

SNC-VM641

Vandal resistant minidome Full
HD 1080p/60fps IP Network
Camera (V-Series)



Overview

Monitor and protect people and property with split-second accuracy: this vandal resistant minidome-type Full HD network camera is ideal for a wide range of everyday security applications.

This compact, easy to install minidome network camera brings crisp, high frame rate Full HD imaging to a wide range of indoor security and surveillance applications, from offices, banks and retail spaces to schools and colleges.

Its vandal-resistant design meets IK10 standards, making the SNC-VM641 ideal for use in environments where there's a risk of physical tampering.

The camera captures crisp, low-noise Full HD images, even in challenging low-light conditions. The sensitive 1/2.8" type Exmor R CMOS image sensor is teamed with XDNR processing, improving low-light performance and achieving the minimum illumination of 0.006 lux(30 IRE) in colour mode.

Video can be captured at a high maximum frame rate of 60fps – allowing smoother, more accurate viewing of moving objects such as people or vehicles.

View-DR expands dynamic range for significantly improved

imaging in high-contrast and strongly backlit scenes, like sun-drenched offices or car park entrances. Image stabilisation keeps video images crisp and clear, even when the camera is subject to vibration on a mounting pole or bracket.

The addition of SD card edge storage allows video/audio data to be recorded directly by the camera when triggered by an alarm event. This provides valuable redundancy in the event of temporary network failure: recording to the network server resumes automatically when normal network connection is restored.

Installation of the SNC-VM641 is simplified by the same familiar user interface, usability and form factor as previous-generation Sony V Series cameras.

Features

Vandal resistant

The camera's vandal-resistant design meets IK10 standards (protection against mechanical impact), making the SNC-VM641 ideal for use in environments where there's a risk of physical tampering or damage.

See every scene clearly with Full HD image quality

View fine detail in a wide range of everyday video security and surveillance environments, from retail spaces to banks and schools. The sensitive 1/2.8" type Exmor R CMOS image sensor is teamed with XDNR processing, improving low-light performance and achieving the minimum illumination of 0.006 lux(30 IRE) in colour mode.

Steadier, more stable video footage

The in-built image stabiliser minimises the effects of camera shake – for example when the camera's pole mounted or subject to mechanical vibration. With clearer, more stable video images it's easier to see what's happening in any scene.

Don't miss that crucial moment with Intelligent Motion Detection and Face Detection

In-built motion detection can trigger a range of actions, from storage and transfer of images to sounding of external alarms. False alarms caused by noise, weather and environment noise are minimised by a smart processing algorithm. Human face detection is also supported, allowing rapid indexing of recordings to find events where a face is visible in the scene.

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.

Optimum picture quality in any situation

A choice of selectable picture modes optimises camera settings for best picture quality in a wide range of applications and lighting environments.

Recording quality to suit your network

Select CBR (constant bitrate), VBR (variable bitrate) or VBR-with-cap compression modes for optimised recording quality depending on IP network conditions.

Edge recording on SD card for reliable operation

SD card edge storage allows video/audio data to be recorded directly by the camera when triggered by an alarm event. This provides valuable redundancy in the event of temporary network failure: recording to the network server resumes automatically when normal network connection is restored.

Detect in confidence with Edge-based Analytics

Powerful DEPA Advanced video analytics enhances Intelligent Motion Detection with rule-based alarm triggers, providing alerts with object filters like 'passing' and 'intrusion' to further reduce false alarms.

Reduce cabling costs with Power Over Ethernet

(PoE)

Power over Ethernet (PoE) allows the camera be powered by the same Ethernet cable that's used for data transfer, reducing installation complexity and costs.

View and control with your smartphone

Remotely view live camera images with your Android or iOS smartphone or tablet. You don't even need to download a special app.

ONVIF (Open Network Video Interface Forum) compliance

Support for ONVIF simplifies interoperability with other network video devices. The ONVIF (Open Network Video Interface Forum) defines a common protocol for the exchange of information between network video devices, including automatic device discovery and video streaming.

Specifications

Camera

Image Sensor	1/2.8-type progressive scan Exmor R CMOS sensor
Number of Effective Pixels	Approx. 2.13 Megapixels
Signal System	NTSC/PAL (switchable)
Sync System	Internal synchronization
Minimum Illumination (50 IRE)	Color: 0.01 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.007 lx (F1.2, View-DR Off, VE

	Off, AGC On, 1/30 s, 30 fps)
Minimum Illumination (30 IRE)	Color: 0.006 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps) B/W: 0.005 lx (F1.2, View-DR Off, VE Off, AGC On, 1/30 s, 30 fps)
Dynamic Range	Equivalent to 90 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, 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	CS-mount varifocal lens
Easy Zoom	Yes
Zoom Ratio	Optical zoom 3x Digital zoom 4x Total zoom 12x
Easy Focus for Setup	Yes

Horizontal Viewing Angle	105.3° to 35.6°
Vertical Viewing Angle	56.9° to 20.1°
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)	±192° -7° to +75° -99° to +99°
IR Illuminator	No
White-light LED Illuminator	No
<h3>Camera Features</h3>	
Day/Night	True D/N
Day/Night linked with Easy Focus	Yes
e-Flip	Yes

Image Rotate	90°, 270°
Mirroring	Yes
Wide-D	View-DR
Tone Correction	Visibility Enhancer
Noise Reduction	XDNR
Image Stabilizer	Electronic
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
Voice Alert	Yes
Vandal Resistant	IK10
Superimpose Number	3 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
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 (1280 x 720)
Bitrate Control 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
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Bandwidth Control	JPEG
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Multi streaming Capability	Yes (3)
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Number of Clients	20
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Intelligent Video/Audio Analytics

Analytics Architecture	DEPA Advanced
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Intelligent Motion Detection	Yes
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Face Detection	Yes
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Tamper Alarm	Yes
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Scene Analytics	Passing, Intrusion, Left Object Detection, Removed Object Detection
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Audio

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

Windows 7 (32/64 bit) Ultimate,

Operating System	Professional Edition Windows 8.1 Pro (32/64 bit) Windows 10 Pro (32/64 bit)
Processor	Intel Corei7 2.8 GHz or higher
Memory	2 GB or more
Web Browser	Microsoft Internet Explorer Ver. 11.0 Firefox Ver. 50.1 (plug-in free viewer only) Google Chrome Ver. 55.0 (plug-in free viewer only)
SNC toolbox	Yes
SNC toolbox mobile	Yes

Network

Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP*, HTTP, DHCP, DNS, NTP, RTP/RTCP, RTSP over TCP, SMTP over HTTP, IPv6, HTTPS, FTP (client), SNMP (v1, v2c, v3), SSL
	*SSM (Source Specific Multicast) is supported.
QoS	DSCP

Multicast Streaming Support

Yes

ONVIF Conformance

Profile S, Profile T

Authentication

IEEE802.1X

Interface

Analog Video Output

BNC x1, 1.0 Vp-p, 75 Ω, unbalance, sync negative
700 TV lines (analog video)*2

Analog Monitor Output for Setup

Phono jack x1

Microphone Input

Mini jack (monaural)

Line Input

Mini jack (monaural)

Line Output

Mini jack (monaural) Maximum output level: 1 Vrms

Network Port

10BASE-T/100BASE-TX (RJ-45)

Alarm Input (Sensor Input)

x2, make contact, break contact

Alarm Output

x2, AC 24V/DC 24 V, 1 A (mechanical relay outputs electrically isolated from the camera)

Card Slots	SD x 1
Confirmed SD Card Type	Max. 256GB *3
General	
Power Requirements	IEEE 802.3af compliant (PoE system), DC 12 V \pm 10%, AC 24 V \pm 20%
Power Consumption	6.0 W max.
Operating Temperature	-10°C to +50°C 14°F to 122°F
Cold Start Temperature	0°C to +50°C 32°F to 122°F
Storage Temperature	-20°C to + 60°C -4°F to + 140°F
Operating Humidity	20 % to 80 %
Storage Humidity	20 % to 80 %(no condensation)
Dimensions (W x H x D)*1	ϕ 148 x 108 mm ϕ 5 7/8 inches x 4 3/8 inches
Mass	Approx. 835 g Approximate 1 lb 13 oz

External Material	Top cover: PC Dome cover: PC
External Color	Top cover: Munsell 4.4BG 8.4/0.2
Safety Regulations	JATE Technical standard (LAN) UL2044, IEC60950-1 (CB) VCCI (Class A), FCC (Class A), IC (Class A) Emission: EN55032 (Class A) Immunity: EN55024+ EN50130-4 Emission: AS/NZS CISPR32 (Class A) KC EMC-TR
Supplied Accessories	Template (1) Audio cable (1) I/O cable (1) BNC cable (1) Power input cable (1) Screw M3 (1) Wrench (1) Bracket (1) Wire rope (1) Safety regulations (1) Operating Instructions - Download site Information (1)
	YT-ICB600 (In-ceiling Bracket)

Optional Accessories YT-LD601S (Smoke Dome Cover)

Notes

*1 The values for dimensions are approximate.

*2 Monitor display ratio 4:3

*3 The maximum number of event recording in the SD card is 4000. It may not use the full capacity of the SD card, depending on the limitation set for the event recording.

Gallery

