

SNP-6321 2MEGAPIXEL FULL HD 32X NETWORK PTZ 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 SNP-6321 2MEGAPIXEL FULL HD 32X NETWORK PTZ DOME CAMERA

- A. These cameras shall support multi-streaming technologies, transferring real-time high resolution images at 60 fps with video compression in H.264 and MJPEG codec.
- B. The camera shall provide 4.44~142.6mm (32x) optical zoom with 16x digital zoom. It shall support PoE plus, SD memory, and bi-directional audio.
- C. All operation and configuration menus shall be provided English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Finnish, Norwegian

2.03 ELECTRICAL SPECIFICATIONS

Input Voltage / Current	24V AC +/- 10%, PoE+ (IEEE802.3af class4)
Power Consumption, on)	24V AC : Max. 65W (24V AC heater on & PoE heater on)
	PoE+ : Max. 25W (24V AC heater off / PoE heater on)

2.04 CAMERA

A. Imaging Device	1/2.8" 2.38M CMOS
B. Total Pixels (horizontal x vertical)	1,952,(H) x 1,116(V), 2.18M pixels
C. Effective Pixels (horizontal x vertical)	1,944(H) x 1,104(V), 2.14M pixels
D. Scanning System	Progressive
E. Min. Illumination	Color : 0.3Lux (1/30sec, F1.6, 50IRE, AGC high) , 0.005Lux (2sec, F1.6, 50IRE, AGC high) B/W : 0.03Lux (1/30sec, F1.6, 50IRE, AGC high), 0.0005Lux (2sec, F1.6, 50IRE, AGC high) Color : 0.15Lux (1/30sec, F1.6, 30IRE), 0.0025Lux (2sec, F1.6, 30IRE) B/W : 0.015Lux (1/30sec, F1.6, 30IRE), 0.00025Lux (2sec, F1.6, 30IRE)
F. S / N ratio	50dB
G. Video Output	CVBS:1.0 Vp-p
1. NTSC	704x480, for installation
2. PAL	704x576, for installation

2.05 PAN/TILT/ROTATE

A. Pan / Tilt Range	360° Endless / 210° (-15° ~195°)
B. Pan / Tilt Speed	Preset : 700°/sec, Manual : 0.024°/sec ~ 120°/sec
C. Sequence	Preset (255ea), Swing, Group (6ea), Trace, Tour (1ea), Auto run, Schedule
D. Preset Accuracy	±0.2°
E. Azimuth	Yes (E / W / S / N / NE / NW / SE / SW)

2.06 LENS

A. Focal Length (Zoom Ratio)	4.44 ~ 142.6mm (32x)
B. Angular Field of View	H : 62.8°(Wide) ~ 2.23°(Tele) / V : 36.8°(Wide) ~ 1.26°(Tele)
C. Max. Aperture Ratio	F1.6(Wide) / F4.4(Tele)
D. Min. Object Distance	Wide : 1.4m (4.59ft), Tele : 1.9m (6.23ft)
E. Focus control	Auto / Manual / One push
F. Lens Type	DC auto iris
G. Mount Type	Board-in type

2.07 OPERATIONAL SPECIFICATION

A. Camera Title	On, Off (displays up to 45 characters)
B. Day and Night	Auto (ICR), Color, B/W
C. Backlight Compensation	BLC, Off
D. Wide Dynamic Range	120dB
E. Contrast Enhancement	SSDR (Samsung Super Dynamic Range) (Off / On)
F. Digital Noise Reduction	SSNRIII (2D+3D noise filter) (Off / On)
G. Digital Image Stabilization	Off , On
H. Defog	Off, Auto, Manual
I. Motion Detection	On, Off (4ea rectangle zone)
J. Privacy Masking	On, Off (32 zones of rectangle zone) with zoom threshold mosaic option
K. Gain Control	Off, Low, Middle, High
L. White Balance	ATW / AWC / Manual / Indoor / Outdoor / Mercury
M. Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
N. Digital Zoom	16x
O. Flip/Mirror	Off, On
P. Intelligent Video Analytics	Tampering, Virtual line, Enter / Exit, Appear / Disappear, Audio detection, Face detection
Q. Alarm I/O	Input 4ea / Output 2ea(relay).
R. Remote control Interface	RS-485
S. RS-485 Protocol	Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Vicon, Bosch, GE
T. Alarm Triggers	Motion detection, Tampering, Audio detection, Face detection, Video analytics, Alarm input, Network disconnection
U. Alarm Events	File upload via FTP and E-mail, Notification via E-mail, TCP and HTTP, local storage (SD/SDHC/SDXC) recording at network disconnected & event (Alarm triggers), External output

2.08 NETWORK

Page 3 SNP-6321 2Megapixel Full HD 32X Network PTZ Dome Camera

A. Ethernet	RJ-45 (10/100Base-T)
B. Video Compression	H.264(MPEG-4 part 10 / AVC), MJPEG
C. Resolution	1920 x 1080p(Full HD), 1280 x 1024, 1280 x 960, 1280 x 720P (HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180
D. Max Frame rate	H.264 : Max. 60fps at all resolutions MJPEG : 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768 : Max. 15fps 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180 : Max. 30fps
E. Smart Codec	Yes
F. Video Quality Adjustment	Compression level, Target bit rate level control Quality level control
G. Bitrate Control Method	VBR or CBR VBR
1. H.264	
2. MJPEG	
H. Streaming	Multiple, up to 10 profiles
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 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), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication
O. Security	Unicast, Multicast 10 users at Unicast
P. Streaming Method	SD/SDHC/SDXC slot for supporting memory card
Q. Max. User Access	- Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. NAS (Network Attached Storage)
R. Edge Storage	ONVIF profile S, SUNAPI 2.0, SVN 1.2, Samsung Techwin Open Platform
S. Application Programming Interface	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Finnish, Norwegian
T. Webpage Language	
U. Web Viewer	Windows XP / VISTA / 7 / 8, MAC OS X 10.7
1. Supported OS	Microsoft Internet Explorer (Ver. 8 ~ 11), Mozilla Firefox (Ver. 9 ~ 19),
2. Supported Browser	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
V. Central Management Software	Smart Viewer, SSM

2.09 ENVIRONMENTAL SPECIFICATIONS

A. Operating Temperature / Humidity	PoE+ : -30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH (Heater on)
-------------------------------------	---

		24V AC : -50°C ~ +55°C (-58°F ~ +131°F) / Less than ~ 90% RH (Heater on) * Heater works only 24V AC * Startup should be done at above -50°C within 3 hours.
B. Storage Temperature / Humidity		-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
C. Ingress Protection		IP66
D. Vandal Resistance		IK10
2.10	PHYSICAL SPECIFICATIONS	
A. Dimension		Ø223.4 x 293.6mm (Ø8.8" X 11.56")
B. Weight		3.2kg (7.05 lb)
C. Color		Ivory
D. Material		Plastic + Metal
2.11	CERTIFICATIONS	
A. UL Listed		
B. CE mark		
C. FCC mark		
2.12	WARRANTY	
A. 3 years		