

iPOLiS

iPOLiS

H.264 A1 Network Camera

- SNB-2000
- SNB-3000
- SND-3080(F)
- SNV-3080



The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Design and specifications are subject to change without notice.



SAMSUNG TECHWIN CO., LTD.
 Samsungtechwin R&D Center, 701, Sampyeong-dong, Bundang-gu, Seongnam-si, Gyeonggi-do Korea 463-400
 Tel: +82-70-7147-8741 ~ 8749 Fax: +82-70-7147-8752 ~ 8760 Fax: +82-31-8018-3745
 www.samsungsecurity.com www.samsungcctv.com

SAMSUNG TECHWIN AMERICA Inc.
 1480 Charles Willard St, Carson, CA 90746, UNITED STATES
 Toll Free: +1-877-213-1222 Fax: +1-310-632-2195
 www.samsungcctvusa.com

SAMSUNG TECHWIN EUROPE LTD.
 Samsung House, 1000 Hillswood Drive, Hillswood Business Park
 Chertsey, Surrey, UNITED KINGDOM KT16 0PS
 Tel: +44-1932-45-5300 Fax: +44-1932-45-5325

TIANJIN SAMSUNG TECHWIN OPTO-ELECTRONICS CO., LTD.
 No.11 Wei 6 Street, Micro-Electronic Industrial Park
 Jingang Road, Tianjin, P.R. CHINA 300385
 Tel: +86-22-23887788 Fax: +86-22-23887788

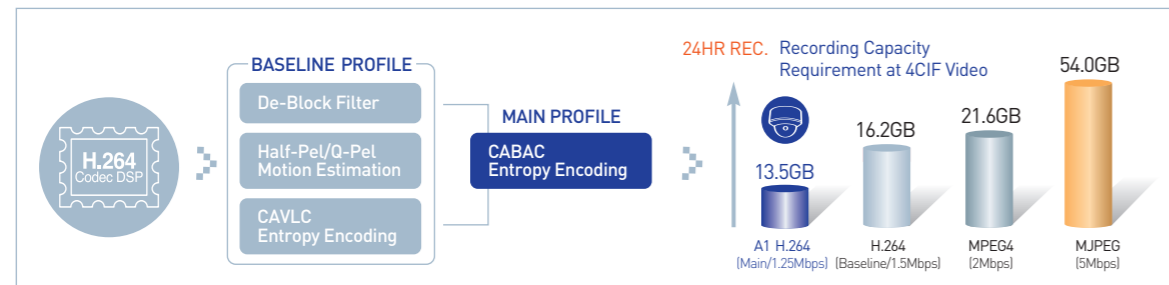
■ DISTRIBUTED BY

FC  

M.E-1003

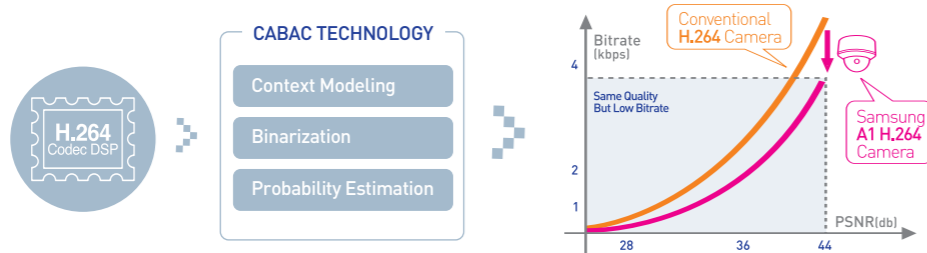
www.samsungipolis.com

High Performance H.264 Compression



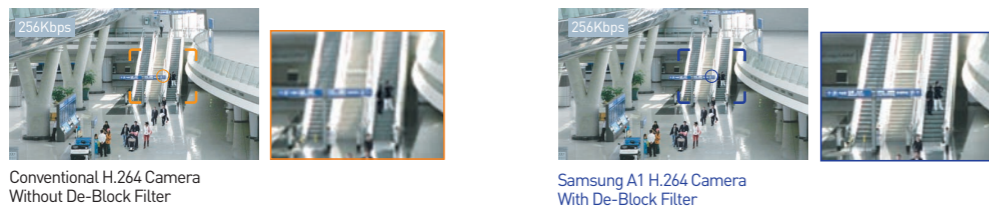
CABAC Entropy coding Technology

Samsung A1 Network Camera has adopted the H.264 CABAC Entropy Coding Technology, so the H.264 performance is more enhanced than normal H.264 compression methods. With CABAC technology, Samsung network camera will provide a significant benefit to network transmitting with far less bandwidth usage.



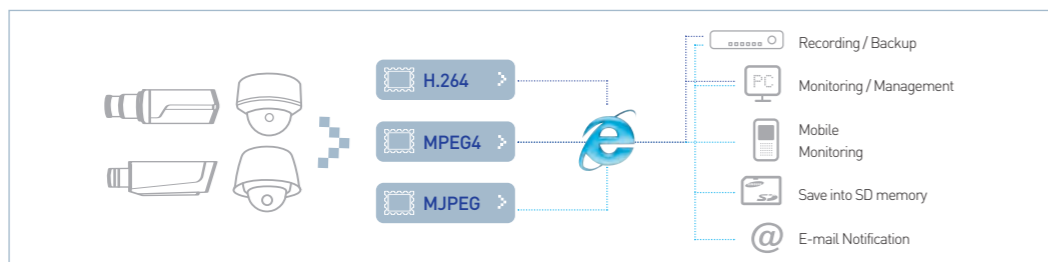
De-block Filter

The De-Block Filter technology allows Samsung A1 Network Cameras to guarantee perfect image quality when transmitting low bit rate video through a narrow bandwidth network, by minimizing the block noise that occurs when highly compressed video is sent over a low speed bandwidth network.



Multi-Codect & Multi-Usage

The Multi Streaming feature means that H.264 or MPEG4 and MJPEG can be transmitted simultaneously, enabling real-time monitoring, high-quality or high efficiency recording, mobile monitoring, E-mail notification and saving to SD memory.



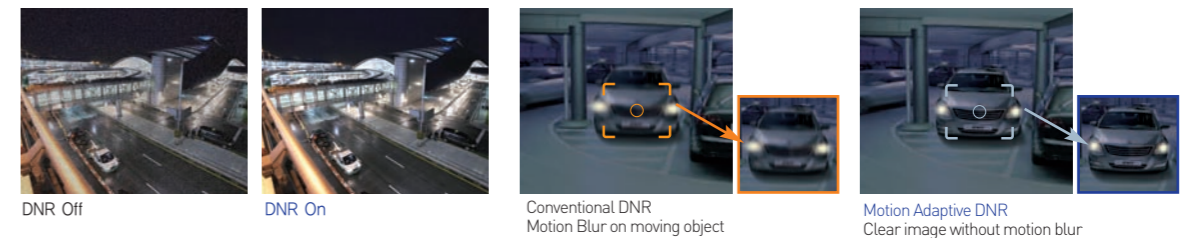
Super High-Resolution-600TVL

Samsung A1 network cameras offer the best quality digital image by using Samsung Techwin's industry leading video/image processing technology.



Motion Adaptive Digital Noise Reduction

A1 DNR technology utilizes Motion Adaptive DNR, this combines an adaptive 2D filter to reduce noise in the brightness of the image and an adaptive 3D filter that reduces the noise caused by movement greatly reducing motion blur.



eXtended Dynamic Range (XDR)

Samsung A1 Network Camera provides XDR (eXtended Dynamic Range) technology to increase the level of visible detail in the dark areas, while maintaining image clarity and detail in the brighter portions of the image.



Progressive Scan Network Camera

Samsung A1 Network Camera's progressive scan technology allows for the capture of noiseless, high-quality video of moving subjects.



SNB-2000

1/3" H.264 Network Camera



- Real-time 30(25)fps at High Resolution(4CIF)
- H.264, MPEG-4 & MJPEG Multiple Encoding
- Progressive Scan
- XDR (eXtended Dynamic Range)
- Motion Adaptive DNR (Dynamic Noise Reduction)
- Privacy Mask (12ea)
- DIS (Digital Image Stabilizer)
- DDNS support, HTTPS security support
- IPv4/IPv6 support
- Standard RTP/RTSP support
- PoE (Power over Ethernet)



SNB-3000

1/3" H.264 WDR Network Camera



- Real-time 30(25)fps at High Resolution(4CIF)
- H.264, MPEG-4 & MJPEG Multiple Encoding
- Progressive Scan
- Day & Night Function(IR Cut Filter)
- WDR (Wide Dynamic Range)
- Bi-directional Audio Support
- SD Memory Slot for Internal Recording
- Intelligent Video Analytics
- XDR (eXtended Dynamic Range)
- Motion Adaptive DNR (Dynamic Noise Reduction)
- Privacy Mask (12ea)
- DIS (Digital Image Stabilizer)
- PoE (Power over Ethernet)

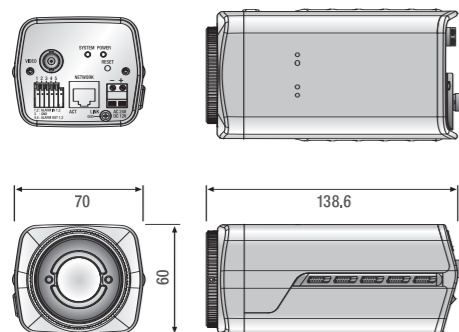


Technical Specifications

Camera	SNB-2000		
Camera Type	Color / B/W	Color	
Device	Super HAD PS CCD		
Image Size	1/3"		
Scan	Progressive Scan		
Pixels	Total	NTSC : 811 x 508 / PAL : 795 x 596	
	Effective	NTSC : 768 x 494 / PAL : 752 x 582	
Horizontal Frequency	Internal Mode	NTSC : 15.734Hz	
	Internal Mode	PAL : 15.625Hz	
Vertical Frequency	Internal Mode	NTSC : 59.94Hz	
	Internal Mode	PAL : 50Hz	
Min. Scene Illumination	Color	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)	
	B/W	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)	
Functions	Number of Privacy Zone	12ea (Polygonal method)	
	Day & Night	Color / B/W / Auto (Soft method)	
	eXtended Dynamic Range(XDR)	On / Off (Level setting)	
	Wide Dynamic Range	N/A	
	Digital Zoom	1x ~ 16x (0.1x step)	
	PIP	On / Off	
	Electronic Shutter Speed	NTSC : 1/60 ~ 1/10Ksec / PAL : 1/50 ~ 1/10Ksec	
	Sens-up (Frame Integration)	2x ~ 512x	
	Backlight Compensation	On / Off (Area setting)	
	White Balance	ATW1 / ATW2 / AWC / 3200K° / 5600K°	
Resolution	Horizontal / Vertical	600TV lines / 350TV lines	
	Video Output	VBS 1.0Vp-p	
	S/N Ratio	52dB	
	Lens	Lens Drive Type	Manual / AI (VIDEO / DC)
		Mount Type	CS / C
	Environmental Conditions	Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)
		Operating Humidity	0% ~ 90% RH
	Power	Power Requirement	Dual (12V DC / 24V AC), PoE
		Power Consumption	Max. 7W
	Physical Specification	LED Indicator	Yes
Dimensions (WxHxD)		72 x 60 x 138.6mm (2.83" x 2.36" x 5.46")	

Network	SNB-2000	
OS	OS	Embedded Linux
	Flash memory	32M byte
RAM	RAM	256M byte
	Ethernet	RJ-45 (10/100 Base-T)
Video Out	Video Out	VBS 1.0Vp-p
	Audio	N/A
SD Memory Slot	SD Memory Slot	N/A
	PoE	Yes (IEEE802.3af)
Input / Output	Input / Output	2ea / 2ea
	Compression	H.264 / MPEG-4 / MJPEG Multiple codec (H.264 / MPEG-4 selectable)simultaneous dual streaming
Resolution	4CIF	NTSC : 704 x 480 / PAL : 704 x 576
	VGA	640 x 480
CIF	CIF	NTSC : 352 x 240 / PAL : 352 x 288
	Max. Frame Rate	NTSC : 30, 15, 8, 3, 1fps / PAL : 25, 13, 6, 3, 1fps
Quality	Quality	1 ~ 10 level (CBR / VBR)
	Compression	N/A
Bi-Directional Communication	Bi-Directional Communication	N/A
	OSD	OSD menu on video (Menu enter/exit, move by Web UI)
Sensitivity and Area Setting	Sensitivity and Area Setting	High / Medium / Low
	Intelligent Video Analytics	N/A
IP	IP	IPv4 / IPv6
	Network 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
Streaming	Streaming	Unicast, Multicast
	Security	HTTPS (SSL) login authentication, Digest login authentication, IP address filtering
DDNS	DDNS	Supporting samsung DDNS and public DDNS services
	Maximum User Access	Max. 10 users at Unicast mode, Max. 20 users at Multicast mode
Administrator	Administrator	Live monitoring, Alarm I/O control, OSD menu control, Set up
	Operator	Live monitoring, Alarm I/O control
User	User	Live monitoring
	Alarm Input	JPEG image transfer : FTP, JPEG image recording : SD memory
Motion Detection	Motion Detection	Notification : notify to viewer or by E-mail (one image attachment)
	Schedule	Alarm out
Supported OS	Supported OS	Windows XP, VISTA, 7
	Supported Browser	Internet Explorer 6.0 or higher
UI Language	UI Language	English, French, German, Spanish, Italian, Chinese, Korean
	S/W Upgrade	Using web viewer UI
RTP / RTSP Streaming	RTP / RTSP Streaming	Quicktime, VLC player
	Video Management Software	Samsung CMS S/W, 3rd party S/W application
IP Installation	IP Installation	IP installer application for all Samsung IP devices
	HTTP API	CGI Command
RTP/RTSP API	RTP/RTSP API	Provides functionality to control cameras and set/retrieve internal parameter values
	ActiveX	SDK
ActiveX	ActiveX	Get JPEG image or MJPEG stream, Alarm in/out control
	SDK	RTP header, RTSP command document
ActiveX	ActiveX	Provides functionality to control cameras and set/retrieve internal parameter values
	SDK	Get JPEG image or MJPEG stream, Alarm in/out control

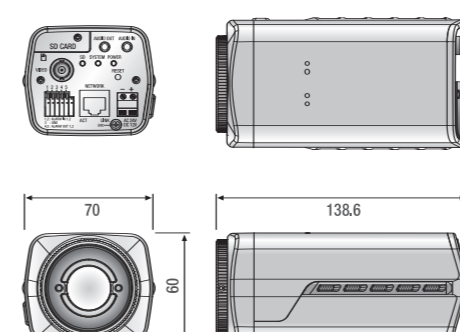
Dimensions



Technical Specifications

Camera	SNB-3000		
Camera Type	Color / B/W	Color	
Device	Super HAD PS CCD		
Image Size	1/3"		
Scan	Progressive Scan (* When WDR on, Interlaced scan)		
Pixels	Total	NTSC : 811 x 508 / PAL : 795 x 596	
	Effective	NTSC : 768 x 494 / PAL : 752 x 582	
Horizontal Frequency	Internal Mode	NTSC : 15.734Hz	
	Internal Mode	PAL : 15.625Hz	
Vertical Frequency	Internal Mode	NTSC : 59.94Hz	
	Internal Mode	PAL : 50Hz	
Min. Scene Illumination	Color	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)	
	B/W	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)	
Functions	Number of Privacy Zone	12ea (4-point polygonal method)	
	Day & Night	Color / B/W / Auto (ICR)	
	eXtended Dynamic Range (XDR)	On / Off (Level setting)	
	Wide Dynamic Range	NTSC : On / Off (128x) / PAL : On / Off (160x)	
	Digital Zoom	1x ~ 16x (0.1x step)	
	PIP	On / Off	
	Electronic Shutter Speed	NTSC : 1/60 ~ 1/10Ksec / PAL : 1/50 ~ 1/10Ksec	
	Sens-up (Frame Integration)	2x ~ 512x	
	Backlight Compensation	On / Off (Area setting)	
	White Balance	ATW1 / ATW2 / AWC / 3200K° / 5600K°	
Resolution	Horizontal / Vertical	600TV lines / 350TV lines	
	Video Output	VBS 1.0Vp-p	
	S/N Ratio	52dB	
	Lens	Lens Drive Type	Manual / AI (VIDEO / DC)
		Mount Type	CS / C
	Environmental Conditions	Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)
		Operating Humidity	0% ~ 90% RH
	Power	Power Requirement	Dual (12V DC / 24V AC), PoE
		Power Consumption	Max. 8W
	Physical Specification	LED Indicator	Yes
Dimensions (WxHxD)		72 x 60 x 138.6mm (2.83" x 2.36" x 5.46")	

Dimensions



Network	SNB-3000	
OS	OS	Embedded Linux
	Flash memory	32M byte
RAM	RAM	256M byte
	Ethernet	RJ-45 (10/100 Base-T)
Video Out	Video Out	VBS 1.0Vp-p
	Audio	Line in / Line out
SD Memory Slot	SD Memory Slot	Yes (SD / SDHC)
	PoE	Yes (IEEE802.3af)
Input / Output	Input / Output	2ea / 2ea
	Compression	H.264 / MPEG-4 / MJPEG Multiple codec (H.264 / MPEG-4 selectable)simultaneous dual stream
Resolution	4CIF	NTSC : 704 x 480 / PAL : 704 x 576
	VGA	640 x 480
CIF	CIF	NTSC : 352 x 240 / PAL : 352 x 288
	Max. Frame Rate	NTSC : 30, 15, 8, 3, 1fps / PAL : 25, 13, 6, 3, 1fps
Quality	Quality	1 ~ 10 level (CBR / VBR)
	Compression	G.711
Bi-Directional Communication	Bi-Directional Communication	Yes
	OSD	OSD menu on video (Menu enter/exit, move by Web UI)
Sensitivity and Area Setting	Sensitivity and Area Setting	Scene change, Virtual line, Enter/Exit, Appear/Disappear
	Intelligent Video Analytics	IPV4 / IPV6
IP	IP	IPv4 / IPv6
	Network 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
Streaming	Streaming	Unicast, Multicast
	Security	HTTPS (SSL) login authentication, Digest login authentication, IP address filtering
DDNS	DDNS	Supporting samsung DDNS and public DDNS services
	Maximum User Access	Max. 10 users at Unicast mode, Max. 20 users at Multicast mode
Administrator	Administrator	Live monitoring, Alarm I/O control, OSD menu control, Set up
	Operator	Live monitoring, Alarm I/O control
User	User	Live monitoring
	Alarm Input	JPEG image transfer : FTP, JPEG image recording : SD memory
Motion Detection	Motion Detection	Notification : notify to viewer or by E-mail (one image attachment), Alarm out
	Schedule	JPEG image transfer : FTP, E-mail, JPEG image recording : SD memory
Supported OS	Supported OS	Windows XP, VISTA, 7
	Supported Browser	Internet Explorer 6.0 or higher
UI Language	UI Language	English, French, German, Spanish, Italian, Chinese, Korean
	S/W Upgrade	Using web viewer UI
RTP / RTSP Streaming	RTP / RTSP Streaming	Quicktime, VLC player
	Video Management Software	Samsung CMS S/W, 3rd party S/W application
IP Installation	IP Installation	IP installer application for all Samsung IP devices
	HTTP API	CGI Command
RTP/RTSP API	RTP/RTSP API	Provides functionality to control cameras and set/retrieve internal parameter values
	ActiveX	SDK
ActiveX	ActiveX	Get JPEG image or MJPEG stream, Alarm in/out control
	SDK	RTP header, RTSP command document
ActiveX	ActiveX	Provides functionality to control cameras and set/retrieve internal parameter values
	SDK	Get JPEG image or MJPEG stream, Alarm in/out control

SND-3080(F)

H.264 WDR Network Dome Camera

SNV-3080

H.264 Anti-Vandal WDR Network Dome Camera



- 2.8~11mm Vari-Focal Lens
- Real-time 30[25]ips at High Resolution[4CIF]
- H.264, MPEG-4 & MJPEG Multiple Encoding
- Progressive Scan
- WDR (Wide Dynamic Range)
- SD Memory Slot for Internal Recording
- XDR (eXtended Dynamic Range)
- Motion Adaptive DNR (Dynamic Noise Reduction)
- Privacy Mask (12ea)
- DIS (Digital Image Stabilizer)
- PoE (Power over Ethernet)

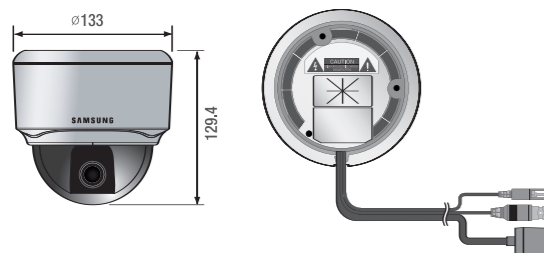


- 2.8~11mm Vari-Focal Lens
- Fan/Heater built-in for Outdoor Installation
- Real-time 30[25]ips at High Resolution[4CIF]
- H.264, MPEG-4 & MJPEG Multiple Encoding
- Progressive Scan
- WDR (Wide Dynamic Range)
- Day & Night Function (IR Cut Filter)
- Bi-directional Audio Support
- SD Memory Slot for Internal Recording
- Intelligent Video Analytics
- XDR (eXtended Dynamic Range)
- Motion Adaptive DNR (Dynamic Noise Reduction)
- Privacy Mask (12ea)
- DIS (Digital Image Stabilizer)
- PoE (Power over Ethernet)
- IP66

Technical Specifications

Camera	SND-3080/3080F	
Camera Type	Color / B/W	Color
Device		Super HAD PS CCD
Size		1/3"
Image	Scan	Progressive Scan
	Horizontal	NTSC : 811 x 508 / PAL : 795 x 596
Pixels	Total Effective	NTSC : 768 x 494 / PAL : 752 x 582
	Internal Mode	NTSC : 15,734Hz
Scanning	Vertical Frequency	PAL : 15,625Hz
	Internal Mode	NTSC : 59.94Hz
Min. Scene Illumination	Color	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)
	Sens-up 512x	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)
	Sens-off	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)
	Sens-up 512x	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)
Functions	Number of Privacy Zone	12ea (Polygonal method)
	Day & Night	Color / B/W / Auto (Soft method)
	eXtended Dynamic Range (XDR)	On / Off (Level setting)
	Wide Dynamic Range	NTSC : On / Off (128x) / PAL : On / Off (160x)
	Digital Zoom	1x ~ 16x (0.1x step)
	PIP	On / Off
	Electronic Shutter Speed	NTSC : 1/60 ~ 1/10Ksec / PAL : 1/50 ~ 1/10Ksec
	Flickerless	On / Off
	Sens-up (Frame Integration)	2x ~ 512x
	Backlight Compensation	On / Off (Area setting)
	AGC	On / Off (Max. level setting)
	White Balance	ATW1 / ATW2 / AWC / Manual
	Digital Noise Reduction	On / Off (Adaptive 3D + 2D)
	Digital Image Stabilization	On / Off
	Camera ID	On / Off (Max. 54ea / 2 line)
Etc. Function	Detail, Reverse (H/V), Posi/Nega	
Resolution	Horizontal / Vertical	600TV lines / 350TV lines
	Video Output	VBS 1.0Vp-p
S/N Ratio		52dB
	Focal Length	2.8 ~ 11mm
	Zoom Ratio	3.9x
Lens	Aperature Ratio	F1.2
	Angular Field of View	H : 94.6°(Wide) ~ 28.8°(Tele) / V : 68.4°(Wide) ~ 21.6°(Tele)
	Mount Type	AI (DC)
Environmental Conditions	Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)
	Operating Humidity	0% ~ 90% RH
Power	Power Requirement	Dual (12V DC / 24V AC), PoE
	Power Consumption	Max. 8W
Physical Specification	LED Indicator	Yes
	Dimensions (WxH)	SND-3080 : 0133 x 129.4mm (05.24" x 5.09") SND-3080F : 0159.9 x 126mm (06.3" x 4.96") SND-3080 : 523g (1.15 lb) / SND-3080F : 650g (1.43 lb)
Weight		
Color / Case		White / Plastic

Dimensions

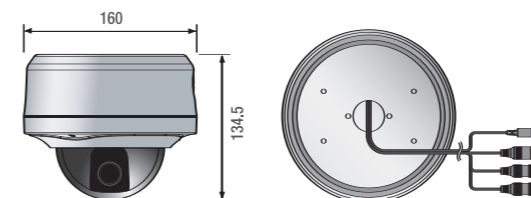


Network	SND-3080/3080F	
OS		Embedded Linux
	Flash memory	32M byte
RAM		256M byte
	Ethernet	RJ-45 (10/100 Base-T)
Network Board	Video Out	VBS 1.0Vp-p
	Audio	N/A
	SD Memory Slot	Yes (SD / SDHC)
	PoE	Yes (IEEE802.3af)
Alarm	Input / Output	2ea / 2ea
	Compression	H.264 / MPEG-4 / MJPEG Multiple codec (H.264 / MPEG-4 selectable) simultaneous dual streaming
Video	4CIF	NTSC : 704 x 480 / PAL : 704 x 576
	Resolution	VGA 640 x 480
	CIF	NTSC : 352 x 240 / PAL : 352 x 288
	Max. Frame Rate	NTSC : 30, 15, 8, 3, 1fps / PAL : 25, 13, 6, 3, 1fps
Quality		1 ~ 10 level (CBR / VBR)
	Compression	N/A
Audio	Bi-Directional Communication	N/A
	Camera Control and Adjustment	OSD menu on video (Menu enter/exit, move by Web UI)
Motion Detection	Sensitivity and Area Setting	High / Medium / Low
	IP	IPv4 / IPv6
Protocol	Network	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP
	Protocol	IPv6
Streaming		PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3 (MIB-2), ARP, DNS, DDNS
		TCP/IP, HTTP, HTTPS, SSL, DHCP
Security	Unicast, Multicast	
	DDNS	Supporting samsung DDNS and public DDNS services
Maximum User Access		Max. 10 users at Unicast mode, Max. 20 users at Multicast mode
	User Access	Administrator
Level	Operator	Live monitoring, Alarm I/O control, OSD menu control, Set up
	User	Live monitoring, Alarm I/O control
Event Management	Alarm Input	JPEG image transfer : FTP, JPEG image recording : SD memory
	Motion Detection	Notification : notify to viewer or by E-mail (one image attachment), Alarm out
Schedule		JPEG image transfer : FTP, E-mail, JPEG image recording : SD memory
	Supported OS	Windows XP, VISTA, 7
Web Browser	Supported Browser	Internet Explorer 6.0 or higher
	UI Language	English, French, German, Spanish, Italian, Chinese, Korean
S/W Upgrade		Using web viewer UI
	RTP / RTSP Streaming	Quicktime, VLC player
Video Management Software		Samsung CMS S/W, 3rd party S/W application
	Application	IP installation application for all Samsung IP devices
SDK	HTTP API	CGI Command
	RTP/RTSP API	Provides functionality to control cameras and set/retrieve internal parameter values
	ActiveX	Get JPEG image or MJPEG stream, Alarm in/out control
	SDK	RTP header, RTSP command document

Technical Specifications

Camera	SNV-3080	
Camera Type	Color / B/W	Color
Device		Super HAD PS CCD
Size		1/3"
Image	Scan	Progressive Scan (When WDR on, Interlaced Scan)
	Horizontal	NTSC : 811 x 508 / PAL : 795 x 596
Pixels	Total Effective	NTSC : 768 x 494 / PAL : 752 x 582
	Internal Mode	NTSC : 15,734Hz
Scanning	Vertical Frequency	PAL : 15,625Hz
	Internal Mode	NTSC : 59.94Hz
Min. Scene Illumination	Color	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)
	Sens-up 512x	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)
	Sens-off	0.12Lux (15 IRE) / 0.2Lux (30 IRE) / 0.4Lux (50 IRE)
	Sens-up 512x	0.00023Lux (15 IRE) / 0.0005Lux (30 IRE) / 0.0008Lux (50 IRE)
Functions	Number of Privacy Zone	12ea (4-point polygonal method)
	Day & Night	Color / B/W / Auto (ICR)
	eXtended Dynamic Range (XDR)	On / Off (Level setting)
	Wide Dynamic Range	NTSC : On / Off (128x) / PAL : On / Off (160x)
	Digital Zoom	1x ~ 16x (0.1x step)
	PIP	On / Off
	Electronic Shutter Speed	NTSC : 1/60 ~ 1/10Ksec / PAL : 1/50 ~ 1/10Ksec
	Flickerless	On / Off
	Sens-up (Frame Integration)	2x ~ 512x
	Backlight Compensation	On / Off (Area setting)
	AGC	On / Off (Max. level setting)
	White Balance	ATW1 / ATW2 / AWC / Manual (ATW1 : 2,500 ~ 9,500°K, ATW2 : 2,000 ~ 10,000°K)
	Digital Noise Reduction	On / Off (Adaptive 3D + 2D)
	Digital Image Stabilization	On / Off
	Camera ID	On / Off (Max. 54ea / 2 line)
Etc. Function	Detail, Reverse (H/V), Posi/Nega, PIP	
Resolution	Horizontal / Vertical	600TV lines / 350TV lines
	Video Output	VBS 1.0Vp-p
S/N Ratio		52dB
	Focal Length	2.8 ~ 11mm
	Zoom Ratio	3.9x
Lens	Aperature Ratio	F1.2
	Angular Field of View	H : 94.6°(Wide) ~ 28.8°(Tele) / V : 68.4°(Wide) ~ 21.6°(Tele)
	Mount Type	AI (DC)
Environmental Conditions	Operating Temperature	-40°C ~ +50°C (Built-in fan/heater)
	Operating Humidity	0% ~ 90% RH (Waterproof)
Power	Power Requirement	Dual (12V DC / 24V AC), PoE
	Power Consumption	Max. 8W (Heater off) / Max. 11W (Heater on)
Physical Specification	LED Indicator	Yes
	Dimensions (WxH)	0160 x 134.5mm (6.3" x 5.3")
Weight		1.28Kg (2.82 lb)
Color / Case		White Grey / Aluminum (IP66)

Dimensions



Network	SNV-3080	
OS		Embedded Linux
	Flash memory	32M byte
RAM		256M byte
	Ethernet	RJ-45 (10/100 Base-T)
Network Board	Video Out	VBS 1.0Vp-p
	Audio	Line in / Line out
	SD Memory Slot	Yes (SD / SDHC)
	PoE	Yes (IEEE802.3af)
Alarm	Input / Output	2ea / 2ea
	Compression	H.264 / MPEG-4 / MJPEG Multiple codec (H.264 / MPEG-4 selectable) simultaneous dual streaming
Video	4CIF	NTSC : 704 x 480 / PAL : 704 x 576
	Resolution	VGA 640 x 480
	CIF	NTSC : 352 x 240 / PAL : 352 x 288
	Max. Frame Rate	NTSC : 30, 15, 8, 3, 1fps / PAL : 25, 13, 6, 3, 1fps
Quality		1 ~ 10 level (CBR / VBR)
	Compression	G.711
Audio	Bi-Directional Communication	Yes
	Camera Control and Adjustment	OSD menu on video (Menu enter/exit, move by Web UI)
Intelligent Video Analytics		Scene change, Virtual line, Enter/Exit, Appear/Disappear
	IP	IPv4 / IPv6
Protocol	Network	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP
	Protocol	IPv6
Streaming		PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3 (MIB-2), ARP, DNS, DDNS
		TCP/IP, HTTP, HTTPS, SSL, DHCP
Security	Unicast, Multicast	
	DDNS	Supporting samsung DDNS and public DDNS services
Maximum User Access		Max. 10 users at Unicast mode, Max. 20 users at Multicast mode
	User Access	Administrator
Level	Operator	Live monitoring, Alarm I/O control, OSD menu control, Set up
	User	Live monitoring, Alarm I/O control
Event Management	Alarm Input	JPEG image transfer : FTP, JPEG image recording : SD memory
	Intelligent Video Detection	Notification : notify to viewer or by E-mail (one image attachment), Alarm out
Schedule		JPEG image transfer : FTP, E-mail, JPEG image recording : SD memory
	Supported OS	Windows XP, VISTA, 7
Web Browser	Supported Browser	Internet Explorer 6.0 or higher
	UI Language	English, French, German, Spanish, Italian, Chinese, Korean
S/W Upgrade		Using web viewer UI
	RTP / RTSP Streaming	Quicktime, VLC player
Video Management Software		Samsung CMS S/W, 3rd party S/W application
	Application	IP installation application for all Samsung IP devices
SDK	HTTP API	CGI Command
	RTP/RTSP API	Provides functionality to control cameras and set/retrieve internal parameter values
	ActiveX	Get JPEG image or MJPEG stream, Alarm in/out control
	SDK	RTP header, RTSP command document