality by prioritising exposure calculation on selected image areas.

### **Intelligent Auto Exposure**

Get perfect pictures in every situation, with front light and backlight compensation that adapts to changing light conditions.

### **Built in microphone and audio alarm**

Listen in to what's happening in monitored areas. Audio detection can generate an alarm if needed.

### **Low profile design, easy installation**

The camera's slim, low profile is ideal for unobtrusive installation, fitting in discreetly with architectural features. Surface mounting is easy with supplied twist/click mounting ring. Power-over-Ethernet connection simplifies integration.

### Edge recording

Insert an optional memory card and store up to 2TB of local alarm recording. Pre-alarm recording reduces network bandwidth.

### Secure access

Supports password protection with three levels and 802.1x authentication.

### Seamless system integration

Conforms to ONVIF Profile S, Profile G, and Profile T specifications, guaranteeing interoperability with other network video products. Third-party integrators can directly access the camera's internal features.

## Specifications

Camera	
Image Sensor	1/2.3 type progressive scan CMOS sensor
Number of Effective Pixels	Approx. 12 Megapixels
Minimum Illumination (30 IRE)	Color: 0.55 lx (F2.8) B/W: 0.18 lx (F2.8)
Dynamic Range	92 dB
S/N Ratio (Gain 0 dB)	More than 50 dB
Gain	Auto

Shutter Speed	1/15 s to 1/15,000 s
Exposure Control	Automatic exposure, Shutter speed
White Balance	2500 to 10000K, 4 automatic modes (basic, standard, sodium vapor, dominant color), Manual
Lens	Fixed lens
Horizontal Viewing Angle	180°
Vertical Viewing Angle	180°
Focal Length	f = 1.6 mm
F-Number	F2.8
Minimum Object Distance	100 mm
Number of Preset Positions	6

## Camera Features

Day/Night	True D/N
360°Hemispheric/180°Panoramic View Modes	Yes / Yes
e-Flip	Yes

Wide-D	Yes
Tone Correction	Global Tone Mapping
Defog Image Processing	Yes
Highlight Compensation	Exposure zones
Flicker Reduction	Yes
Distortion Correction	Yes
Noise Reduction	Yes
Intelligent Scene Capture	Yes
Privacy Masking (number)	8
Privacy Masking (shape)	Shape formed by any five corner points
Privacy Masking (color/effect)	Opaque 1 colors (Black)
Edge Storage	Yes
Vandal Resistant	IK06 (without the lens)
Menu Language	English, Japanese, Chinese (simplified), French, Spanish, German, Italian, Portuguese, Dutch, Polka, Czech, Russian, Slovenian

## Video

Resolution	2640 x 2640, 3584 x 504, 1536 x 864, 2688 x 800, 1920 x 1080, 1600 x 1200, 1280 x 720
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Compression Format	H.264, M-JPEG
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Maximum Frame Rate	30/25 fps
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Bitrate Control Mode	VBR
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Solid PTZ	Yes
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Adaptive Rate Control	Yes
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Bandwidth Control	Yes
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Evidence Shot	Yes
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Multi streaming Capability	Yes (3)
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Number of Clients	No hard limit
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## Intelligent Video/Audio Analytics

Analytics Architecture	Yes
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Intelligent Motion Detection	Yes
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Tamper Alarm	Yes
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Advanced Audio Detection	Audio threshold detection
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Scene Analytics	Essential Video Analytics
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Multi Tracking	Yes, 8 objects
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## Audio

Compression Format	G.711.8 (8 kHz) / L16 (16kHz) / AAC-LC (16kHz)
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## System Requirements

Operating System	Windows 7 or later operating system
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Memory	2GB or more
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Web Browser	Internet Explorer Ver. 11 or later
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SNC toolbox	Yes
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## Network

IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IMGP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet, ARP, DHCP, APIPA (Auto-IP, link local address), NTP(SNTP), SNMP(V1,



Protocols	MIB-2), 802.1x, DNS, DNSv6, DDNS, SMTP, iSCSI, UPnP(SSDP), DiffServ(QoS), LLDP, SOAP, Dropbox, CHAP, digest authentication
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QoS	DiffServ
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Multicast Streaming Support	Yes
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ONVIF Conformance	Profile S, Profile G, Profile T
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Microphone Input	Built-in Microphone
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Network Port	10Base-T, 100Base-T
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Card Slots	SD x1
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Confirmed SD Card Type	SDHC (up to 32GB), SDXC (up to 2TB)
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## General

Power Requirements	IEEE 802.3af compliant (PoE system)
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Power Consumption	9.6 W
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Operating Temperature	-20 °C to + 40 °C -4°F to + 104°F
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Cold Start Temperature	-20 °C -4°F
Storage Temperature	-20 °C to + 60 °C -4 °F to + 140 °F
Operating Humidity	20 % to 93 %
Storage Humidity	up tp 98 %
Dimensions (W x H x D)*1	Φ158 mm x 33 mm Φ6 1/4 inches x 1 1/4 inches
Mass	Approx. 526 g Approx. 1.16 lb
External Material	Shell : Plastic Lexan PC Base : Aluminum
External Color	RAL9003
Safety Regulations	VCCI : CISPR32 Class A UL60950-1, CSA 60950-1 FCC part15B Class A ISED ICES-003 Class A CE-EMC-Directive :EN55032(2015) Class A, EN50130-4(2011) + A1 RCM-EMC: EN55032(2015) Class A
	Mounting ring (1) Wrenches (2) (T10 and 1.5)

Supplied Accessories	Plugs (4)
	Screws (4) (4.5 x 40)
	Washers (2) (M4 x 14)
	Safety Regulations (1)
	Operating Instructions - Download site Information (1)
	Identification labels (1)

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Optional Accessories	VDA-70112-SMB (Surface Mount Box)
	VDA-70112-PMT (Pendant Pipe Mount Bracket)
	VDA-PLEN-DOME (In-ceiling Housing for Plenums)

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## Footnote

*1	The values for dimensions are approximate.
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## Gallery

