

SNC-EMX50

Indoor minidome video security camera with 5 megapixel resolution and motorised zoom



Overview

Excellent image quality in all lighting conditions

The SNC-EMX50 is a high performance indoor minidome camera, combining Sony's advanced Exmor R CMOS sensor and advanced image processing technologies for high quality 5 megapixel images with wide dynamic range, excellent low-light sensitivity and true day/night capability.

With the additional benefits of smart analytics, convenient installation and powerful security features, the SNC-EMX50 is an ideal choice for demanding security, surveillance and monitoring applications.

Features

1/2.9-inch 5MP Exmor R CMOS sensor

The camera's very high resolution 5 megapixel Exmor R CMOS sensor captures exceptionally smooth, detailed video images at 30fps.

Automatic Varifocal Lens

High quality Automatic Varifocal lens provides 3-10mm focal length range and makes it easy for an installer to quickly and accurately adjust the image for best results.

Better images in high-contrast conditions

Wide dynamic range technology ensures evenly-exposed video

footage, even in harshly-lit high contrast scenes where ordinary cameras struggle to accommodate bright highlights and dark shadow detail.

Powerful video analytics

Advanced in-built video analytics allow the camera to reliably detect, track and analyse objects, providing alerts and alarm triggers in response to a comprehensive range of pre-defined rules.

Day & Night function

The camera's switchable IR cut filter ensures best colour accuracy in daylight, while boosting sensitivity for exceptional night-time while maintaining sharp focus under all lighting conditions.

Support Detect, Observe, Recognize and Identify

Complies with Detect, Observe, Recognize, Identify standard, defining camera's ability to distinguish persons or objects in a specified area.

Area-based encoding

Allows separate compression parameters to be set for up to eight user-definable image areas, reducing bandwidth while ensuring optimum quality for most important parts of the scene.

Encoding Regions of Interest (ROI)

Up to eight regions of interest can be specified in the camera's field of view, with separate encoding quality settings for each area.

Content Based Imaging Technology

Continually adjusts camera settings, taking into account changing lighting conditions and subject movement for optimised image quality while significantly reducing bandwidth requirements.

Intelligent Dynamic Noise Reduction

Distinguishes between noise and relevant image information,

reducing network bandwidth requirements without compromising video quality.

Intelligent Auto Exposure

Automatically adjusts camera exposure and compensates for backlighting, assuring accurately exposed images in a changing lighting conditions.

Intelligent streaming

Advanced encoding technology is combined with the efficient H.265 compression codec and Intelligent Dynamic Noise Reduction, reducing network bandwidth requirements by up to 80% while maintaining excellent image quality compared with conventional streaming using H.264 compression.

Edge recording

Store up to 2TB of local alarm recording on an optional microSD card. Pre-alarm recording in RAM reduces network bandwidth.

Cut through fog and haze

Intelligent Defog automatically optimises picture quality in foggy, hazy or misty conditions.

Latest data security technology

The camera's on-board Trusted Platform Module (TPM) and Public Key Infrastructure (PKI) offer superior protection against malicious attacks. 802.1x network authentication with EAP/TLS supports TLS 1.2 with updated cipher suites including AES 256 encryption.

Automatic calibration

Integration is simplified by the camera's internal gyro/accelerometer that automatically senses orientation, flipping the image in increments of 90° if the camera is mounted on its side or upside down.

Seamless system integration

Conformance to ONVIF Profile S, Profile T and Profile G specifications ensures interoperability with other network video products and systems. The camera's internal features can be accessed directly by third-party integrators.

Specifications

| Camera | |
|-------------------------------|--|
| Image Sensor | 1/2.9-type progressive scan Exmor-R CMOS sensor |
| Number of Effective Pixels | 3072 x 1728 (5MP) |
| Minimum Illumination (30 IRE) | Color: 0.24 lx (F1.3) B/W: 0.03 lx (F1.3) IR mode: 0.0 lx (F1.3) |
| Dynamic Range | 119 dB |
| S/N Ratio (Gain 0 dB) | More than 55 dB |
| Gain | Auto |
| Shutter Speed | 1/25[30] s to 1/15,000 s |
| Exposure Control | Automatic exposure, Fixed Shutter speed, Default shutter, Automatic iris control |
| | 2500 to 10000K, 4 automatic modes (basic, standard, sodium |

| | |
|--------------------------|---|
| White Balance | vapor, dominant color), Manual mode and Hold mode |
| Lens | Automatic Varifocal (AVF) |
| Horizontal Viewing Angle | 29° - 92° |
| Vertical Viewing Angle | 18° - 50° |
| Focal Length | f = 3 mm - 10 mm |
| F-Number | F1.3 - F360 |

Camera Features

| | |
|----------------------------------|----------|
| Day/Night | True D/N |
| Day/Night linked with Easy Focus | Yes |
| Night Vision | No |
| Auto-rotation Mode | No |
| e-Flip | Yes |
| Image Rotate | Yes |
| Mirroring | Yes |
| Wide-D | Yes |

| | |
|--------------------------------|---------------------|
| Tone Correction | Global Tone Mapping |
| Defog Image Processing | Yes |
| Highlight Compensation | Yes |
| Flicker Reduction | Yes |
| Distortion Correction | No |
| Noise Reduction | Yes |
| Image Stabilizer | No |
| Intelligent Scene Capture | Yes |
| Privacy Masking (number) | Yes (8 areas) |
| Privacy Masking (shape) | Polygon |
| Privacy Masking (color/effect) | Opaque 1 color |
| Edge Storage | Yes |
| Voice Alert | No |
| Hours Meter | No |

Superimpose Number Yes

Superimpose Language Roman characters

Video

Resolution 3072x1728, 1728x3072 (upright), 2688x1512, 1512x2688 (upright), 2304x1296, 1296x2304 (upright), 1920x1080, 1080x1920 (upright), 1280x1024, 1280x720, 640x480, 320x240

Compression Format H.265, H.264, M-JPEG

Maximum Frame Rate 30/25 fps

Bitrate Control Mode VBR

Solid PTZ No

e-Varifocal No

Adaptive Rate Control Yes

Bandwidth Control Yes

Evidence Shot No

Multi streaming Capability Yes (3)

| | |
|-------------------|---------------|
| Number of Clients | No hard limit |
|-------------------|---------------|

| | |
|------------|----|
| Letter Box | No |
|------------|----|

Intelligent Video/Audio Analytics

| | |
|------------------------|-----|
| Analytics Architecture | Yes |
|------------------------|-----|

| | |
|------------------------------|-----|
| Intelligent Motion Detection | Yes |
|------------------------------|-----|

| | |
|----------------|----|
| Face Detection | No |
|----------------|----|

| | |
|--------------|-----|
| Tamper Alarm | Yes |
|--------------|-----|

| | |
|--------------------------|-----|
| Advanced Audio Detection | Yes |
|--------------------------|-----|

| | |
|-----------------|---------------------------|
| Scene Analytics | Essential Video Analytics |
|-----------------|---------------------------|

| | |
|----------------|----------------|
| Multi Tracking | Yes, 8 objects |
|----------------|----------------|

Audio

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

System Requirements

| | |
|------------------|-------------------------------------|
| Operating System | Windows 7 or later operating system |
|------------------|-------------------------------------|

| | |
|-------------|------------------------------------|
| Memory | 2GB or more |
| Web Browser | Internet Explorer Ver. 11 or later |
| SNC toolbox | Yes |

Network

| | |
|-----------------------------|--|
| Protocols | IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, SMTP, UPnP (SSDP), DiffServ (QoS), LLDP, SOAP, Dropbox™, CHAP, Digest Authentication. |
| QoS | DiffServ |
| Multicast Streaming Support | Yes |
| ONVIF Conformance | Profile S, Profile G, Profile T |
| Microphone Input | No |
| Built-in Microphone | Yes |
| Line Input | Yes |
| Line Output | Yes |

| | |
|----------------------------|---------------------|
| Network Port | 10Base-T, 100Base-T |
| Alarm Input (Sensor Input) | Yes |
| Alarm Output | 1 Relay output |

Interface

| | |
|------------------------|---------------------------|
| Card Slots | microSD x 1 |
| Confirmed SD Card Type | SDHC (~32GB), SDXC (~2TB) |

General

| | |
|------------------------|---|
| Power Requirements | +12 VDC \pm 5%, 24 VAC \pm 10% or IEEE 802.3af compliant (PoE system) |
| Power Consumption | 7.15 W max |
| Operating Temperature | -20 °C to + 50 °C -4°F to + 122°F |
| Cold Start Temperature | -20 °C |
| Storage Temperature | -30 °C to + 70 °C -22 °F to + 158 °F |

| | |
|-----------------------|---|
| Operating Humidity | 20% to 90% RH non condensing |
| Storage Humidity | up to 98 % |
| Built-in Heater | No |
| Dimensions (Φ x H) *1 | Φ147.6mm x 104.2 mm Φ5.81 inches x 4.09 inches |
| Mass | Approx. 0.530 kg Approx. 1.17 lb |
| Safety Regulations | VCCI: V-2/2015.04 & V-3/2015.04 UL 60950-1 CAN/CSA-C22.2 No. 60950-1-07 CFR 47 FCC part 15 Class B AS/NZS CISPR 32 equal to CISPR 32 CE-EMC-Directive :EN55032 Class B, EN 50130-4: 2011+ A1: 2014, EN 50121-4: 2006 / AC: 2008 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 55032: 2012 / AC: 2013 EN 55024: 2010+ A1: 2015 |
| *1 | The values for dimensions are approximate. |

Gallery

