SNV-8081R 5Megapixel Vandal-Resistant Network IR Dome Camera

TECHNICAL SPECIFICATIONS SECURITY SYSTEM

DIVISION – 28 ELECTRONIC SAFETY AND SECURITY

LEVEL 1\_\_28 20 00 ELECTRONIC SURVEILLANCE

LEVEL 2\_\_28 23 00 VIDEO SURVEILLANCE

LEVEL 3\_\_28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS

PART 2 – PRODUCTS

2.01 GENERAL

A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer’s system.

B. All systems and components shall have been thoroughly tested and proven in actual use.

C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) from the manufacturer. The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.

2.02 SNV-8081R 5Megapixel Vandal-Resistant Network IR Dome Camera

1. The camera shall feature up to 5M resolution with frame rate of 30 fps. At 2M resolution, it shall feature frame rate of 60 fps.
2. The minimum illumination shall be 0.15Lux at the aperture ratio of F1.3 in color mode. In black and white mode with IR LED on, it shall be 0Lux.
3. The camera shall feature motorized varifocal lens which varies between 3.93mm and 9.4mm.
4. The camera shall feature H.265, H.264 and MJPEG codec.
5. The camera shall feature Day & Night mode with a removable infrared cut filter (ICR) for precise color reproduction and the best possible low light performance.
6. The camera shall feature intelligent video and audio analytics such as tampering and audio detection.
7. The camera shall provide memory slots for SD/SDHC/SDXC and support recording to NAS and local PC.
8. The camera shall provide hallway view which rotates the scene to 90 or 270 degrees. The hallway view is particularly useful for corridors where vertical view is desired.
9. The camera shall feature LDC (Lens Distortion Correction) which corrects the distortions caused by lens of camera for true reproduction of objects.
10. The camera shall provide IP66 and IK10 ratings to prove strong protection against solid and liquid objects and impact.

**2.03 CAMERA**

A. Imaging Device 1/1.8” 6M CMOS

B. Total Pixels 3,096(H) x 2,094(V)

C. Effective Pixels 2,616(H) x 1,976(V)

D. Scanning System Progressive

E. Min. Illumination

1. Color 0.3Lux (1/30sec, F1.3, 50IRE)

0.005Lux (2sec, F1.3, 50IRE)

0.15Lux (1/30sec, F1.3, 30IRE)

0.003Lux (2sec, F1.3, 30IRE)

2. B/W 0Lux (IR LED on)

F. S / N Ratio 50dB

G. Video Output CVBS: 1.0 Vpp / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation

DIP connector type

2.04 LENS TYPE

A. Focal Length (Zoom Ratio) 3.93 ~ 9.4mm (2.4x) motorized varifocal

B. Max. Aperture Ratio F1.3

C. Angular Field of View H: 93.4°(Wide) ~ 39.2°(Tele)

V: 68.1°(Wide) ~ 29.3°(Tele)

D. Min. Object Distance 0.5m (1.64ft)\

E. Lens Type DC auto iris, support P-Iris mode

F. Mount Type Board-in type

G. Focus Control Simple focus (Motorized V/F)

Manual, Remote control via network

(Manual, Simple focus)

**2.05 PAN / TILT / ROTATE**

A. Pan / Tilt / Rotate Range 0° ~ 354° / 0° ~ 67° / 0° ~ 355°

2.06 OPERATION

A. Viewable Length 30m (98.43ft), Smart IR

B. Camera Title Off / On (Displayed up to 15 characters)

C. Day & Night Auto (ICR) / Color / B/W / External / Schedule

D. Backlight Compensation Off / BLC / WDR

E. Wide Dynamic Range 120dB

F. Contrast Enhancement SSDR (Samsung Super Dynamic Range) (Off / On)

G. Digital Noise Reduction SSNR (2D+3D noise filter) (Off / On)

H. Motion Detection Off / On (4ea, Rectangle)

I. Privacy Masking Off / On (6ea, Rectangle) - Color: Black / Blue / Red / Grey / White / Green

J. Gain Control Off / Low / Medium / High

K. White Balance ATW / AWC / Manual / Indoor / Outdoor (Include mecury & Sodium)

L. LDC (Lens Distortion Correction) Off / On (Level auto control)

M. Electronic Shutter Speed Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)

N. Flip / Mirror Off / On, Hallway : 90° /270°

O. Intelligent Video Analytics Tampering, Audio detection - with metadata

P. Alarm I/O Input 1ea / Output 1ea

Q. Alarm Triggers Alarm input, Motion detection, Tampering, Audio detection, Network disconnect

R. Alarm Events File upload via FTP and E-mail, Notification via E-mail

Local storage (SD/SDHC/SDXC) or NAS recording at event triggers, External output

S. Pixel Counter Support

2.07 NETWORK PROTOCOL

A. Ethernet RJ-45 (10/100BASE-T)

B. Video Compression Format H.265: Main,

H.264 (MPEG-4 part 10/AVC): Main / Baseline / High, MJPEG

C. Resolution

1. 5M Mode 2592 x 1944, 2592 x 1464, 1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240

2. 2M Mode 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240

D. Max. Frame rate

1. 5M Mode H.265 / H.264 - 30fps in all resolutions

MJPEG - 2592 x 1944 ~ 2592 x 1464: 2fps,

1920 x 1080 ~ 1600 x 1200: 4fps

1280 x 1024 ~ 1024 x 768: 5fps,

800 x 600 ~ 320 x 240: 15fps

2. 2M Mode H.265 / H.264 - 60fps in all resolutions

MJPEG - 1920 x 1080: 4fps,

1280 x 1024 ~ 1024 x 768: 5fps,

800 x 600 ~ 240: 15fps

E. Smart Codec Manual mode (Area-based: 4ea)

F. Video Quality Adjustment

1. H.264 / H.265 Compression level, Target bitrate level control

2. MJPEG Quality level control

G. Bitrate Control Method

1, H.264 / H.265 CBR or VBR

2. MJPEG VBR

H. Streaming Capability Multiple streaming (Up to 3 profiles) - Total 3 stream at the same time (Including recording stream)

I. Audio In Selectable (Mic. in / Line in)

Supply voltage: 2.5V DC (4mA)

Input impedance: approx. 2K Ohm

J. Audio Out Line out (3.5mm stereo mini jack)

Max output level: 1Vrms

K. Audio Compression Format G.711 u-law/G.726 selectable, G.726 (ADPCM): 8KHz, G.711: 8KHz, G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps

L. Audio Communication Bi-directional audio (2-way)

M. IP IPv4, IPv6

N. Protocol TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP,

SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour

O. Security HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication (EAP-TLS, EAP-LEAP)

P. Streaming Method Unicast, Multicast

Q. Max. User Access 10 users at Unicast mode

R. Edge Storage SD/SDHC/SDXC (128GB) - Motion images recorded in the SD/SDHC/SDXC memory card can be downloaded, Camera can detect automatically when the memory is connected, Memory status display (Normal / Error / Active / Formatting / Lock), NAS (Network Attached Storage), Local PC for instant recording

S. Application Programming Interface ONVIF profile S, SUNAPI (HTTP API), SVNP, Samsung Techwin Open Platform

T. Webpage Language English, French, German, Spanish, Italian, Chinese, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek

U. Web Viewer

1. Supported OS Windows XP / VISTA / 7 / 8 / 8.1 or higher

MAC OS X 10.7 ~ 10.10

2. Supported Browser Microsoft Internet Explorer (Ver. 8 ~ 11),

Mozilla Firefox (Ver. 9 ~ 35),

Google Chrome (Ver. 15 ~ 40),

Apple Safari (Ver. 8.0.2 (Mac OS X 10.10), 7.0.6 (Mac OS X 10.9), 6.0.2 (Mac OS X 10.8, 10.7 only), 5.1.7)

\* Mac OS X only

V. Central Management Software SmartViewer, SSM

**2.08 ELECTRICAL**

A. Input Voltage / Current 24V AC ±10%, 12V DC ±10%

PoE (IEEE802.3af, Class3)

B. Consumption Max. 12W/13.5W (24V AC, Heater off / on)

Max. 10W/11.5W (12V DC, Heater off / on)

Max. 11.5W/12.95W (PoE, Heater off / on)

**2.09 ENVIRONMENTAL SPECIFICATIONS**

A. Operating Temperature -40°C ~ +55°C (40°F ~ 131°F)

Startup should be done at above -35°C(-31°F)

B. Operating Humidity Less than 90% RH

C. Storage Temperature -30°C ~ +60°C (-22°F ~ +140°F)

D. Storage Humidity Less than 90% RH

E. Ingress Protection IP66

F. Vandal Resistance IK10

**2.10 PHYSICAL SPECIFICATIONS**

A. Dimension (WxHxD) Φ160.0 x 118.5mm (Φ6.3” x 4.67”)

B. Weight 955g (2.11 lb.)

C. Color Ivory

D. Material Aluminum

**2.10 CERTIFICATIONS**

A. CE mark

B. FCC mark

C. UL mark

**2.11 WARRANTY**

A. 3 years, parts and labor.