

SONY

SNC-EM602RC

Network Mini Dome HD Camera – E Series

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

- Maximum resolution of 1280 x 1024 pixels with the Exmor™ CMOS sensor
- Dynamic range equivalent to 130 dB achieved with View-DR technology
- Minimum illumination of 0.05 lx in Color mode at 50 IRE
- Built-in IR (infrared) illuminators to provide clear B/W images in the dark even under 0 lx
- Advanced IR technology for high-quality IR images
- Image Stabilizer effective for use in vibration
- IK10-rated vandal-resistant and IP66-rated water-resistant/dust-tight features
- Operating temperature ranging from -40°C to +50°C (-42°F to +122°F)



IPELA

KEY FEATURES

- IPELA ENGINE EX signal processing system developed based on Sony's unique signal processing and video analytics technologies to provide unique features such as View-DR, XDNR, and DEPA™ Advanced technologies
- View-DR – Sony's innovative wide dynamic range technology – to capture objects clearly and adaptively even under very harsh, severe backlight or highlight conditions

- Advanced IR technology to provide high-quality IR images without overexposure, delivering clear B/W images of close and distant objects



OFF



ON

Actual images

- Visibility Enhancer (VE) to optimize the brightness and color reproduction of an image dynamically on a pixel-by-pixel basis while continuously adapting to the scene within the given dynamic range
- XDNR (eXcellent Dynamic Noise Reduction) technology for clear images without introducing motion blur under low illumination
- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules
- Easy Zoom/Easy Focus for easy installation
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- Powered by IEEE 802.3af/IEEE 802.3at-compliant PoE/PoE+ system for easy installation
- Built-in IR (infrared) illuminators to assist capturing objects in the dark even under 0 lx, up to 25 m (82 feet, tentative) (50 IRE) away



Conventional IR technology
(cannot identify close objects due to overexposure)



Advanced IR technology
(can identify close and distant objects)

Actual images

- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images
- IK10-rated vandal-resistant feature to protect the camera from destructive behaviors
- IP66-rated water-resistant and dust-tight feature for outdoor surveillance and indoor where water ingress may pose an issue
- True D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- Picture mode selectable from a range of camera scenes in the setting menu to optimize picture quality in various applications
- VBR (variable bitrate) capable of maximum bitrate setting or CBR (constant bitrate) compression mode selectable to correspond with various network conditions
- Smartphone viewer to display an image of the camera on the smartphone's screen and control the camera's pan, tilt, and zoom functions by simple touch-panel manipulation
- ONVIF (Open Network Video Interface Forum) Profile S-conformance firmware that ensures greater interoperability and more flexibility in building multi-vendor systems

IPELA
ENGINE EX

View-DR

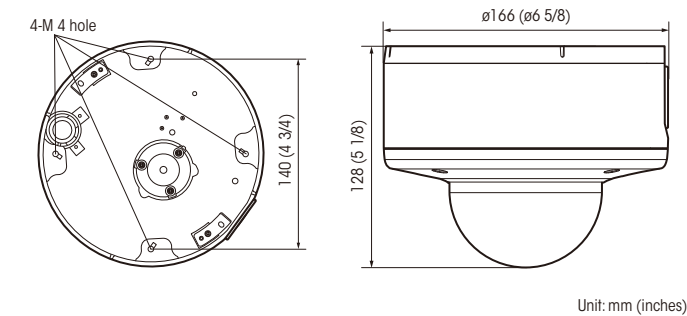
DEPA
Advanced

ONVIFS

SPECIFICATIONS

	SNC-EM602RC
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
White Balance	ATW, ATW-PRO, Fluorescent lamp, Mercury lamp, Sodium vapour lamp, Metal halide lamp, White LED, One push WB, Manual, Indoor, Outdoor
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	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/Tilt/Rotation Angle (Manual)	Pan: ±192° Tilt: -7° to +75° Rotation: -99° to +180°
IR Illuminator	Yes (Wave length: 850 nm [typical], IR LED 20 pieces)
IR Working Distance	30 m (50 IRE)
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)
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
Vandal Resistant	IK10
Ingress Protection	IP66
Superimpose Number	3 independent positions for characters (Codec, Date & Time, Event, Text (Max. 64 characters)), 1 independent position for logo marks
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
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
Solid PTZ	Yes
e-Varifocal	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi streaming Capability	Triple streaming
Number of Clients	20

DIMENSIONS



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 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 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, RTSP over HTTP, SMTP, IPv6, HTTPS, SNMP (v1, v2c, v3), FTP (client only), SSL *SSM (Source Specific Multicast) is supported.
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE 802.1X
Interface	
Analog Monitor Output for Setup	Phono jack x1
Network Port	10BASE-T/100BASE-TX (RJ-45)
General	
Power Requirements	IEEE802.3at compliant (PoE/PoE+ system)
Power Consumption	Max. 17 W (IEEE802.3at-compliant (PoE+ system) Max. 12.95 W (IEEE802.3at/at-compliant (PoE/PoE+ system)
Operating Temperature*2	-40°C to +50°C (-40°F to +122°F) (PoE+) -30°C to +50°C (-22°F to +122°F) (PoE)
Cold Start Temperature	-30°C (-22°F) (PoE+) -20°C (-4°F) (PoE)
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 (W x H x D)	ø 166 x 128 mm (ø 6 5/8 inches x 5 1/8 inches)
Mass	1580 g (3 lb 7.7 oz)
External Material	Upper case: ADC12 Lower case: ADC12 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 x 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)

*1 *SSM (Source Specific Multicast) is supported.
*2 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.

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