

## SNC-XM631

Minidome 1080p/30 fps  
Camera Powered by IPELA  
ENGINE EX™ – X Series



### Overview

**Excellent Full HD picture quality in a compact, discreet indoor housing: ideal for retail, banking and education applications**

The SNC-XM631 minidome IP camera is suited to a wide range of indoor security and surveillance environments, from banks and retail spaces to schools and colleges.

It's compact and easy to install, vandal resistant with an IK10 rating for protection against tampering or deliberate damage.

Full HD picture quality is assured by the sensitive, high-resolution Exmor™ CMOS sensor that's teamed with Sony's latest-generation IPELA ENGINE EX™ signal processing system. Every scene looks clearer, sharper and more detailed – even in challenging low-light conditions or with harsh backlighting. Extra intelligence is added by DEPA Advanced Intelligent Video Analytics that can intelligently trigger an alarm based on user-defined rules.

Full HD pictures from the wide-angle (113 degree horizontal field of view) lens are fine-tuned by the advanced IPELA ENGINE EX™ processing engine. This delivers wide dynamic range and cuts noise for crisp,

clear results – even in less-than-perfect lighting conditions. Built-in image stabilisation reduces the effects of vibration, making it easier to see what’s happening.

The camera supports image rotation, enabling a vertical image format also known as corridor view, ideal for video security and surveillance applications in corridors and hallways. This extra mode electronically flips the camera image through a quarter turn, presenting a correctly oriented 9:16 vertical ‘portrait’ view at Full HD resolution and no wasted pixels.

For even greater flexibility, there is a choice of three optional lenses to accommodate a wide range of (83°, 51° and 25°) horizontal viewing angle requirements.

## Features

### **See every detail with Full HD quality**

The sensitive, high-resolution Exmor CMOS sensor captures crisp, detail-packed Full HD (1920 x 1080) video images.

### **Wide angle lens**

A horizontal viewing angle of 113 degrees makes the camera ideal for wide area surveillance, requiring fewer cameras to cover the same space.

### **Latest generation imaging power**

High quality imaging is assured by Sony’s unique IPELA ENGINE EX™ signal processing platform that combines powerful signal processing with intelligent video analytics technologies. XDNR (eXcellent Dynamic Noise Reduction) assures clear low-light images, while Visibility Enhancer (VE) dynamically optimises brightness and colour reproduction on a pixel-by-pixel basis. Extra

intelligence is added by DEPA Advanced analytics with face detection that can trigger alarms based on user-determined rules.

#### **Wide dynamic range**

Innovative View-DR technology achieves a dynamic range equivalent to 90 dB, capturing objects clearly and adaptively – even with harsh backlighting or sun-drenched highlights.

#### **Excellent low-light sensitivity**

The camera is capable of capturing clear images in very low light conditions: minimum illumination of 0.3 lx in Colour mode and 0.3 lx in B/W mode (at 50 IRE).

#### **Better pictures, day or night**

Electronic Day/Night function automatically switches the camera between Day (colour) and Night (B/W) modes, depending on light levels.

#### **Steadier, more stable images**

The in-built image stabiliser reduces the effects of camera shake or vibration for steadier images with reduced blur.

#### **Optimum picture quality in any situation**

A choice of selectable picture modes optimises camera settings for best picture quality in a wide range of applications and lighting environments.

#### **Recording quality to suit your network**

Select CBR (constant bitrate), VBR (variable bitrate) or VBR-with-cap compression modes for optimised recording quality depending on IP network conditions.

#### **Automatic edge recording to memory card**

Edge Storage allows recording of video directly to an

optional SD/SDHC card, even when a network connection isn't available.

#### **Power over Ethernet**

The camera is powered using PoE (IEEE 802.3af) via a standard RJ-45 connector, simplifying installation and eliminating the need for additional power cables.

#### **Easy mounting on wall or ceiling with three-axis lens adjustment**

This allows the lens unit to be turned in pan, tilt and rotate axes for versatile camera angle adjustment.

#### **Easy, flexible field-of-view adjustments**

e-Varifocal allows electronic zooming and adjustment of field of view – for easy, flexible installation without cumbersome focus re-adjustment that's needed with optical varifocal lenses.

#### **Optional lenses for flexible control over field-of-view**

In addition to the camera's supplied lens (with 113 degree horizontal viewing angle), three optional fixed lenses are also available with a horizontal viewing angle of 83 degrees, 51 degrees and 25 degrees respectively to allow flexible field-of-view camera settings.

#### **Vandal resistant design**

The camera is vandal resistant with an IK10 impact rating, for protection against destructive behaviours.

#### **View with your smartphone**

Securely access the camera using a smartphone or tablet (Android or iOS) to view images and control pan/tilt/zoom functions remotely.

#### **Easy IP network configuration**

Configuration of network settings is made quick and simple using the supplied SNC Easy IP Setup application.

ONVIF (Open Network Video Interface Forum) compliance  
 Support for ONVIF simplifies integration with a wide range of VMS platforms and hardware, providing video streaming and camera control. ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices, including automatic device discovery and video streaming.

## Specifications

### Camera

|                               |  |
|-------------------------------|--|
| Image Sensor                  | 1/2.9-type progressive scan Exmor CMOS sensor  |
| Number of Effective Pixels    | Approx. 2.14 Megapixels  |
| Minimum Illumination (50 IRE) | Color: 0.3 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)<br>B/W: 0.3 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)   |
| Minimum Illumination (30 IRE) | Color: 0.18 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)<br>B/W: 0.18 lx (F2.0, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) |
| Dynamic Range                 | Equivalent to 90 dB with View-DR technology  |
| Gain                          | Auto   |

|                                  |   |
|----------------------------------|---|
| Shutter Speed                    | 1/1 s to 1/10,000 s   |
| Exposure Control                 | Exposure compensation,<br>Shutter speed   |
| White Balance                    | ATW, ATW-PRO, Indoor,<br>Outdoor, Fluorescent lamp,<br>Mercury lamp, Sodium vapour<br>lamp, Metal halide lamp,<br>White LED, One push WB,<br>Manual |
| Lens                             | Fixed lens  |
| Zoom Ratio                       | Digital zoom 4x<br>Total zoom 4x  |
| Horizontal Viewing Angle         | 113°  |
| Vertical Viewing Angle           | 61°   |
| Viewing Tilt Angle               | 151°  |
| Focal Length                     | f = 2.8 mm  |
| F-Number                         | F2.0  |
| Minimum Object Distance          | 500 mm  |
| Pan/Tilt/Rotation Angle (manual) | 0 ° to 350 °<br>0 ° to 60 °<br>-175 ° to +175 °   |

## Camera Features

|           |                |
|-----------|----------------|
| Day/Night | Electronic D/N |
|-----------|----------------|

|                                  |   |
|----------------------------------|---|
| e-Flip                           | Yes   |
| Image rotate                     | 90°, 270°   |
| Mirroring                        | Yes   |
| Wide-D                           | View-DR   |
| Tone Correction                  | Visibility Enhancer   |
| Noise Reduction                  | XDNR  |
| Image Stabilizer                 | Electronic  |
| Picture Mode                     | Yes   |
| Privacy Masking (number)         | 20  |
| Privacy Masking (shape)          | Quadrangle formed by any four corner points   |
| Privacy Masking (color/effect)   | Opaque 14 colors (Black, White, Red, Green, Blue, Cyan, Yellow, Magenta, Gray (6 scales)), Mosaic                                     |
| Edge Storage                     | Yes   |
| Compatibility with Cloud Service | Yes   |
| Vandal Resistant                 | IK10  |
| Superimpose Number               | 3 independent positions for characters (Codec, Date & Time, Event, Text (Max. 64 characters)), 1 independent position for a logo mark |

|                           |   |
|---------------------------|---|
| Superimpose Language      | English   |
| Menu Language             | English, Japanese, Chinese (simplified), Chinese (traditional), French, Spanish, German, Italian, Korean, Portuguese, Russian, Arabic, Hindi, Vietnamese, Thai, Turkish, Polish |
| Smartphone viewer         | Yes   |
| <b>Video</b>              |   |
| Resolution                | 1920 x 1080, 1280 x 720, 1024 x 576, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 640 x 360, 352 x 288, 320 x 184 (H.264, JPEG)  |
| Compression Format        | H.264 (High/Main/Baseline Profile), JPEG  |
| Maximum Frame Rate        | H.264: 30 fps (1920 x 1080)<br>JPEG: 30 fps (1920 x 1080)   |
| Bitrate Control Mode      | CBR/VBR (selectable)  |
| Range of Bit Rate Setting | 64 Kbps to 32 Mbps  |
| Solid PTZ                 | Yes   |
| e-Varifocal               | Yes   |
| Adaptive Rate             | H.264   |



## Control

|                            |         |
|----------------------------|---------|
| Bandwidth Control          | JPEG    |
| Multi streaming Capability | Yes (3) |
| Number of Clients          | 20      |

## Intelligent Video/Audio Analytics

|                              |   |
|------------------------------|---|
| Analytics Architecture       | DEPA Advanced   |
| Intelligent Motion Detection | Yes   |
| Face Detection               | Yes   |
| Tamper Alarm                 | Yes   |
| Scene Analytics              | Passing, Intrusion, Left Object Detection, Removed Object Detection |

## System Requirements

|                  |   |
|------------------|---|
| Operating System | Windows XP (32 bit) Professional Edition<br>Windows Vista (32 bit) Ultimate, Business Edition<br>Windows 7 (32/64 bit) Ultimate, Professional Edition<br>Windows 8 Pro (32/64 bit)<br>Windows 8.1 Pro (32/64 bit) |
| Processor        | Intel Corei7 2.8 GHz or higher  |

|                    |   |
|--------------------|---|
| Memory             | 2 GB or more  |
| Web Browser        | Microsoft Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver. 10.0, Ver. 11.0<br>Firefox Ver. 19.02 (plug-in free viewer only)<br>Safari Ver. 5.1 (plug-in free viewer only)<br>Google Chrome Ver. 25.0 (plug-in free viewer only) |
| SNC toolbox        | Yes   |
| SNC toolbox mobile | Yes   |

## Network

|                                  |   |
|----------------------------------|---|
| Protocols                        | IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, RTSP over HTTP, SMTP, IPv6, HTTPS, FTP (client), SNMP (v1, v2c, v3), SSL<br>*SSM (Source Specific Multicast) is supported. |
| Number of IP Address/Mac ADDRESS | 1   |
| QoS                              | DSCP  |
| Multicast Streaming Support      | Yes   |
| ONVIF                            | Profile S, Profile T  |

## Conformance

|                |            |
|----------------|------------|
| Authentication | IEEE802.1X |
|----------------|------------|

## Interface

|              |                             |
|--------------|-----------------------------|
| Network Port | 10BASE-T/100BASE-TX (RJ-45) |
|--------------|-----------------------------|

|                               |                                 |
|-------------------------------|---------------------------------|
| Alarm Input<br>(Sensor Input) | x1, make contact, break contact |
|-------------------------------|---------------------------------|

|              |   |
|--------------|---|
| Alarm Output | x1, +/- 50 V, 0.4 A (solid state relay outputs electrically isolated from the camera) |
|--------------|---|

|            |        |
|------------|--------|
| Card Slots | SD x 1 |
|------------|--------|

|                        |            |
|------------------------|------------|
| Confirmed SD Card Type | Max. 64 GB |
|------------------------|------------|

## General

|                    |                                     |
|--------------------|-------------------------------------|
| Power Requirements | IEEE 802.3af compliant (PoE system) |
|--------------------|-------------------------------------|

|                   |            |
|-------------------|------------|
| Power Consumption | 4.0 W max. |
|-------------------|------------|

|                       |                                 |
|-----------------------|---------------------------------|
| Operating Temperature | -10°C to +50°C<br>14°F to 122°F |
|-----------------------|---------------------------------|

|                        |             |
|------------------------|-------------|
| Cold Start Temperature | 0°C<br>32°F |
|------------------------|-------------|

|                     |   |
|---------------------|---|
| Storage Temperature | -30 °C to + 60 °C<br>-22 °F to + 140 °F |
|---------------------|---|

|                    |              |
|--------------------|--------------|
| Operating Humidity | 20 % to 80 % |
|--------------------|--------------|

|                      |   |
|----------------------|---|
| Storage Humidity     | 20 % to 80 %  |
| Dimensions *1        | φ104.5 × 56.5 mm<br>φ4 1/8 inches x 2 1/4 inches  |
| Mass                 | Approx. 200 g<br>Approx. 7.1 oz   |
| External Material    | Top cover/Dome cover : PC<br>(Polycarbonate)<br>Lower case:AL Die-cast  |
| External Color       | Top cover: Munsell 4.4 BG<br>8.4/0.2  |
| Fire Retardant       | UL2044  |
| Safety Regulations   | JATE Technical standard (LAN)<br>UL2044, IEC60950-1 (CB)<br>VCCI (Class A), FCC (Class A),<br>IC (Class A)<br>Emission: EN55022 (Class A)<br>+ EN50130-4<br>Immunity: EN55022 (Class A)<br>+ EN55024<br>Emission: AS/NZS CISPR22<br>(Class A)<br>EMC-TR |
| Supplied Accessories | CD-ROM (supplied programs)<br>(1)<br>Installation Manual (1)<br>Template (1)<br>Safety regulations (1)<br>Warranty booklet (1)<br>I/O cable (1)   |
|                      | SNCA-L038MF (M12 Mount<br>Lens)   |

Optional  
Accessories

SNCA-L060MF (M12 Mount  
Lens)  
SNCA-L120MF (M12 Mount  
Lens)

## Notes

\*1

The values for dimensions are  
approximate.

Related  
products



**FWL-  
65W855C**

65" BRAVIA  
Professional Full HD  
Colour LED Display



**FWL-  
75W855C**

75" BRAVIA  
Professional Full HD  
Colour LED Display



**FWL-  
55W805C**

55" BRAVIA  
Professional Full HD  
Colour LED Display



**FWL-  
40W705C**

40" BRAVIA  
Professional Full HD  
Colour LED Display



**FWL-  
48W705C**

48" BRAVIA  
Professional Full HD  
Colour LED Display

## Gallery

