

SNC-EM631

Vandal-resistant Minidome
1080p/30 fps Camera Powered
by IPELA ENGINE EX™ - E Series



Overview

Monitor and protect people, property and other assets with this Full HD network camera that's vandal-resistant for use in a wide range of everyday security applications.

This compact, easy to install minidome network camera brings crisp, clear Full HD imaging quality to a wide range of indoor security and surveillance applications, from offices, banks and retail spaces to education.

The camera's vandal-resistant design meets IK10 standards, making the SNC-EM631 ideal for use in environments where there's a risk of physical tampering.

Sony's Exmor CMOS sensor captures crisp, clear, low-noise Full HD images for dependable monitoring – even in tricky low-light situations.

The SNC-EM631 features Sony's award winning IPELA ENGINE EX processing platform. This boosts image quality in a wide range of environments, including challenging low-light scenes.

View-DR expands dynamic range for significantly improved imaging in high-contrast and strongly backlit scenes, like sun-drenched offices or car park entrances. Image stabilisation keeps

video images crisp and clear, even when the camera is subject to vibration on a mounting pole or bracket.

Features

Vandal resistant

The camera's vandal-resistant design meets IK10 standards (protection against mechanical impact), making the SNC-EM631 ideal for use in environments where there's a risk of physical tampering or damage.

See every scene clearly with Full HD image quality

View fine detail in a wide range of everyday video security and surveillance environments, from retail spaces to banks and schools. The high resolution Exmor CMOS sensor assures crisp, clear Full HD 1080p images – even in low light conditions like dimly-lit car parks.

Best-ever imaging performance with IPELA ENGINE EX

At the heart of Sony's G6 (sixth generation) camera family, the powerful IPELA ENGINE EX processing platform combines several technologies for optimises Full HD picture quality. View-DR combines images taken at different shutter speeds, delivering a wide dynamic range up to 90 dB for excellent performance in high contrast, strongly backlit environments.

Steadier, more stable video footage

The in-built image stabiliser minimises the effects of camera shake – for example when the camera's pole mounted or subject to mechanical vibration. With clearer, more stable video images it's easier to see what's happening in any scene.

Don't miss that crucial moment with Intelligent Motion Detection and Face Detection

In-built motion detection can trigger a range of actions, from storage and transfer of images to sounding of external alarms.

False alarms caused by noise, weather and environment noise are minimised by a smart processing algorithm. Human face detection is also supported, allowing rapid indexing of recordings to find events where a face is visible in the scene.

Detect in confidence with Edge-based Analytics

Powerful DEPA Advanced video analytics enhances Intelligent Motion Detection with rule-based alarm triggers, providing alerts with object filters like 'passing' and 'intrusion' to further reduce false alarms.

Reduce cabling costs with Power Over Ethernet (PoE)

Power over Ethernet (PoE) allows the camera be powered using the same Ethernet cable that's for data transfer, reducing installation complexity and costs.

View and control with your smartphone

Remotely view live camera images and control PTZ position with your Android or iOS smartphone or tablet. You don't even need to download a special app.

ONVIF (Open Network Video Interface Forum) compliance

Support for ONVIF simplifies interoperability with other network video devices. The 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.

Triple streaming for extra operational versatility

Configure up to three simultaneous IP video streams to suit your operating needs. For example, one stream for high quality live viewing; another for storage-efficient recording; and a third for viewing over a low bandwidth connection or on mobile devices.

Day/Night operation for clearer images around the

clock

In extreme low light conditions the camera switches automatically to a special night-time monitoring mode, removing the IR-cut filter and extending sensitivity to infra-red wavelengths. Sophisticated video processing ensures crisp, clearly-visible colour images in light levels as low as 0.1 lx. During the day, the IR-cut filter assures excellent image clarity and colour accuracy, even in bright sunlight.

Specifications

Camera

Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.14 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.1 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.07 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.06 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.05 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
	Equivalent to 90 dB with View-DR

Dynamic Range	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, 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
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x Digital zoom 4x Total zoom 12x
Easy Focus for Setup	Yes
Horizontal Viewing Angle	105.3° to 35.6°
Vertical Viewing Angle	56.9° to 20.1°
Viewing Tilt Angle	127.6°
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/Tilt/Rotation Angle (manual)	±192° -7° to +75° -99° to +99°

Camera Features

Day/Night	True D/N
Day/Night linked with Easy Focus	Yes
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
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
Smartphone viewer	Yes

Video

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) 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
Adaptive Rate Control	H.264
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 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)

SNC toolbox	Yes
SNC toolbox mobile	Yes

Network

Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, FTP (client), 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
Authentication	IEEE802.1X

Interface

Analog Monitor Output for Setup	Phono jack x1
Network Port	10BASE-T/100BASE-TX (RJ-45)

General

Power Requirements	IEEE 802.3af compliant (PoE system)
Power Consumption	5.0 W max.
Operating Temperature	-10°C to +50°C 14°F to 122°F
Cold Start Temperature	0°C to +50°C 32°F to 122°F
Storage Temperature	-20 °C to + 60 °C -4 °F to + 140 °F
Operating Humidity	20 % to 80 %
Storage Humidity	20 % to 95 %
Built-in Heater	Yes
Dimensions *1	φ148 x 108 mm φ5 7/8 inches x 4 3/8 inches
Mass	Approx. 800 g Approximate 1 lb 12 oz

External Material	Top cover: PC Dome cover: PC
External Color	Top cover: Munsell 4.4BG 8.4/0.2
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) Installation Manual (1) Template (1) Screw M3 (1) Wrench (1) Bracket (1) Wire rope (1) Safety regulations (1)
Optional Accessories	YT-ICB600 (In-ceiling bracket) YT-LD601S (Smoke dome cover)

Notes

*1

The values for dimensions are approximate.

Gallery

