

SNP 6230RH 2MEGAPIXEL FULL HD 23X NETWORK IR 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 6230RH 2MEGAPIXEL FULL HD 23X NETWORK IR PTZ DOME CAMERA

- A. These cameras shall offer Max. 2M (1920 x 1080) resolution and 16:9 Full HD (1080p) resolutions.
- B. The camera shall provide 4.4 ~ 101.2mm (23x) IR corrected optical zoom, and 16x digital zoom.
- C. The camera shall support H.264, MJPEG dual codec, and multiple streaming.
- D. The camera shall feature Day & Night (ICR).
- E. The camera shall feature Auto tracking and intelligent video analytics.
- F. The camera shall feature Wide Dynamic Range with a gain of 120dB.
- G. The camera shall support SD/SDHC/SDXC memory slot.
- H. The camera shall support Bi-directional audio.
- I. The camera has IP66 and IK10 certifications.
- J. The camera has IR LED (2ea).

2.03 VIDEO

A. Imaging Device	1/2.8" 2.38M CMOS
B. Total Pixels	1,952(H) x 1,116(V), 2.18M pixels
C. Effective Pixels	1,944(H) x 1,104(V), 2.14M pixels
D. Scanning System	Progressive
E. Min. Illumination	
1. Color	0.3Lux (1/30sec, F1.6, 50IRE), 0.005Lux (2sec, F1.6, 50IRE) 0.1Lux (1/30sec, F1.6, 30IRE), 0.0005Lux (2sec, F1.6, 30IRE)
2. B/W	0Lux (IR LED on)
F. S/N Ratio	50dB
G. Video Output	CVBS : 1.0 Vpp / 75Ω composite, 720 x 480(N), 720 x 576(P), for installation

2.04 LENS

A. Focal Length (Zoom Ratio)	4.4 ~ 101.2mm (Optical 23x)
B. Max. Aperture Ratio	F1.6(Wide) / F4.5(Tele)
C. Angular Field of View	H : 63.68°(Wide) ~ 3.1°(Tele) V : 37.52°(Wide) ~ 1.76°(Tele)
D. Min. Object Distance	1.5m (4.92ft)
E. Focus Control	AF / One-shot AF / Manual
F. Lens Type	DC auto iris (IR corrected)
G. Mount Type	Board-in type

2.05 PAN/TILT/ROTATE

A. Pan Range	360° Endless
B. Tilt Range	190° (-5° ~185°)
C. Pan/Tilt Speed	Preset : 250°/sec, Manual : 0.024°/sec ~ 120°/sec
D. Sequence Accuracy	Preset (255ea), Swing, Group (6ea), Trace, Tour, Auto run, Schedule
E. Preset Accuracy	±0.2
F. Azimuth	Yes (E / W / S / N / NE / SE / NW / SW OSD)
G. Auto Tracking	Off/On

2.06 OPERATION

A. IR LED	2ea
B. Viewable Length	100m (328.08ft)
C. Camera Title	Off / On (Displayed up to 15 characters)
D. Day & Night	Auto (ICR) / Color / B/W
E. Backlight Compensation	Off / BLC / HLC / 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. Digital Image Stabilization	Off / On
J. Defog	Off / Auto / Manual
K. Motion Detection	Off / On (4ea, Rectangular zones)
L. Privacy Masking	Off / On (32ea, Rectangular zones) - Color : Grey / Green / Red / Blue / Black / White, - Zoom ratio option for mask mode
M. Gain Control	Off / Low / Medium / High / Manual
N. White Balance	ATW / AWC / Manual / Indoor / Outdoor / Mercury / Sodium
O. Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
P. Digital Zoom	16x, area zoom function support digital zoom 2x
Q. Flip / Mirror	Off / On
R. Intelligent Video Analytics	Tampering (Scene change), Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Face detection
S. Alarm I/O	Input 4ea / Output 3ea (Relay type)
T. Remote Control Interface	RS-485/422
U. RS-485 Protocol	Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Vicon, Bosch, GE
V. Alarm Triggers	Alarm input, Motion detection,

W. Alarm Events	Intelligent video analytics, Network disconnect File upload via FTP and E-mail Notification via E-mail Local storage (SD/SDHC/SDXC) or NAS recording at event triggers External output PTZ preset
2.07 NETWORK	
A. Ethernet	RJ-45 (10/100BASE-T)
B. Video Compression Format	H.264 (MPEG-4 Part 10/AVC) : Main / Baseline / High, MJPEG
C. Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 640 x 480, 640 x 360, 320 x 240, 320 x 180
D. Max. Framerate	
1. H.264	Max. 60fps @ all resolutions
2. MJPEG	Max. 15fps @ 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768 Max. 30fps @ 800 x 600, 720 x 576, 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 bitrate 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), Supply voltage : 2.5V DC (4mA), Input impedance : approx. 2K Ohm
J. Audio Out	Line out (3.5mm stereo mini 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 (2-way)
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 (EAP-TLS, EAP-LEAP)
P. Streaming Method	Unicast / Multicast
Q. Max. User Access	15 users at unicast mode

R. Edge Storage	SD/SDHC/SDXC (Up to 128G) Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded NAS (Network Attached Storage), Local PC for instant recording
S. Application Programming interface	ONVIF profile S, SUNAPI (HTTP API), 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	SmartViewer, SSM
2.08 ELECTRICAL	
A. Voltage	24V AC only / 6A
B. Power Consumption	Max. 30W (Heater off) Max. 35W/90W (Heater off/on, IR on)
2.09 ENVIRONMENTAL SPECIFICATIONS	
A. Operating Temperature / Humidity	-50°C ~ +55°C (-58°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
2.10 PHYSICAL SPECIFICATIONS	
A. Dimension	Ø248.0 x 399.5mm (Ø9.76" x 15.73")
B. Weight	7.1Kg (15.65 lb)
C. Color/Material	Ivory / Aluminum
2.11 CERTIFICATIONS	
A. CE mark	
B. FCC mark	
C. UL mark	
2.12 WARRANTY	
A. 3 years, parts and labor.	