

## 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)<br>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

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|--|-----------|
| 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

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

## Intelligent Video/Audio Analytics

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|---------------------------------|-----|
| Analytics Architecture          | Yes |
| Intelligent Motion<br>Detection | Yes |
| Tamper Alarm                    | Yes |

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|--------------------------|---------------------------|
| Advanced Audio Detection | Audio threshold detection |
| Scene Analytics          | Essential Video Analytics |
| Multi Tracking           | Yes, 8 objects            |

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## Audio

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

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| Operating System | Windows 7 or later operating system |
| Memory           | 2GB or more                         |
| Web Browser      | Internet Explorer Ver. 11 or later  |
| 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

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| 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<br>-4°F to + 104°F |
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|--------------------------|--|
| Cold Start Temperature   | -20 °C<br>-4°F   |
| Storage Temperature      | -20 °C to + 60 °C<br>-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<br>Φ6 1/4 inches x 1 1/4 inches  |
| Mass                     | Approx. 526 g<br>Approx. 1.16 lb   |
| External Material        | Shell : Plastic Lexan PC<br>Base : Aluminum  |
| External Color           | RAL9003  |
| Safety Regulations       | VCCI : CISPR32 Class A<br>UL60950-1, CSA 60950-1<br>FCC part15B Class A<br>ISED ICES-003 Class A<br>CE-EMC-Directive :EN55032(2015)<br>Class A, EN50130-4(2011) + A1<br>RCM-EMC: EN55032(2015) Class A |
|                          | Mounting ring (1)<br>Wrenches (2) (T10 and 1.5)  |

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|----------------------|---|
| Supplied Accessories | Plugs (4)<br>Screws (4) (4.5 x 40)<br>Washers (2) (M4 x 14)<br>Safety Regulations (1)<br>Operating Instructions - Download<br>site Information (1)<br>Identification labels (1) |
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| Optional Accessories | VDA-70112-SMB (Surface Mount<br>Box)<br>VDA-70112-PMT (Pendant Pipe<br>Mount Bracket)<br>VDA-PLEN-DOME (In-ceiling<br>Housing for Plenums) |
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## Footnote

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| *1 | The values for dimensions are<br>approximate. |
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## Gallery

