SONY

SNC-XM631

Network Mini Dome Full HD Camera – X Series

Compact Indoor Mini Dome1080p/30 fps Camera
Powered by IPELA ENGINE EX™

IPELA

- Maximum resolution of 1920 x 1080 pixels with the Exmor™ CMOS sensor
- Dynamic range equivalent to 90 dB achieved with View-DR technology
- Minimum illumination of 0.3 lx in Color mode at 50 IRE
- IK10-rated impact-resistance
- Three-axis-hinge structure for easy viewing angle adjustment
- Flexible field-of-view , with three optional fixed lenses as an alternative to the supplied lens with 113 degrees
- e-Varifocal to electronically zoom an image and adjust the field of view for easy and flexible installation

KEY FEATURES

- IPELA ENGINE EX signal processing system developed based on Sony's unique signal processing and intelligent video analytics technologies to provide unique features such as View-DR, XDNR, and DEPA Advanced technologies
- View-DR – 90 dB wide dynamic range, using Sony's innovative wide dynamic range technology – to capture objects clearly and adaptively even under very harsh, severe backlight or highlight conditions

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
- IK10-rated impact-resistance feature to protect the camera in tough environments
- Three-axis-hinge structure to adjust the lens unit in pan, tilt, and rotate directions for easy field of view adjustment during installation
- Picture mode settings to allow for easier camera parameter changes based on scene requirements
- Supports VBR (variable bit-rate) for best image quality; VBR with cap to reduce storage requirement or CBR (constant bit-rate) for balanced network load and image quality
- Edge Storage function to record video and audio data with an SD/SDHC card attached to the camera
- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images
- Electronic D/N (Day/Night) function to switch to Day or Night mode depending on the light level

- XDNR (eXcellent Dynamic Noise Reduction) technology for clear images without introducing motion blur under low illumination

OFF

ON

Actual images

- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules, including intelligent motion detection, crossing line filter and object detection capabilities
- Smartphone viewer to display an image of the camera on the smartphone 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
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- Powered by IEEE 802.3af (PoE system) via an RJ-45 connector for easy installation
- Three types of optional fixed lens with a horizontal viewing angle of 83 degrees, 51 degrees, and 25 degrees (in addition to the supplied lens with 113 degrees) for flexible field-of-view camera settings
- e-Varifocal to electronically zoom an image and adjust the field of view for easy and flexible installation, without requiring cumbersome focus adjustments necessary for optical varifocal lenses

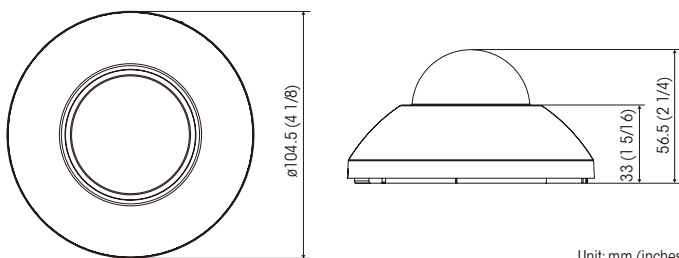**IPELA ENGINE EX**   **View-DR**   **DEPA Advanced**   **Onvif S**

SPECIFICATIONS

SNC-XM631

Camera

Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.14 Megapixels
Minimum Illumination (50 IRE)	Color: 0.3 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
	B/W: 0.3 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.18 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
	B/W: 0.18 lx (F2.0, View-DR OFF, VE OFF, AGC ON, 1/30 s, 30 fps)
Dynamic Range	Equivalent to 90 dB with View-DR technology
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
lens	Fixed lens
Zoom Ratio	Digital zoom 4x
Horizontal Viewing Angle	113°
Vertical Viewing Angle	61°
Viewing Tilt Angle	121°
Focal Length	f = 2.8 mm
F-Number	F2.0
Minimum Object Distance	500 mm
Pan/Tilt/Rotation Angle (manual)	Pan: 350°
	Tilt: 0° to +60°
	Rotation: ±175°

Camera Features

Day/Night	Electronic D/N
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
Edge Storage	Yes
Compatibility with Cloud Service	Yes
Vandal Resistant	IK10
Ingress Protection	No
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	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 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

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, FTP (client only), SNMP (v1, v2c, v3), SSL
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE802.1X

Interface

Microphone Input	No
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x1, make contact, break contact
Alarm Output	x1, +/- 50 V, 0.4 A (solid state relay outputs electrically isolated from the camera)
Card Slots	SD Card x1
Confirmed SD Card Type	Max. 64 GB

General

Power Requirements	IEEE 802.3af compliant (PoE system)
Power Consumption	4.0 W max.
Operating Temperature	-10°C to +50°C (14°F to 122°F)
Cold Start Temperature	0°C (32°F)
Storage Temperature	-30°C to +60°C (-22°F to +140°F)
Operating Humidity	20% to 80%
Storage Humidity	20% to 80%
Built-in Heater	No
Dimensions (W x H x D)	ø104.5 mm x 56.5 mm (ø4 1/8 inches x 2 1/4 inches)
Mass	Approx. 200 g (Approx. 7.1 oz)
External Material	Top cover/Dome cover: PC (Polycarbonate) Lower case: AL Die-cast
External Color	Top cover: Munsell 4.4BG 8.4/0.2
Fire Retardant	UL2044
Safety Regulations	UL2044
	IEC60950-1 (CB)
	IEC62262
	EN55022
	EN55024, EN50130-4, FCC/IC (Class A)
	AU/NZ EMC, KN22/KN24 (Class A)
	VCCI (Class A)
	EAC (CU-TR)
Supplied Accessories	CD-ROM (supplied programs) (1)
	Installation Manual (1)
	Template (1)
	Safety regulations (1)
	Warranty booklet (1)
	I/O cable (1)
Optional Accessories	SNCA-L038MF M12 Mount Lens (f=3.8 mm, horizontal viewing angle: 83 degrees)
	SNCA-L060MF M12 Mount Lens (f=6.0 mm, horizontal viewing angle: 51 degrees)
	SNCA-L120MF M12 Mount Lens (f=12 mm, horizontal viewing angle: 25 degrees)

*SSM (Source Specific Multicast) is supported.

DIMENSIONS

ø104.5 (4 1/8)

33 (1 5/16)   56.5 (2 1/4)

Unit: mm (inches)

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