

SNC-EM602R

Outdoor IR Ruggedized 720p/30 fps Camera
Powered by IPELA ENGINE EX™ - E Series



Overview

Tough, round-the-clock surveillance with HD picture quality and IR illumination.

This ruggedized minidome camera delivers HD quality images around the clock in tough environments – indoors or outside in harsh weather.

The vandal- and weather-resistant SNC-EM602R is ideal for a wide range of demanding security, surveillance and monitoring applications, from banks, factories, shopping malls and offices to airports, car parks and transportation systems.

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 where other cameras struggle. Extra intelligence is added by DEPA Advanced Intelligent Video Analytics that can intelligently trigger an alarm based on user-defined rules.

On-board image stabilisation helps keep images crisp, clear and minimizes the effects of mechanical vibration, even if the camera's buffeted by wind on an outdoor pole or overlooking a busy motorway.

This 'single box' solution also includes built-in IR (infrared) illumination, allowing viewing of objects up to 30m from the camera in complete darkness.

PoE (Power over Ethernet) capability carries IP video and power over a single connection cable, while easy focus and zoom adjustment further reduces installation time and maintenance costs.

Capable of operating in temperatures from -40C to +50C, the totally sealed minidome unit assures dependable operation in challenging indoor and outdoor environments. For even greater resilience, IK10-rated vandal resistance is teamed with an IP66 rating for waterproof/dust resistance.

Features

See every detail with HD quality

The camera's sensitive, high-resolution Exmor CMOS sensor captures crisply detailed HD (720 x 1024) video images at 25 fps.

Latest generation imaging power

Class-leading imaging is assured by Sony's unique IPELA ENGINE EX signal processing platform. 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 130 dB, capturing objects clearly and adaptively – even with harsh backlighting or sun-drenched highlights.

Always ready for action, even in the dark

Built-in IR (infrared) illuminators give a clear view in complete darkness (0 lx) of objects at a distance of up to 30m (50 IRE) from the camera. Using View DR and high quality IR, images can be captured without overexposure.

Better pictures, day or night

True D/N (Day/Night) function automatically switches the camera to Day or Night mode, depending on ambient light levels.

Steadier, more stable images

Mechanical vibration – caused by gusts of wind or a busy road bridge – can cause blurred, hard to see images. The in-built image stabiliser reduces the effects of camera shake for crisper, clearer images.

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

Built to effortlessly handle tough conditions

IK10-rated vandal-resistance protects the camera from destructive interference and tampering. IP66-rated waterproof and dust-tight, the camera is ideal for outdoor surveillance, as well as damp or humid indoor environments where water ingress may be encountered.

Flexible powering options with PoE

The camera can be powered by Power over Ethernet (IEEE 802.3af/IEEE 802.3at-compliant (PoE/PoE+)) simplifying installation by eliminating the need for additional power cables.

View with your smartphone

Securely access the camera using a smartphone or tablet to view images remotely and adjust settings.

Quick, easy installation

Quick, easy adjustment of focus and zoom settings simplifies installation while reducing maintenance time. Configuration of network settings is made simple with the supplied SNC Easy IP Setup Guide 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	1/3-type progressive scan Exmor CMOS
Number of Effective Pixels	Approx. 1.37 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.05 lx (F1.2, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps) B/W: 0 lx (IR LED ON)
Minimum Illumination (30 IRE)	Color: 0.03 lx (F1.2, View-DR OFF, VE OFF, AGC ON 1/30 s, 30 fps) B/W: 0 lx (IR LED ON)
Dynamic Range	Equivalent to 130 dB with View-DR technology
S/N Ratio (Gain 0 dB)	More than 50 dB
Gain	Auto
Shutter Speed	1/1 s to 1/10,000 s
Exposure Control	Exposure compensation, AGC, Shutter speed, Iris
White Balance	ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual
Lens	Built-in varifocal lens
Powered Zoom	No
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x Digital zoom 4x Total zoom 12x
Powered Focus	No
Auto Focus	No
Easy Focus for Setup	Yes
Horizontal Viewing Angle	92.9° to 31.8°
Vertical Viewing Angle	73.1° to 25.5°
Viewing Tilt Angle	121.5°
Focal Length	f = 3.0 mm to 9.0 mm
F-Number	F1.2 (Wide) to F2.1 (Tele)
Minimum Object Distance	300 mm
	Pan: ±192°

Pan/Tilt/Rotation Angle (manual)	Tilt: -7° to +75° Rotation: ±99°
IR Illuminator	Yes (Wave length: 850 nm[typical], IR LED 20 pieces)
IR Working Distance	30 m (50 IRE)
White-light LED Illuminator	No
LED Working Distance	No

Camera Features

Day/Night	True D/N
Day/Night linked with Easy Focus	Yes
e-Flip	Yes
Wide-D	View-DR
Tone Correction	Visibility Enhancer (VE)
Defog Image Processing	No
Noise Reduction	XDNR
Image Stabilizer	Yes
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	No
Image Memory	No
Memory Size for Image Memory	No
Memory Size for Pre/Post Buffer	No
Compatibility with Cloud Service	No
Voice Alert	No
Vandal Resistant	IK10
Ingress Protection	IP66
	3 independent positions for characters (Codec, Date & Time, Event, Text (Max. 64

Superimpose Number	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
Smartphone viewer	Yes

Video

Resolution	1280 x 1024, 1280 x 960, 1024 x 768, 1280 x 720, 800 x 600, 720 x 576, 720 x 480, 704 x 576, 640 x 480, 352 x 288, 320 x 240 (H.264, JPEG)
Compression Format	H.264 (High/Main/Baseline Profile), JPEG
Maximum Frame Rate	H.264: 30 fps (1280 x 1024) JPEG: 30 fps (1280 x 1024)
Bitrate Compression Mode	CBR/VBR (selectable)
Range of Bit Rate Setting	64 Kbps to 32 Mbps
Image Cropping	No
Solid PTZ	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi streaming Capability	Triple streaming
Number of Clients	20
Letter Box	No

Intelligent Video/Audio Analytics

Analytics Architecture	DEPA Advanced
Intelligent Motion Detection	Yes
Face Detection	Yes
Tamper Alarm	Yes
Advanced Audio Detection	No
Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
Auto Tracking	No

Audio

Compression Format	N/A
--------------------	-----

System Requirements

Operating System	Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows 7 (32/64 bit) Ultimate, Professional Edition Windows 8 Pro (32/64 bit) Windows 8.1 Pro (32/64 bit)
Processor	Intel Core i7 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 Firefox Ver. 19.02 (plug-in free viewer only) Safari Ver. 5.1 (plug-in free viewer only) Google Chrome Ver. 25.0 (plug-in free viewer only)

Network

Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, FTP (client only), SNMP (v1, v2c, v3), SSL *SSM (Source Specific Multicast) is supported.
Number of IP Address/Mac ADDRESS	1
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S, Profile T
Wireless Network	No
Wi-Fi Certified	No
Wi-Fi Protected Setup (WPS)	No
Authentication	IEEE 802.1X

Interface

Analog Video Input	No
Analog Video Output	No
Analog Monitor Output for Setup	Phono jack x1

Analog Video Output/SLOC Port	No
SLOC Port	No
Composite Buffered Through Out	No
Microphone Input	No
Line Input	No
Line Output	No
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	No
Alarm Output	No
Serial Interface	No
Card Slots	No
Confirmed SD Card Type	No
USB Slots	No

General

Power Requirements	IEEE802.3at compliant (PoE/PoE+ system)
Power Consumption	Max. 17W (IEEE802.3at (PoE+), heater enabled) Max. 11W (IEEE802.3af/at (PoE/PoE+), heater disabled)
Operating Temperature	-40°C to +50°C (heater enabled) -10°C to +50°C (heater disabled) 14°F to +122°F (heater disabled) *If the camera is installed in high-temperature environments and subjected to direct sunlight, it is highly recommended to use the optional SNCA-WP602 Weather Protector.
Cold Start Temperature	-30°C (heater enabled) 0°C (heater disabled) -22°F (heater enabled) +32°F (heater disabled)
Storage Temperature	-20°C to +60°C -4°F to +140°F
Operating Humidity	20% to 90%(no condensation)
Storage Humidity	20% to 95%(no condensation)
Built-in Heater	Yes

Dimensions*1	φ166 x 128 mm φ6 5/8 inches x 5 1/8 inches
Mass	1580 g 3 lb 7.7 oz
External Material	Upper case:AL Die-cast Lower case:AL Die-cast Dome cover: PC Cap:PC
External Color	White
Fire Retardant	UL2044
Safety Regulations	JATE Technical Standard (LAN) UL2044, IEC60950-1 (CB) VCCI (Class A), FCC (Class A),IC (Class A) Emission: EN55022 (Class A) + EN50130-4 Immunity: EN55022 (Class A) + EN55024 Emission: AS/NZS CISPR22 (Class A) KCC EMC-TR
Supplied Accessories	CD-ROM (supplied programs) (1) Bracket (1) Template (1) Wire rope (1) Wrench (1) Camera unit mounting screws (4) Screw (M4 × 8) (2) Installation Manual (1 set) Safety Regulations (1 set) Cable holder (for conduit) (1)
Optional Accessories	YT-ICB45 (In-ceiling Bracket) SNCA-WP602(Weather Protector)

Notes

*1 The values for dimensions are approximate.

Related products



UNI-PMA1
Pole mount adaptor



UNI-CMA1
Aluminium Corner Mount Adaptor



UNI-MDB3
Pendant bracket



UNI-WMB1
Gooseneck wall mount

Gallery

