SONY

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 acount changing lighting conditions and subject movement for optimised image quality while signficantly 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

Camera	
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
White Balance	2500 to 10000K, 4 automatic modes (basic, standard, sodium 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

Camera Features

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 ±5%, 24 VAC ±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

General	
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







© 2004 - 2026 Sony Corporation. All rights reserved. Reproduction in whole or in part without written permission is prohibited. Features and specifications are subject to change without notice. The values for mass and dimension are approximate. All trademarks are the property of their respective owners.