SNC-VM632R
Network Mini Dome Full HD Camera – V Series

SONY
make.believe

Outdoor IR Ruggedized 1080p/60fps Camera
Powered by IPELA ENGINE™ EX Technology

- Maximum resolution of 1920 x 1080 pixels with the Exmor® CMOS sensor
- Extremely Wide Dynamic Range to 90dB achieved with View-DR® technology
- Minimum illumination of 0 lx in B/W (IR illuminator: ON) and 0.1 lx in Color (50 IRE @1/30 sec)
- High frame rate of 60 frames per second (fps)
- Picture mode to help optimize picture quality in various applications
- H.264 (High/Main/Baseline Profile)/JPEG video codecs
- Operating temperature ranging from -40°F to +140°F (-40°C to +60°C)
- IK10-rated vandal-resistant and IP66-rated water-resistant/dust-tight features
- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images

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 a high frame rate, View-DR®, XDNR®, and DEPA™ Advanced technologies

IPELA ENGINE EX

- Built-in IR (infrared) illuminators to assist capturing objects in the dark even under 0 lx, up to 98 feet (30 m) (50 IRE) away
- View-DR – Sony's innovative wide dynamic range technology to capture objects clearly and adaptively even under very harsh, severe backlight or highlight conditions

View-DR

OFF

ON
Actual Images

- Advanced IR technology to provide high-quality IR images without overexposure by using View-DR technology
- 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
- DEPA Advanced Intelligent Video Analytics to trigger an alarm based on user-defined rules

DEPA Advanced

- XDNR (eXcellent Dynamic Noise Reduction) technology for clear images with virtually no motion blur under low illumination

OFF

ON
Actual Images

- High frame rate of 60 fps to provide smoother and less blurry moving pictures
- IK10-rated vandal-resistant feature to help 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
- Picture mode selectable from a range of camera scenes in the setting menu to optimize picture quality in various applications
- True D/N (Day/Night) function to switch to Day or Night mode depending on the light level
- VBR (variable bitrate) or CBR (constant bitrate) compression mode selectable to correspond with various network conditions
- Edge Storage function to record video and audio data with a micro SD/SDHC card attached to the camera
- Image Stabilizer to help minimize the effect of camera shake or vibration to achieve less blurry images
- Easy Focus - allows installer/user to focus the camera remotely using a PC or locally
- Easy Zoom - allows installer/user to change field of view locally or remotely using a PC
- Easy initial network settings with supplied SNC Easy IP Setup Guide application
- Powered by either IEEE 802.3af/IEEE 802.3at-compliant (PoE/PoE+), AC 24 V ±20%, or DC 12 V ±10% for easy installation
- Built-in HTML viewer compatible with most Smartphones
- ONVIF™ (Open Network Video Interface Forum) Profile S conformance software that ensures greater interoperability and more flexibility in building multiple-vendor systems

Onvif S

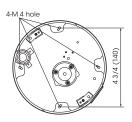**IPELA**™

SPECIFICATIONS

Camera	SNC-VM632R
Image Sensor	1/2.9-type progressive scan Exmor CMOS sensor
Number of Effective Pixels	Approx. 2.14 Megapixels
Signal System	NTSC
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 lx (IR illuminator ON)
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 lx (IR illuminator ON)
Dynamic Range	Equivalent to 90 dB with View-DR technology
S/N Ratio	More than 50 dB (Gain 0 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
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x
	Digital zoom 4x
	Total zoom 12x
Easy Focus for Setup	Yes
Horizontal Viewing Angle	105.2° to 35.4°
Vertical Viewing Angle	57.0° to 20.0°
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)	Pan: ±192°
	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)

Camera Features	
Day/Night	True 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
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
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: 60 fps (1920 x 1080)
	JPEG: 60 fps (1920 x 1080)
Bitrate Compression Mode	CBR/VBR (selectable)
Range of Bitrate Setting	64 Kbps to 32 Mbps
Solid PTZ	Yes
Adaptive Rate Control	H.264
Bandwidth Control	JPEG
Multi Streaming Capability	Triple streaming
Number of Clients	20

Intelligent Video 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

Audio	
Compression Format	G.711/G.726/AAC (16 kHz, 48 kHz)

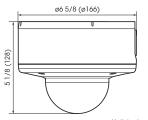| System Requirements	
Operating System	Windows® XP™ (32 bit) Professional Edition
	Windows® Vista™ (32 bit) Ultimate, Business Edition
	Windows® 7 (32/64 bit) Ultimate, Professional Edition
	Windows® 8 Pro (32/64 bit)
	Microsoft® DirectX 9.0c or higher
Processor	Intel Corei7 2.8 GHz or higher
Memory	2 GB or more
Web Browser	Microsoft® Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver. 10.0
	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	SNC-VM632R
Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*1, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE 802.1X

Interface	
Analog Video Output	BNC x1
Analog Monitor Output for Setup	Phono jack x1
Line Input	Mini jack (monaural)
Line Output	Mini jack (monaural)
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	Yes (x2)
Alarm Output	Yes (x2)
Card Slots	SD Card x1
Confirmed SD Card Type	4/8/16/32GB SDHC (no support for SDXC)

General	
Power Requirements	12 V DC ± 10%
	24 V AC ± 20%, 50 Hz/60 Hz
	IEEE802.3at compliant (PoE/PoE+ system)
Power Consumption	Max. 22 W (AC 24 V/DC 12 V, heater enabled)
	Max. 18 W (IEEE802.3at (PoE+), heater enabled)
	Max. 12.8 W (IEEE802.3af/at (PoE/PoE+), heater disabled)
Operating Temperature*2	-40°F to +140°F (-40°C to +60°C) (IR illuminator OFF, heater enabled)
	-40°F to +122°F (-40°C to +50°C) (IR illuminator ON, heater enabled)
	14°F to 140°F (-10°C to +60°C) (IR illuminator OFF, heater disabled)
	14°F to 122°F (-10°C to +50°C) (IR illuminator ON, heater disabled)
Cold Start Temperature	-22°F (-30°C) (heater enabled)
	+32°F (-0°C) (heater disabled)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
Operating Humidity	20% to 90% (no condensation)
Storage Humidity	20% to 95% (no condensation)
Built-in Heater	Yes
Dimensions (W x H x D)	ø6 5/8 inches x 5 1/8 inches (ø166 mm x 128 mm)
Weight	3 lb 13 oz (1730 g)
External Material	Upper case: AL Diecast
	Lower case: AL Diecast
	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)
	LAN cable holder (1)
Optional Accessories	YT-ICB45 (In-ceiling Bracket)
	SNCA-WP602 (Weather Protector)

*1: SSM (Source Specific Multimedia) 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.

Optional Mounts and Accessories	
Model	
UNI-MDB3	GOOSENECK WALL MOUNT (includes Pendant Cap)
UNI-MDB4	GOOSENECK WALL MOUNT (without pendant cap)
UNI-WMBB1	CONDUIT BOX
UNI-CMA1	CORNER ADAPTER
UNI-PMA1	POLE ADAPTER
UNI-MDPDH180	PENDANT CAP
YT-ICB140/YT-ICB600	RECESSED BRACKET-FLUSH MOUNT

DIMENSIONS

4-M 4 hole

ø6 5/8 (ø166)

4 3/4 (140)

5 1/8 (128)

Unit: inches (mm)

Printed in USA (9/13)