SONY

SNC-VM772R

4K Outdoor IR Ruggedised
Camera with Large-sized Exmor
R™ CMOS Sensor

Overview

Exceptional detail and sensitivity for round-the-clock surveillance applications, indoors or outside

Extraordinary sensitivity with 4K

With four times the resolution of Full HD, Sony's first 4K network security camera brings industry-leading clarity and sensitivity to critical video monitoring and surveillance applications.
Thanks to the camera's large, highly sensitive 1.0-type back-illuminated Exmor R™ CMOS image sensor, high-speed image processing engine and high-quality zoom lens, the SNC-VM772R captures detail-packed 4K/30 fps video footage with a minimum illumination of 0.06 lx - even in near darkness.

Automatic selection of picture settings

Picture settings are automatically selected to suit a wide range of operating environments, such as weather, time, and lighting conditions, providing the best picture quality for the scene. They can also be manually adjusted for even more flexible operation.

Various output modes

The increased resolution of 4K opens up exciting new monitoring possibilities. Traditional video surveillance requires a PTZ camera or several box cameras to survey a wide area. The SNC-VM772R can stream an overall low-resolution situational view, plus cropped original 4K resolution views of specific areas

of interest in the scene, with Multi Tracking to chase moving subjects. The 20 megapixel sensor also enables high-quality still image recording at beyond 4K resolution to allow close examination of a scene for evidence purposes.

Other key features
• Excellent low-light capabilities are further enhanced with in-built IR illuminators for true night-time coverage.

• Edge Storage (onboard recording with memory cards) safeguards recordings during network outrage.

• The camera's outstanding image performance is enhanced with features, including Optical Image Stabilisation for steadier pictures.

• Quick, simple installation and set-up is aided by a smartphone or tablet PC app for remote field of view adjustment (SNC toolbox mobile).

• The discreetly styled minidome camera features a ruggedised vandal- and weather-resistant design that is ideal for tough round-the-clock video security and surveillance assignments, indoors or outside (IK10, IP66).

Features

See and analyse more with 4K detail
With a resolution of 20 megapixels (5,472 x 3,648), the camera's large 1.0-type back-illuminated Exmor R™ CMOS sensor captures 4K (3,840 x 2,160) video with exceptional detail.

Excellent low-light sensitivity
The large 1.0-type image sensor captures more incident light than conventional security camera sensors, allowing the SNC-VM772R to function effectively at minimum illumination levels as low as

0.06 lx in colour mode.

High quality 2.9x optical zoom lens for detailed close-ups
The motorised Sony lens can zoom in to areas of interest for extremely high resolution close-ups.

Best picture settings to suit any conditions
Intelligent Scene Capture automatically selects optimum picture settings responding to environments such as weather, time, and lighting conditions and providing the best picture quality for the scene. Picture settings can also be adjusted manually, or set according to time schedules, external triggers and lighting conditions.

Efficient use of network bandwidth with Intelligent Coding
Intelligent Coding gives selected of-interest areas maximum detail, while reducing bit-rates in the other areas of the image to save network bandwidth by up to 50% and minimize storage costs.

Efficient use of network bandwidth with Intelligent Cropping
Simultaneously observe specific areas of interest in captured images with VGA or Full HD view with an original 4K resolution, while overviewing the entire image at lower (Full HD) resolution, reducing network bandwidth by up to 50% and minimizing storage costs.

Multi Tracking
A single camera can automatically 'chase' multiple objects in its field of view, tracking each one independently with VGA or Full HD-cropped view with an original 4K resolution. It's a cost-effective alternative to using multiple PTZ cameras to track several objects simultaneously.

20 megapixel Evidence Shot for high-resolution still image capture

High-quality recording of 20 megapixel (5,472 x 3,648) still images can be triggered by the camera's motion detection capability, or by external inputs from third-party equipment such as motion detectors and door sensors.

HDMI interface support

Includes HDMI digital video output

Optimum performance under varying network conditions

Select VBR (variable bit-rate) with Cap or CBR (constant bit-rate) compression modes for optimised recording quality and balanced network load depending on IP network conditions.

Smart analytics

DEPA Advanced Intelligent Video Analytics trigger alarm events based on user-defined rules, including intelligent motion detection, crossing line filter and object detection capabilities.

Steadier, more stable images

On-board Optical Image Stabiliser keeps video images steady and blur-free, even if the camera's subjected to buffeting from wind or traffic vibration on a pole, fence or road bridge.

Always ready for action, even in the dark

Built-in IR (infrared) illuminators give a clear view in complete darkness (0 lx) of objects at a distance of up to 50m from the camera.

Accurately exposed night-time viewing, near or far

Adaptive IR assures high-quality B/W night-time images without overexposure, even with objects that are close to the camera or highly reflective.

Better pictures, day or night

True D/N (Day/Night) function automatically switches the camera to Day or Night mode, depending on ambient light levels.

Automatic recording to memory card

Edge Storage records video and audio directly to an optional SD card for later examination. Recording can be triggered manually or automatically in response to alarm events, by the camera's analytics features, or if network connection is temporarily lost.

Clearer views in fog, smog and haze

Defog Image Processing feature uses powerful image processing to enhance pictures in fog, smog and haze conditions for clearer video images.

Highlight Compensation

Detects and masks intensely localised light sources, such as car headlights and flashlights in dark conditions.

Speedy, simple setup with SNC toolbox mobile app

Save time and integration costs with wireless adjustment of the camera's field view from a smartphone or tablet PC, using an optional IFU-WLM3, USB Wireless LAN Module.

Built to handle tough conditions

The camera's vandal-resistant design meets IK10 standards (protection against mechanical impact). IP66-rated water-resistant and dust-tight, it's ideal for all-weather outdoor surveillance, as well as damp or humid indoor environments.

ONVIF (Open Network Video Interface Forum) compliance

ONVIF Profile S-conformance ensures greater interoperability and flexibility in multi-vendor systems.

Versatile powering options

Choose PoE system, AC 24 V or DC 12 V power for easier, more flexible installation.

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Specifications

Camera	
Image Sensor	1.0-type progressive scan Exmor R CMOS sensor
Number of Effective Pixels	Approx. 20 Megapixels
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.1 lx (F1.8, 1/30 s) B/W: 0 lx (IR LED On, F1.8, 1/30 s)
Minimum Illumination (30 IRE)	Color: 0.06 lx (F1.8, 1/30 s) B/W: 0 lx (IR LED On, F1.8, 1/30 s)
Dynamic Range	Equivalent to 90 dB with View-DR Technology
Gain	Auto/Manual (0 dB to +48 dB)
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, Indoor, Outdoor
Lens	Built-in zoom lens

Easy Zoom	Yes
Zoom Ratio	Optical zoom 2.9x Clear Image Zoom 2.0x Digital zoom 2.0x Total zoom 11.6x
Easy Focus for Setup	Yes
Horizontal Viewing Angle	70.7 ° to 27.5 ° (16:9 aspect ratio) 76.6 ° to 29.8 ° (3:2 aspect ratio)
Vertical Viewing Angle	39.9 ° to 15.7 ° (16:9 aspect ratio) 51.5 ° to 20.1 ° (3:2 aspect ratio)
Focal Length	f = 8.8 mm to 25.7 mm
F-Number	F1.8 (Wide) to F2.8 (Tele)
Minimum Object Distance	300 mm
Pan/Tilt/Rotation Angle (manual)	$\pm$ 192 ° -10 ° to +81 ° -100 ° to +100 °
IR Illuminator	Yes Wave length (typical): 850 nm, IR LED: 30 pieces
	50 m (30 IRE)

IR Working Distance	164.0 ft. (30 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
Defog Image Processing	Yes
Highlight Compensation	Yes
Flicker Reduction	Yes
Distortion Correction	Yes
Noise Reduction	XDNR
Image Stabilizer	Optical
Intelligent Scene Capture	Yes

Privacy Masking (number)	24
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	4 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, Turkish, Polish

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Video	
Resolution	5472 x 3648, 3840 x 2160, 2880 x 2160, 1920 x 1080, 1440 x 1080, 1440 x 960, 1280 x 720, 960 x 720, 640 x 480, 640 x 360, 320 x 240, 320 x 180
Compression Format	H.264 (High/Main Profile), JPEG H.264 (B-picture) is suproted for 3840 x 2160 and 2880 x 2160 resolution.
Maximum Frame Rate	H264: 30 fps (3840 x 2160)/10 fps (1920 x 1080) JPEG: 2.5 fps (5472 x 3648)
Bitrate Control Mode	CBR/VBR with Cap (selectable)
Range of Bit Rate Setting	64 Kbps to 32 Mbps
Intelligent Cropping (Mode)	Dynamic/Static
Intelligent Cropping (Number)	2 (1920 x 1080), 4 (640 x 480)
Intelligent Coding (Mode)	Auto/Manual
Intelligent Coding (Number)	Up to 8 (up to 4 for Auto mode)

Evidence Shot	20 Megapixels (5472 x 3648)
Multi streaming Capability	Yes (5)
Number of Clients	20

Intelligent Video/Audio Analytics

Analytics Architecture	DEPA Advanced
Intelligent Motion Detection	Yes
Face Detection	Yes
Tamper Alarm	Yes
Scene Analytics	Intrusion, Passing, Existing, Disappearance, Capacity, Left object, Removed object
Multi Tracking	Up to 4

Audio

	G.711 (bit rate: 64 kbps, sampling frequency: 8 kHz) G.726 (bit rate: 40, 32, 24, 16 kbps, sampling frequency: 8 kHz)

Compression Format	AAC-LC (bit rate: 64 kbps, sampling frequency: 16 kHz) AAC-LC (bit rate: 128 kbps, sampling frequency: 48 kHz)

System Requirements

Operating System	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 3.4GHz or higher* *For 4K (3840 x 2160) output at 30 fps, a GPU capable of 3840 x 2160 resolution and decoding 4K/H.264 is required.
Memory	8 GB or more
Web Browser	Microsoft Internet Explorer Ver. 8.0, Ver. 9.0, Ver. 10.0, Ver. 11.0 Firefox Ver. 29.0 Safari Ver. 5.34 Google Chrome Ver. 39.0
SNC toolbox	Yes
SNC toolbox mobile	Yes

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Network

Protocols	IPv4, IPv6, TCP, UDP, ARP, ICMP, ICMP v 6, IGMP*, MLD*, HTTP, DHCP, DHCPv6, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP {client}, HTTPS, FTP (client), SNMP (v1, v2c, v3), TLS {v1.0} *SSM (Source Specific Multicast) is supported.
Number of IP Address/Mac ADDRESS	1
QoS	DSCP
Multicast Streaming Support	Yes
ONVIF Conformance	Profile S
Wireless Network	Yes for setup (IEEE802.11b/g/n with optional IFU-WLM3)
Authentication	IEEE802.1X

Interface

Analog Video Output	No

Analog Monitor Output for Setup	No
Digital Video Output	HDMI (type A) x1
Microphone Input	Mini jack (monaural, 2.2 kΩ, plug-in-power)
Line Input	Mini jack (monaural)
Line Output	No* * supported by future version-up
Network Port	10BASE-T/100BASE-TX (RJ-45)
Alarm Input (Sensor Input)	x2, make contact, break contact
Alarm Output	x2, Max. AC 12 V/DC 24 V, 0.4 A (solid-state relay outputs electrically isolated from the camera)
Wireless LAN Terminal	Yes
Card Slots	SD x1
Confirmed SD Card Type	SDHC/SDXC (Max. 128 GB)
SD off Switch	Yes

General

Power Requirements	IEEE 802.3af compliant (PoE) Class 3, DC 12 V ± 10 %, AC 24 V ± 20 %, 50/60 Hz
Power Consumption	Max. 12.95 W
Operating Temperature	-40 °C to +50 °C -40 °F to +122 °F
Cold Start Temperature	-40 °C to +50 °C -40 °F to +122 °F
Storage Temperature	-20 °C to + 60 °C -4 °F to + 140 °F
Operating Humidity	20 % to 90 % (no condensation)
Storage Humidity	20 % to 80 % (no condensation)
Built-in Heater	Yes
Dimensions *1	φ190 x 146.7 mm ø7 1/2 inches x 5 7/8 inches
Mass	Approx. 1900 g Approx. 4 lb 3 oz Approx. 2100 g (with Bracket) Approx. 4 lb 10 oz (with Bracket)
External Material	Upper case: AL Die-cast Lower case: AL Die-cast

	Dome cover: PC Cap:PC
External Color	Munsell 4.4BG 8.4/0.2 (White)
Fire Retardant	UL2044
Safety Regulations	JATE Technical Standard (LAN) UL2044, IEC/EN60950-1 (CB) VCCI (Class A), FCC (Class A), IC (Class A) Emission: EN55022 (Class A) Immunity: EN55024 + EN50130-4 Emission: AS/NZS CISPR22 (Class A) MSIP EMC-TR
Supplied Accessories	Bracket (1) Template (1) Wrench (1) Screw (M4 × 8) (1) Sealing rubber (1) Multi connector cable (1) Read This First (1) Safety Regulations (1) Warranty booklet (1)
Optional Accessories	IFU-WLM3 (USB wireless LAN module)

Notes

*1	The values for dimensions are approximate.

Related products

SNC-VB770

Ultra High Sensitivity 4K Network Camera with 35 mm Full-frame Exmor™ CMOS Sensor

Gallery