SNP-6321H 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-6321H 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

* 1. ELECTRICAL SPECIFICATIONS

Input Voltage / Current 24V AC +- 10%, PoE+ (IEEE802.3af class4)

Power Consumption, 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**

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

1. H.264 Compression level, Target bit rate level control

2. MJPEG Quality level control

G. Bitrate Control Method

1. H.264 VBR or CBR

2. MJPEG VBR

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

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 10 users at Unicast

R. Edge Storage SD/SDHC/SDXC slot for supporting memory card

- Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. NAS (Network Attached Storage)

S. Application Programming Interface ONVIF profile S, SUNAPI 2.0, SVNP 1.2, Samsung Techwin Open Platform

T. Webpage Language English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish,

Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Finnish, Norwegian

U. Web Viewer

1. Supported OS Windows XP / VISTA / 7 / 8, MAC OS X 10.7

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

V. Central Management Software Smart Viewer, SSM

**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

C. Ingress Protection N/A

D. Vandal Resistance IK10(With SHP-3701H)

**2.10 PHYSCIAL SPECIFICATIONS**

A. Dimension Ø152.0 x 218.0mm (Ø5.98” X 8.58”)

B. Weight 1.8kg (3.97 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