

SND-3080 H.264 WDR NETWORK 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.
- D. All systems and components shall be provided with a one-day turnaround repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and nonwarranty items.

2.02 SND-3080 H.264 WDR NETWORK DOME CAMERA

- A. The network camera shall have a 2.8~11mm vari-focal lens and offer real-time 30fps at High Resolution (4CIF).
- B. The camera shall provide video compression in H.264, MPEG-4 and MJPEG multiple encoding. The camera shall include an SD Memory Slot for Internal Recording, and provide alarm input/output.
- C. The camera shall support WDR (Wide Dynamic Range), progressive scan, PoE, XDR (eXtended Dynamic Range), Motion Adaptive Dynamic Noise Reduction, privacy masking, and digital image stabilization.
- D. A model of this camera shall be configured for flush mounting.
- E. The customizable on-screen display (OSD) which shall be available in English, French, Spanish, German, Italian, Chinese and Korean.

2.03 CAMERA

- A. Type Color
- B. Imaging Device Super HAD PS CCD
- C. Size 1/3"
- D. Scan Progressive Scan
- E. Pixels
 - 1. Total NTSC: 811 x 508, PAL: 795 x 596
 - 2. Effective NTSC: 768 x 494, PAL: 752 x 582
- F. Scanning
 - 1. Horizontal (internal mode) NTSC: 15,734Hz, PAL: 15,625Hz
 - 2. Vertical (internal mode) NTSC: 59.94 Hz, PAL: 50 Hz

G. Min. Illumination	
1. Color, Sens off	0.12 Lux (15 IRE), 0.2Lux (30 IRE), 0.4 Lux (50 IRE)
2. Color, Sens up 512x	0.00023 Lux (15 IRE), 0.0005Lux (30 IRE), 0.0008 Lux (50 IRE)
3. Black/White, Sens off	0.12 Lux (15 IRE), 0.2Lux (30 IRE), 0.4 Lux (50 IRE)
4. Black/White, Sens up 512x	0.00023 Lux (15 IRE), 0.00005Lux (30 IRE), 0.00008 Lux (50 IRE)
H. Functions	
1. Number of privacy zones	12 each (4-point polygonal method)
2. Day and Night	Color, B/W, Auto (ICR)
3. eXtended Dynamic Range (XDR)	On, Off level setting
4. Wide Dynamic Range	NTSC: On, Off (128x) PAL, On, Off (160x)
5. Digital zoom	1x~16x (0.1x step)
6. PIP	On, Off
7. Electronic shutter speed	NTSC, 1/60~1/10Ksec PAL 1/50~1/10 Ksec
8. Flickerless	On, Off
9. Sens-up (frame Integration)	2x~512x
10. Backlight compensation	On, Off (area setting)
11. AGC	On, Off (max level setting)
12. White Balance	ATW1, ATW2, AWC, Manual (ATW1: 2,500 ~ 9,500°K ATW2 : 2,000~10,000°K)
13. Digital Noise Reduction	On, Off (adaptive 3D + 2D)
14. Digital Image Stabilization	On, Off
15. Camera ID	On, Off (max 54 each, 2 lines)
16. Additional Features	Detail, Reverse (H/V), Posi/Nega
I. Resolution	
1. Horizontal	600 TV lines
2. Vertical	350 TV lines
J. Video Output	VBS 1.0vp-p
K. S/N Ratio	52Db
L. Lens	
1. Focal Length	2.8 ~ 11mm
2. Zoom ratio	3.9x
3. Aperture ratio	F 1.2
4. Angular Field of View	Horizontal: 94.6°(Wide) ~ 28.8°(Tele) Vertical: 68.4°(Wide) ~ 21.6°(Tele)
5. Drive Type	AI (DC)
6. Mount Type	Board type
M. Power	
1. Power Requirement	Dual (12v DC / 24V AC), PoE
2. Consumption	Max. 8W
3. LED indicator	Yes

2.04 OPERATIONAL SPECIFICATIONS

A. Operating System	Embedded Linux
B. Network Board Hardware	
1. Flash Memory	32 Mbyte
2. RAM	256 Mbyte
3. Ethernet	RJ-45 (10/100 Base-T)
4. Video Out	VBS 1.0Vp-p
5. Audio	N/A
6. SD Memory Slot	Yes (SD, SDHC)
7. PoE	Yes (IEEE802.3af)

C. Alarm	2 input, 2 output
D. Video	
1. Compression	H.264, MPEG-4, MJPEG Multiple codec (H.264, MPEG-4 selectable) simultaneous dual streaming
2. Resolution 4CIF	NTSC 704 x 480, PAL 704 x 576
3. Resolution VGA	640 x 480
4. Resolution CIF	NTSC 352 x 240, PAL 352 x 288
5. Max. Frame Rate	NTSC 30, 15, 8, 3, 1fps PAL: 25, 13, 6, 3, 1fps
6. Quality	1 ~ 10 level (CBR, VBR)
E. Audio	
1. Compression	NA
2. Bi-Directional Communication	NA
F. OSD Camera Control & Adjustment	OSD Menu on video (menu enter/exit, move by Web UI)
G. Motion Detection Sensitivity and Area Setting	High, Medium, Low
H. Network Protocol	
1. IPv4	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
2. IPv6	TCP/IP, HTTP, HTTPS, SSL, DHCP
3. Streaming	Unicast, Multicast
4. Security	HTTPS (SSL) login authentication, Digest login authentication, IP address filtering
5. DDNS	Supporting Samsung DDNS and public DDNS services
6. Maximum user access	10 users in Unicast mode, 20 users in Multicast mode
I. User Access Level	
1. Administrator	Live monitoring, Alarm I/O control, OSD menu control, and set up
2. Operator	Live monitoring, Alarm I/O control
3. User	Live monitoring
J. Event management	
1. Alarm Input	JPEG image transfer: FTP JPEG image recording: SD memory
2. Motion detection	To viewer or by e-mail (1 image attachment), Alarm out
3. Schedule	JPEG image transfer: FTP, E-mail JPEG image recording: SD memory
K. Web Browser Viewer	
1. Supported OS	Windows XP, Windows Vista, Windows 7
2. Supported Browser	Internet Explorer 6 or higher
3. UI Language	English, French, German, Spanish, Italian, Chinese and Korean
4. S/W Upgrade	Using web viewer UI
L. Video Player RTP/RTSP streaming	QuickTime, VLC player
M. Video Management Software	Samsung CMS, third-party application
N. Application	IP installer application for all Samsung IP devices
O. SDK	
1. HTTP API	CGI command: Provides functionality to control cameras and set/retrieve internal parameter values. Get JPEG image or MJPEG stream, Alarm in/out control
2. RTP/RTSP API	RTP header, RTSP command document
3. Active X API	ActiveX for viewing data streams from IP camera

2.05 ENVIRONMENTAL SPECIFICATIONS

- A. Operating Temperature -0°C ~ +50°C (+32°F ~ +122°F)
- B. Operating Humidity 0% ~ 90% RH

2.06 PHYSICAL SPECIFICATIONS

- A. Dimension
 - 1. SND-3080 Ø133 x 129.4mm (Ø5.24" x 5.09")
 - 2. SND-3080F Ø159.9 x 126mm (Ø6.3" x 4.96")
- B. Weight
 - 1. SND-3080 523g (1.15 lb)
 - 2. SND-3080F 650g (1.43 lb)
- C. Color White
- D. Case Plastic

2.07 CERTIFICATIONS

- A. UL Listed
- B. UL Listed to Canadian safety standards
- C. CE mark
- D. FCC mark

2.08 WARRANTY

- A. 3 years, parts and labor.