

Outdoor IR Ruggedized 1080/60p Camera Powered by IPELA ENGINE EXTM

- 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 lx in B/W mode (IR illuminator: ON) and 0.1 lx in Color mode at 50 IRE
- High frame rate of 60 frames per second (fps)
- Picture mode to optimize picture quality in various applications
- H.264 (High/Main/Baseline Profile)/JPEG video codecs
- Operating temperature ranging from -40°C to +60°C (-40°F to +140°F)
- IK10-rated vandal-resistant and IP66-rated waterproof/ dust-tight features



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
- Built-in IR (infrared) illuminators to assist capturing objects in the dark even under 0 lx, up to 30 m (98 feet) (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





Actual Images

- Advanced IR technology to provide high-quality IR images without overexposure by using View-DR
- 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



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



- High frame rate of 60 fps to provide smoother and less blurry moving pictures
- IK10-rated vandal-resistant feature to protect the camera from destructive behaviors
- IP66-rated waterproof 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 minimize the effect of camera shake or vibration to achieve less blurry images
- Easy Focus/Easy Zoom for easy installation
- Easy initial network settings by supplied SNC Easy IP Setup Guide application
- $^{\circ}$ Powered by either IEEE 802.3af/IEEE 802.3at-compliant (PoE/PoE+), AC 24 V ±20%, or DC 12 V ±10% for easy installation
- Smartphone viewer for accessing the camera from a smartphone
- ONVIF (Open Network Video Interface Forum)
 Profile S conformance

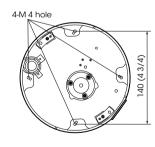


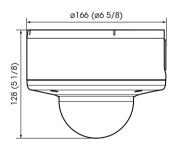
SPECIFICATIONS

Camera Image Sensor Number of Effective Pixels	SNC-VM632R
	1/2.9-type progressive scan Exmor CMOS sensor
	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 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°
ocal Length	f = 3.0 mm to 9.0 mm
-Number	F1.2 (Wide) to F2.1 (Tele)
Minimum Object Distance	
	300 mm
Pan/Tilt/Rotation Angle	Pan: ±192°
(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)
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 log
	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	
	1000 v 1000 1000 v 700 1004 v 574 700 ·· 574 700 ·· 400
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)
Ritrata Compression Made	CBR/VBR (selectable)
	64 Kbps to 32 Mbps
Range of Bitrate Setting	
Range of Bitrate Setting Solid PTZ	Yes
Range of Bitrate Setting Solid PTZ	
Range of Bitrate Setting Solid PTZ Adaptive Rate Control	H.264
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control	H.264 JPEG
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability	H.264 JPEG Triple streaming
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Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control With Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection	H 264 JPEG Triple streaming 20 DEPA Advanced Yes Yes
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Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Wultil Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Tage Detection Tage Detection Tamper Alarm	H_264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Mutil Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Face Detection	H.264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Passing, Intrusion, Left Object Detection, Removed Object
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Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Mutil Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio	H 264 JPEG JPEG Triple streaming 20 DEPA Advanced Yes Yes Passing, Intrusion, Left Object Detection, Removed Object Detection
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Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Bandwidth Control With Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format	H 264 JPEG JPEG Triple streaming 20 DEPA Advanced Yes Yes Passing, Intrusion, Left Object Detection, Removed Object Detection
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements	H 264 JPEG JPEG Triple streaming 20 DEPA Advanced Yes Yes Pes Presing, Intrusion, Left Object Detection, Removed Object Detection G.711/G.726/AAC (16 kHz, 48 kHz)
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements	H.264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Yes Order Yes
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements	H 264 JPEG JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Passing, Intrusion, Left Object Detection, Removed Object Detection G.711/G.726/AAC (16 kHz, 48 kHz) Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Muttl Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements	H.264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Yes Yes Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows To (32/64) In Villimate, Brofessional Edition
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Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements Operating System Processor Memory	H 264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Intel Corel 7.2 8 Bra (32/64 bit) Microsoft DirectX 9.0c or higher Intel Corel 7.2 8 Bra Cary higher 2 GB or more
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements Operating System Processor Memory	H.264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Yes Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows 8 Pro (32/64 bit) Windows 8 Pro (32/64 bit) Microsoft Direct 9.0c or higher Intel Coreit 2.8 GHz or higher
Range of Bitrate Setting Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements Operating System Processor Memory	H.264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Yes Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Business Edition Windows Vista (32 bit) Ultimate, Business Edition Windows SP (32 bit) Villimate, Business Edition Windows SP (32/64 bit) Windows B Pro (32/64 bit) Wincows Of Direct X 9.0 cor higher Intel Corel 7 2.8 GHz or higher Ultimate SP or Nore Microsoft Internet Explorer Ver. 7.0, Ver. 8.0, Ver. 9.0, Ver. 10.0
Bitrate Compression Mode Range of Bitrate Settling Solid PTZ Adaptive Rate Control Bandwidth Control Multi Streaming Capability Number of Clients Intelligent Video Analytics Analytics Architecture Intelligent Motion Detection Face Detection Tamper Alarm Scene Analytics Audio Compression Format System Requirements Operating System Processor Memory Web Browser	H 264 JPEG Triple streaming 20 DEPA Advanced Yes Yes Yes Yes Windows XP (32 bit) Professional Edition Windows Vista (32 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Windows T (32/64 bit) Ultimate, Professional Edition Intel Corel 7.2 8 Bra (32/64 bit) Microsoft DirectX 9.0c or higher Intel Corel 7.2 8 Bra Cary higher 2 GB or more

	SNC-VM632R
Network	ID A TOR URD ARRION IN ION IN INC.
Protocols	IPV4, TCP, UDP, ARP, ICMP, IGMP*1, HTTP, DHCP, DNS, NTP, RTP/RTCP,
QoS	RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, SNMP (v1, v2c, v3), SSL DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Authentication	IEEE 802.1X
Interface	ILLE OUZ. TA
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 Operating Temperature*2	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) -40°C to +60°C (-40°F to +140°F) (IR illuminator OFF, heater enabled)
	-40°C to +50°C (-40°F to +122°F) (IR illuminator ON, heater enabled)
	-10°C to +60°C (14°F to 140°F) (IR illuminator OFF, heater disabled)
	-10°C to +50°C (14°F to 122°F) (IR illuminator ON, heater disabled)
Cold Start Temperature	-30°C (-22°F) (heater enabled)
Cold clair lemperature	-0°C (+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 (W x H x D)	ø166 mm x 128 mm (ø6 5/8 inches x 5 1/8 inches)
Mass	1730 g (3 lb 13 oz)
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)
Supplied Accessories	Bracket (1)
	Template (1)
	Wire rope (1)
	Wrench (1)
	Wrench (1) Camera unit mounting screws (4)
	Camera unit mounting screws (4)
	Camera unit mounting screws (4) Screw M4 x 8 (2)
	Camera unit mounting screws (4) Screw M4 x 8 (2) Installation Manual (1 set)
	Camera unit mounting screws (4) Screw M4 x 8 (2) Installation Manual (1 set) Safety Regulations (1 set)
	Camera unit mounting screws (4) Screw M4 x 8 (2) Installation Manual (1 set)
Optional Accessories	Camera unit mounting screws (4) Screw M4 x 8 (2) Installation Manual (1 set) Safety Regulations (1 set) Cable holder (for conduit) (1)

DIMENSIONS





Unit: mm (inches)

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^{*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.