

SNO 7084R 3 MEGAPIXEL WEATHERPROOF NETWORK IR 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 SNB 7084R 3 MEGAPIXEL WEATHERPROOF NETWORK IR CAMERA

- A. The camera shall be of a bullet type suitable for external installation. The camera shall be dark grey in appearance with an aluminium body and integrated wall bracket.
- B. The camera shall feature an Adaptive Infrared illumination system with 20 LEDs giving a viewable distance of 30m (98.43ft) in complete darkness.
- C. 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.

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 OPERATION

A. IR LED	20ea
B. Viewable Length	30m(98.43ft)
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

2.06 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	Max 30fps@2048x1536, Max 60fps at all resolutions
1. H.264	Max. 10fps@2048 x 1536Max. 15fps@1920 x 1080,
2. Motion JPEG	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	Compression level, Target bit rate level control
1. H.264	Quality level control
2. MJPEG	
G. Bitrate Control Method	CBR or VBR
1. H.264	VBR
2. MJPEG	Multiple Streaming (Up to 10 Profiles)
H. Streaming Capability	Selectable (Mic in / Line in / Built-in mic),
I. Audio In	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 4GB SD memory built-in, 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
2.07 ELECTRICAL	
A. Voltage	AC24V±10%, DC12V±10%, PoE(IEEE802.3af, Class3)
B. Consumption	Max. 13.0W / 19.0W (AC 24V, Heater off / on) Max. 11.5W (DC 12V) Max. 12.5W (PoE, Class3)
2.08 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
C. Ingress Protection	IP66
D. Vandal Resistance	IK10
2.09 PHYSICAL SPECIFICATIONS	
A. Dimension	90.4 x 96.0 x 333.2mm (3.56" x 3.78" x 13.12")
B. Weight	1.19Kg(2.62lb)
C. Color	Dark gray / Aluminium
2.10 CERTIFICATIONS	
A. CE mark	
B. FCC mark	
2.11 WARRANTY	
A. 3 years, parts and labor.	