

SND 7084R 3 MEGAPIXEL 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 SND 7084R 3 MEGAPIXEL NETWORK IR DOME CAMERA

- A. The camera shall be of a dome type suitable for internal installation. The camera shall be ivory in appearance.
- B. The network camera shall feature up to 3 Mega Pixel resolution in a 16:9 format. 4:3 format shall also be available in smaller resolutions.
- C. The camera should be capable of capturing and transmitting an image size of 1920 x 1080 at 60 images per second

2.03 CAMERA

- A. Imaging Device 1/ 2.8" PS Exmor 3.2M CMOS
- B. Total Pixels 2,065(H) x 1,565(V)
- C. Effective Pixels 2,065(H) x 1,553(V)
- D. Scanning System Progressive
- E. Min. Illumination
 - 1. Color 0.1 Lux (F1.2, 50IRE),
0.06Lux (F1.2, 30IRE)
 - 2. B/W 0 Lux (F1.2, 50IRE)
0 Lux (F1.2, 30IRE)
- F. S / N Ratio 50dB
- G. Video Output CVBS : 1.0 Vp-p / 75Ω composite, 704x480(N),
704x576(P), for installation
- DIP connector type

2.04 LENS TYPE

- A. Focal Length (Zoom Ratio) 3 ~ 8.5mm (2.8x) motorized varifocal
- B. Max. Aperture Ratio F1.2
- C. Angular Field of View H : 100.12°(Wide) ~ 35.38°(Tele) /
V : 73.76°(Wide) ~ 26.58°(Tele)
- D. Min. Object Distance 0.5m (1.64ft)
- E. Lens Type Simple Focus / DC Auto Iris, P-Iris
- 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

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

2.06 OPERATION

A. IR LED 12ea
 B. Viewable Length 25m (82.02ft)
 C. Camera Title Off / On (Displayed up to 45 characters)
 D. Day & Night Auto (ICR) / Color / B/W / External / Schedule
 E. Backlight Compensation Off, BLC, WDR
 F. Wide Dynamic Range 120dB
 G. Contrast Enhancement ` SSDR (Samsung Super Dynamic Range) (Off / On)
 H. Digital Noise Reduction SSNRIII (2D + 3D noise filter) (Off / On)
 I. Motion Detection Off / On (4ea 4 Points Polygonal zones)
 J. Privacy Masking Off / On (32ea Rectangular zones)
 K. Gain Control Off / Low / Middle / High
 L. White Balance ATW / AWC / Manual / Indoor / Outdoor
 M. Electronic Shutter Speed Minimum / Maximum / Anti flicker (1 ~ 1/12,000sec)
 N. Flip / Mirror Off, On
 O. Intelligent Video Analytics Tampering, Virtual Line, Enter/Exit, Appear / Disappear, Audio Detection, Face Detection with metadata
 P. Alarm I/O Input 1ea / Output 1ea
 Q. Alarm Triggers Motion detection, Tampering, Audio Detection, Face Detection, Video Analytics, Alarm Input, Network Disconnection
 R. Alarm Events File upload via FTP and E-Mail Notification via E-Mail, local storage(SD/SDHC/SDXC) recording at Network disconnected & Event (Alarm Triggers) External output
 S. Defog Auto/Manual/Off
 T. Digital Image Stabilization Off / On

2.07 NETWORK PROTOCOL

A. Ethernet RJ-45 (10/100Base-T)
 B. Video Compression Format H.264(MPEG-4 part 10/AVC), MJPEG
 C. Resolution 2048 x 1536 / 1920x1080 / 1600x1200 / 1280x1024 / 1280x960 / 1280x720 / 1024x768 / 800x600 / 800x450 / 640x480 / 640x360 / 320x240 / 320x180
 D. Max. Framerate
 1. H.264 Max 30fps@2048x1536, Max 60fps at all resolutions
 2. Motion JPEG Max. 10fps@2048 x 1536Max. 15fps@1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768Max. 30fps@800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180
 E. Smart Codec Manual mode (Area-based : 5ea), Face detection mode
 F. Video Quality Adjustment
 1. H.264 Compression level, Target bit rate level control
 2. MJPEG Quality level control
 G. Bitrate Control Method
 1, H.264 CBR or VBR
 2. MJPEG VBR
 H. Streaming Capability Multiple Streaming (Up to 10 Profiles)
 I. Audio In Selectable (Mic in / Line in / Built-in mic), Supply voltage : 2.5V DC (4mA), Input impedance : approx. 2K Ohm
 J. Audio Out Line out (3.5mm mono jack), Max output level : 1 Vrms

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
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
P. Streaming Method	Unicast, Multicast
Q. Max. User Access	15 users at Unicast mode
R. Edge Storage	micro SD/SDHC/SDXC Motion images recorded in the SDXC/SDHC/SD memory card can be downloaded
S. Application Programming interface	ONVIF profile S, SUNAPI (HTTP API) v2.0, SVNP 1.2
T. Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Norwegian, Finnish
U. Web Viewer	
1. Supported OS	Windows XP / VISTA / 7 / 8, MAC OS X 10.7
2. Supported Browser	Microsoft Internet Explorer (Ver. 7~10), Mozilla Firefox (Ver. 9~19), Google Chrome (Ver. 15~25), Apple Safari (Ver. 6.0.2(Mac OS X 10.8, 10.7 Only), 5.1.7) * Mac OS X Only
3. Central Management Software	SmartViewer
2.08 ELECTRICAL	
A. Voltage	DC12V, PoE(IEEE802.3af,Class3)
B. Consumption	Max. 10.0W (DC 12V) Max. 11.6W (PoE, Class3)
2.09 ENVIRONMENTAL SPECIFICATIONS	
A. Operating Temperature / Humidity	-10°C ~ +55°C (14°F ~ 131°F) Less than 90% RH
B. Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) Less than 90% RH
2.10 PHYSICAL SPECIFICATIONS	
A. Dimension	132.1 x 107.6mm (5.2" x 4.24")
B. Weight	575g(1.27g)
C. Color	Ivory / Aluminum
2.11 CERTIFICATIONS	
A. CE mark	
B. FCC mark	

2.12 WARRANTY

A. 3 years, parts and labor.