

## **SNP-6320 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-6320 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**

- A. Input Voltage 24V AC, PoE+ (IEEE802.3af class3)
- B. Power Consumption, max. Max. 20W

#### **2.04 CAMERA**

- A. Imaging Device 1/2.8" 2M PS CMOS
- B. Total Pixels (horizontal x vertical) 1,952,(H) x 1,236(V)
- C. Effective Pixels (horizontal x vertical) 1,944(H) x 1,224(V), 2.38M pixels
- D. Scanning System Progressive
- E. Min. Illumination
  - 1. Color 0.3Lux (1/30sec, F1.6, 50IRE),
  - 2. B/W 0.03Lux (1/30sec, F1.6, 50IRE)
- F. S / N ratio 50dB
- G. Video Output CVBS:1.0 Vp-p
  - 1. NTSC 704x480, for installation
  - 2. PAL 704x576, for installation

#### **2.04 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 : 1.5m (4.92ft), Tele : 2m (6.56ft)

|                  |                          |
|------------------|--------------------------|
| E. Focus control | Auto / Manual / One push |
| B. Lens Type     | DC auto iris             |
| C. Mount Type    | Board-in type            |

## 2.06 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, HLC, Off, WDR                                                                                                                                                              |
| D. Wide Dynamic Range          | 120dB                                                                                                                                                                           |
| E. Contrast Enhancement        | SSDR (Samsung Super Dynamic Range) (Off / On)                                                                                                                                   |
| F. Digital Noise Reduction     | SSNR III (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)                                                                                                                                            |
| K. Gain Control                | Off, Low, Middle, High                                                                                                                                                          |
| L. White Balance               | ATW / AWC / Manual / Indoor / Outdoor / Mercury / Sodium                                                                                                                        |
| 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, Sungjin, 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 |

## 2.07 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<br>MJPEG : 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768 : Max. 15fps<br>800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180 : Max. 30fps |
| E. Video Quality Adjustment | Compression level, Target bit rate level control                                                                                                                                                            |
| 1. H.264                    | Quality level control                                                                                                                                                                                       |
| 2. MJPEG                    |                                                                                                                                                                                                             |
| F. Bitrate Control Method   | VBR or CBR                                                                                                                                                                                                  |
| 1. H.264                    | VBR                                                                                                                                                                                                         |
| 2. MJPEG                    |                                                                                                                                                                                                             |
| G. Streaming                | Multiple, up to 10 profiles                                                                                                                                                                                 |

|                                          |                                                                                                                                                                                                              |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H. Audio In                              | Selectable (Mic in / Line in), Supply voltage : 2.5V DC (4mA), Input impedance : approx. 2K Ohm                                                                                                              |
| I. Audio out                             | Line out (3.5mm mono jack), Max output level : 1 Vrms                                                                                                                                                        |
| J. Audio Compression Format              | G.711 u-law/G.726 selectable, G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps                                                                                                         |
| K. Audio Communication                   | Bi-directional audio                                                                                                                                                                                         |
| L. IP                                    | IPv4, IPv6                                                                                                                                                                                                   |
| M. Protocol                              | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour                                      |
| N. Security                              | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                                                                                   |
| O. Streaming Method                      | Unicast, Multicast                                                                                                                                                                                           |
| P. Max. User Access                      | 15 users at Unicast                                                                                                                                                                                          |
| Q. Memory Slot                           | SD/SDHC/SDXC (SNP-6320 : micro SD type, SNP-6320H : SD type)<br>- Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. NAS (Network Attached Storage)                                   |
| R. Application Programming Interface     | ONVIF profile S, SUNAPI 2.0, SVNP 1.2                                                                                                                                                                        |
| S. 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 |
| T. Web Viewer                            |                                                                                                                                                                                                              |
| 1. Supported OS                          | Windows XP / VISTA / 7 / 8 or higher, MAC OS X 10.7                                                                                                                                                          |
| 2. Supported Browser                     | Microsoft Internet Explorer (Ver. 8 ~ 11), Mozilla Firefox (Ver. 9 ~ 19),<br>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                       |
| U. Central Management Software           | Smart Viewer, SSM                                                                                                                                                                                            |
| <b>2.08 ENVIRONMENTAL SPECIFICATIONS</b> |                                                                                                                                                                                                              |
| A. Operating Temperature                 | -10°C ~ +55°C (+14°F ~ +131°F)                                                                                                                                                                               |
| B. Operating Humidity                    | < 90% RH                                                                                                                                                                                                     |
| C. Storage Temperature / Humidity        | -30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH                                                                                                                                                            |
| D. Ingress Protection                    | N/A                                                                                                                                                                                                          |
| E. Vandal Resistance                     | IK10 (With SHP-3701H)                                                                                                                                                                                        |
| <b>2.09 PHYSICAL SPECIFICATIONS</b>      |                                                                                                                                                                                                              |
| A. Dimension                             | Ø152.0 x 218mm (Ø5.98" X 8.58")                                                                                                                                                                              |
| B. Weight                                | 2.2kg (4.85 lb)                                                                                                                                                                                              |
| C. Color                                 | Ivory                                                                                                                                                                                                        |
| D. Material                              | Plastic + Metal                                                                                                                                                                                              |
| <b>2.10 CERTIFICATIONS</b>               |                                                                                                                                                                                                              |
| A. UL Listed                             |                                                                                                                                                                                                              |
| B. CE mark                               |                                                                                                                                                                                                              |
| C. FCC mark                              |                                                                                                                                                                                                              |
| <b>2.11 WARRANTY</b>                     |                                                                                                                                                                                                              |
| A. 3 years                               |                                                                                                                                                                                                              |