SSM (Samsung Security Manager)

Central Management Software

SAMSUNG SECURITY MANAGER (VERSION : 1.1)		
Video	Supported Format	H.264, MPEG-4, MJPEG
	Supported Resolution	Depending on the device
Audio	Supported Format	G.711 u-law (PCM), G.723, G.726 (ADPCM)
	Functions	Bi-directional audio (Listen / Talk)
Live Monitoring	Multi-monito	Up to 4 monitors (Follow the recommended system requirement)
	Split-screen Mode	4 : 3 screen modes : 1, 4, 6, 8, 9, 10, 13, 16, 17, 21, 25, 36, 49, 64 16 : 9 screen modes : 6, 12, 20, 30 Full screen mode * While in multi-monitor environment, layouts and split modes for less than 100 channels will be available.
	Sequence Mode	Up to 16-splits per monitor
	PTZ Control	Area zoom, Go to 1x zoom, PTZ sensitivity, Zoom, Patrol, Swing / Autopan, Group / Scan, Trace / Pattern, Preset, Iris control
	360-degree Viewing	Area zoom, Go to 1x zoom, PTZ sensitivity, Zoom, Preset, PTZ / Perimeter / Quad mode (*Need to ImmerVision enables panomorph lens or SNF-7010 model)
	Map Monitoring	Split view mode for map layout, 2D view, Zoom in/out, Video popup (Instant viewer), Camera / Sensor / Alarm icons on the map
	Simple Recording	Recording of the selected video tile up to 1hour
	Functions	OSD on/off, Snapshot/prints image, Brightness/contrast control, Keep aspect ratio/original size, Deinterlacing, Flip, Digital zoom
Search & Playback	Search Mode	Date, Event, Smart search, POS search based on DVR, NVR, Local folder
	Split-screen Mode	Up to 16 cameras can be played simultaneously
	Video Control	Start/stop, Pause, Faster forward/backward, Step forward/backward, Skip forward/backward
	Functions	Snapshot / Prints image, Digital zoom
	Back up	Local storage, Back up format (AVI, SEC)Configurable schedule for backup (*Supported model only)
Event Monitoring	Real-time Event List	Shows real-time event list of the device (Event status, type, device, user,time(PC)), Viewing instant video image
	Searching Events	SSM : User, System / Device : System, Camera, Sensor, Alarm out Camera : Video Loss, Motion, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face detection, Audio detection
	Reporting	Manual report (Show events and statistics), Print & save function, Format (Excel, PDF, Word)
	Confirming	Set alarm details normal / abnormal / etc, Confirm action
	History	The confirmed details of the selected event from the list
	Instant Viewer	Display the selecting camera, Confirm the event, Record event remarks and end the event status
	Instant Player	Plays the corresponding camera's video image
	Event Action	Define various system actions (output) for events (input) from devices, Action (output) types : Instant viewer, Preset, Alarm out, Pop-up, Sound and e-mail notification
CONFIGURATION		
Site / User Management		Site / user group / user account management, Permission management for viewer functions
Device Management		Automatic device IP scanning, Viewing the device settings (Device webpage),Exporting / Importing devices settings, Updating the device firmware
Screen Management	Layouts	Setting / Adding / Deleting layouts, Map / Video layout
	Monitor	Multi monitor, Split screen, Sequence, Using i-frame, Using low-resolution, Deblocking
Environment		OSD display, Date/time, Capture, Recording, Start up, Language, UI auto lock, Log
System Settings		Backup/Restore SSM setups, Restore the default settings
Time Synchronization		NTP server, Client
Update		Automatic self upgrade (Connection to Samsung upgrade server)
GENERAL		
Supported Devices		Samsung's N/W camera, Encoder, DVR / NVR
Max. Number of Media Gateways per System		Default 4 media gateway
Max. Number of Cameras per Media Gateway		N/W camera 72CH or DVR / NVR 288CH (36ea)
Max. Number of Clients per MediaGateway		5 clients
Modules		System manager, Media gateway, Console, Service manager, Schedule back up
Language		Total 23 languages support English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Swedish, Danish, Finnish,Norwegian
System Requirement	Recommended	CPU Intel i7 (Sandy bridge) above RAM 4GB above, Video memory 1GB above, HDD more than 20GB of free space for installation. (For operation, the system log database requires 10GB or more free space.), DirectX 8.1 above. Display resolution : 1,280 x 1,024 above, OpenGL compatible
	Minimum	CPU Intel Core 2 Duo 2.83 GHz above, RAM 2GB above, Video memory 512MB
	Operating System	Console (Windows XP 32bit, Windows 7 32/64bit, Windows 8 32/64bit) System mananger, Media gateway (Windows XP 32bit, Windows 7 32/64bit, Windows 8 32/64bit, Windows server 2003, Windows server 2008)

* The entire items are not supported in every device. Some items are not supported in certain devices.

Design and specifications are subject to change without notice.

Samsung unified video surveillance platform

Samsung Video Surveillance Management System

To maximize the benefits of network video surveillance solutions through an integrated management software while minimizing complexity

SSM (Samsung Security Manager)

SAMSUNG TOTAL MANAGEMENT SOFTWARE

SSM is a one-stop management software platform that maximizes the efficiency of Samsung's network products (including network cameras, encoders, DVRs and NVRs). The client-server architecture features stable video surveillance system management through multi-site and multi-client configuration. Access to the live/recorded videos is extremely easy from remote sites making it suitable for medium to large-scale multi site applications.

SSM Features

- **Samsung network solution is the ideal choice for a total management system**
  Samsung Techwin's video surveillance products (network cameras, encoders, DVRs and NVRs) are effortlessly managed from a single SSM platform. The SSM is provided free of charge and is ideally suited to optimize the performance and management of Samsung network products.

- **Efficient management via Multi-site & Multi-client configuration**
  Numerous clients can administer video surveillance products installed across multiple sites. This helps maximize the efficiency of the monitoring system enabling real-time management by the authorized personnel.

- **Easy-to-use simple UI (User Interface)**
  Most of the essential functionalities required by users are possible with SSM; including simultaneous monitoring of maps/live images, real-time event monitoring, playback and not forgetting an automatic health check for each device.

- **A system that offers flexibility and expandability**
  Adding new or replacing old devices is an easy process so that they can be changed on demand or on system expansion, using a simple add/replace feature.

- **Immediate event management using an auto event reaction setting**
  Users can set specific reactions for a certain type of events, this allows for the immediate control of typical events, enhancing the monitoring efficiency.

Multi-site / Multi-client monitoring

Conventional monitoring solutions have an on-site administrator to control the local devices; this can limit the scope when expanding the monitoring system. The SSM supports multi-site / multi-client monitoring that removes this limitation making it suited for mid to large sized monitoring applications.

Configuration modules
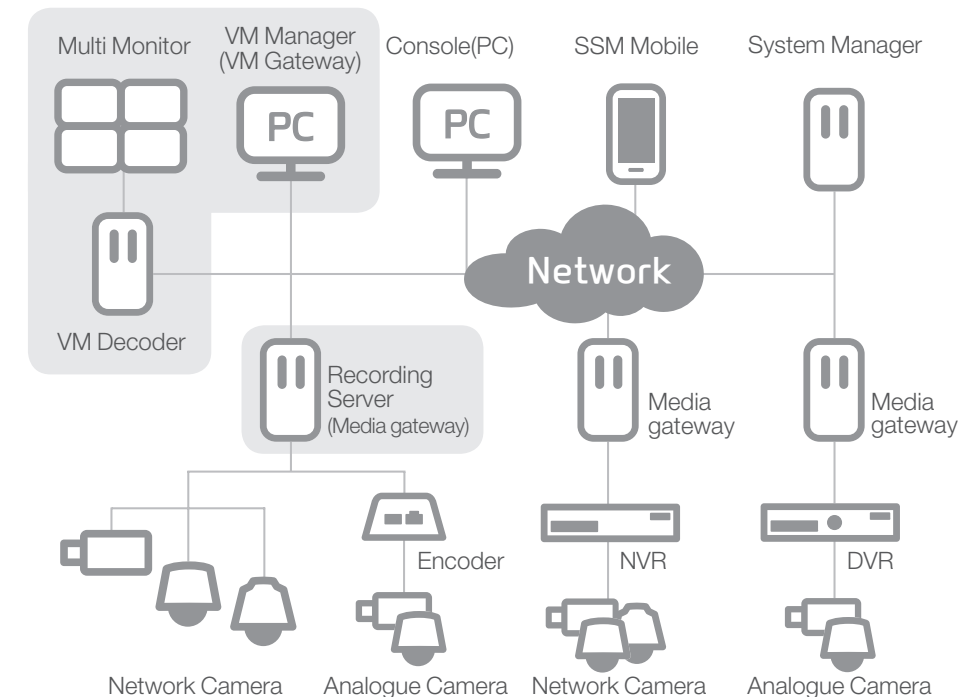
- Console : Provides the user with an interface for monitoring and control
- System Manager : Manages every piece of connected equipment and listed user within the system
- Media Gateway : Works as a server for the video from cameras, Pan/Tilt/Zoom, and event on a single platform
- SSM Recording Server : Add on recording module for SSM, all settings through Configuration Manager
- SSM Virtual Matrix : Add on Multi-monitor(Wall monitor) control module for SSM, settings from VM Manager

Up to 5 clients can simultaneously access the server that manages and monitors the remote devices with real-time access to the video sources, providing efficient/effective monitoring solution.

Expandability

Network connected Samsung Techwin products are registered and managed by SSM server. The media gateway server can handle 72 Samsung network cameras or 36 DVRs/NVRs (based on 8CH system, support up to 288CH). The server can search the connected equipment, support health checks and upgrade each device to ensure that they are maintained in the best condition.

Reliability and Security

Individual sites, users and user group management is controlled by the system manager. With this level of authorization access and management, certain sites or devices and management function can be controlled at user level.


Admin   User group1   User group2
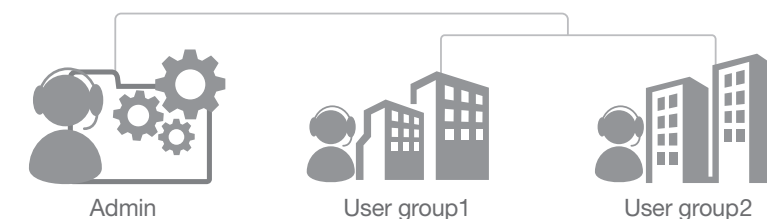
One-stop Live / Map monitoring

Efficient live monitoring

Samsung's intuitive UI design makes it simple to monitor live images and maps. One monitor can display 64CH, and with a maximum of 4 monitors connected up to 100CH can be monitored. The video images can be displayed in various formats; full screen, split screen, and 4:3/16:9, so that users can create best-fit layouts. If there are numerous administrators in a single control station, users can immediately load their own pre-saved display format layouts. The software will manage Samsung Techwin products and support image resolutions up to megapixel with a range of video/audio compression formats at different video profiles. These profiles will manage the network and computer environment to their optimum capability.

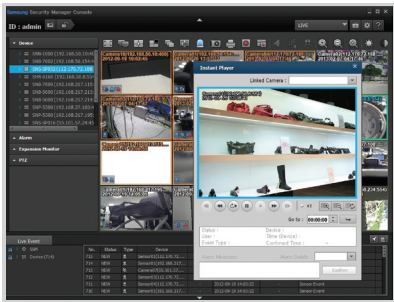## Simultaneous monitoring/playback support

While monitoring a live view, the user can also playback recorded data on the same or a different device at the same time, this allows the user to compare the recorded data showing the suspicious event/person with the live view, helping to prevent potential incidents.
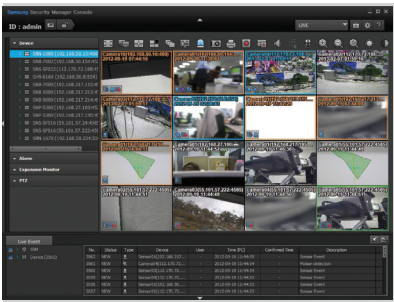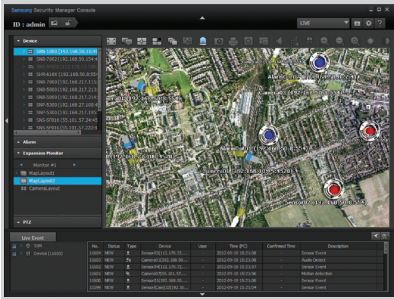

Live monitoring
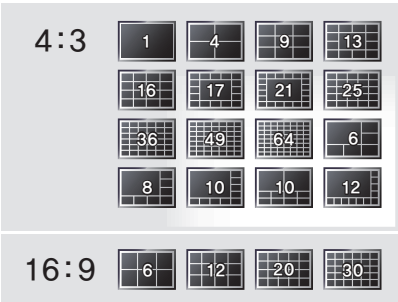
Various display layouts

Instant player pop-up

Map monitoring

With SSM, an administrator can set a map-based layout to match with the live videos in real-time. Overlaying camera or sensor icons means the resolving of issues becomes extremely easy. By utilizing map based monitoring together with live monitoring, an event pop-up window will appear on the location where the event has happened helping towards a quick resolution to the event.


Map layout

Efficient Alarm/Event Monitoring

When there is an event/alarm input, the SSM system manager will instigate a set of pre-set follow up actions of the related device. Once an event occurs, manager and administrators can approve and write a comment on it. The result and status of the events are recorded and can be referred to in post-event reporting.
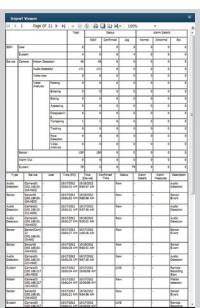
Event viewer

The real-time event viewer provides an event log that includes a single channel preview and event type that are easily viewed. Useful information such as sorting by event type, individual event comments and their approver can be displayed here. The event log also can be exported in excel/PDF format and used as evidence for the incident.
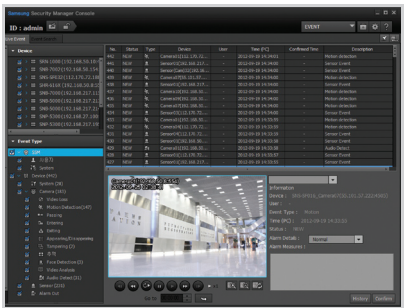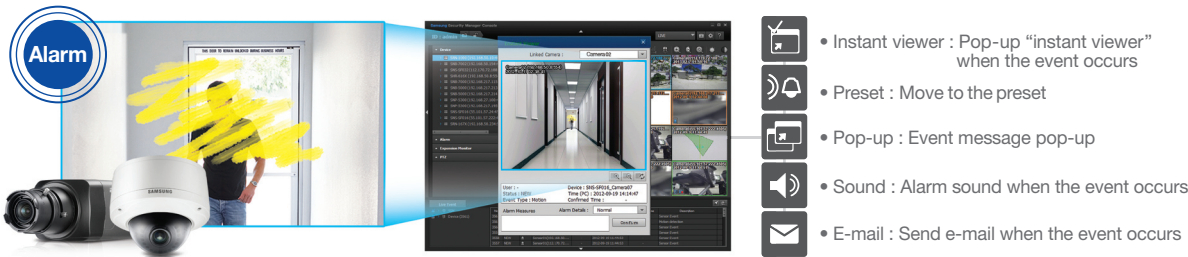

Event viewer

Instant viewer
(Event approval/Comment writing)

Report viewer

Event action

The setting of follow-up actions for each event can be managed in the event management function of the SSM. Matching motion detection, alarm or video loss with pop-up, move to preset and e-mail notification ensure prompt handling of events. For example, when network camera 1 gives a tampering event, pop-up for camera 2 which is installed in the corridor next to the camera 1 is possible proving the required information to the security staff.

- Instant viewer : Pop-up "instant viewer" when the event occurs
- Preset : Move to the preset
- Pop-up : Event message pop-up
- Sound : Alarm sound when the event occurs
- E-mail : Send e-mail when the event occurs

SSM Recording Server

SSM Recording Server is designed for high quality video recording, simultaneous searching and viewing of Samsung's network cameras/encoders. Operators maintain a complete overview using Configuration Manager easily.

SSM Recording Server provides 400Mbps high performance recording, 100Mbps playback/backup throughput for supporting high quality megapixel video.

SSM Recording Server provides single access point using Configuration Manager, operators configure and control of recording functions at the same PC.
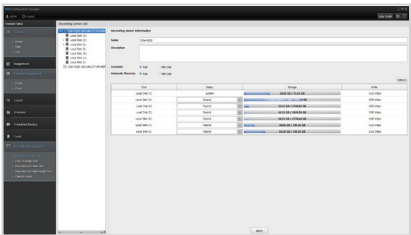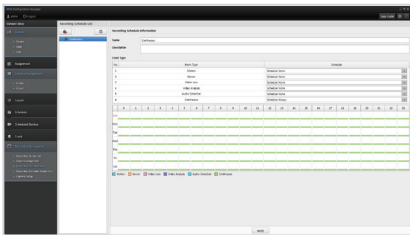
Recording Management

Smart Search and Backup

Various searching mode

As well as date/time, POS(if using a Samsung DVR/NVR that support POS recording) and event/time-line searches which support preview images, a user can additionally check past events in a certain area or ROI (Region Of Interest). The motion search from the SSM can extract the event that occurred in the ROI therefore reducing the search time.

Date/Time search

Motion search

POS search

Backup function

Manual back up mode allows the user to select the required time-line, while the schedule back up mode will automatically back up the recorded data of the DVR/NVR at the pre-determined time. The backup can be done on the SSM PC and the user can extract the video when required.
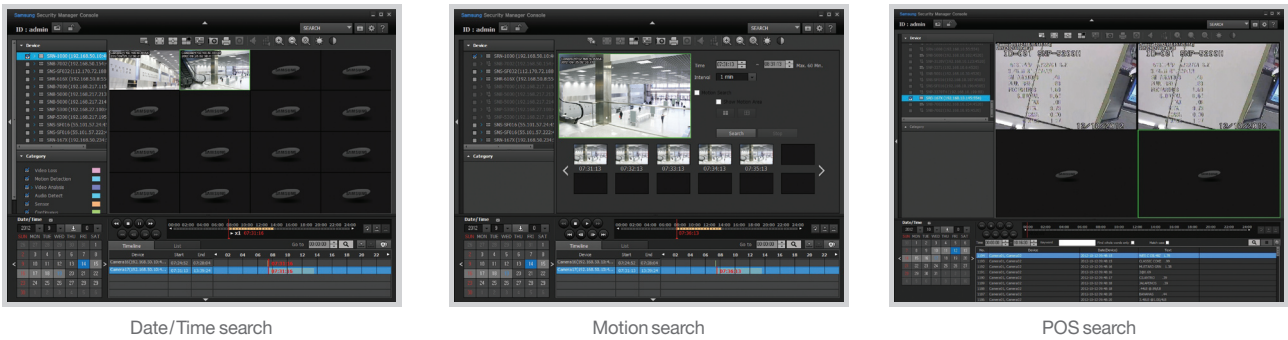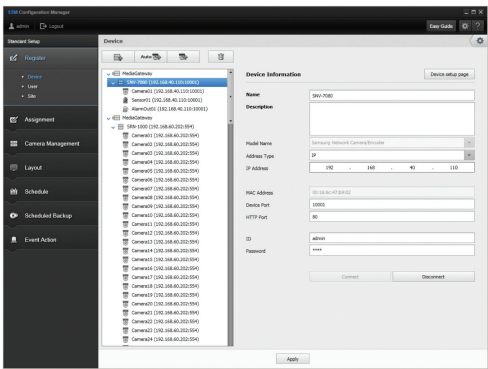
Easy & Convenient configuration

It can be difficult for the managers to set up all registration and setting process, (such as device set up, site configuration, user group assignment, and profile set up, etc). Through the configuration manager of SSM a helpful guide for each set up menu is available this assists anyone to easily complete the configuration procedure.

Easy Guide
Basic essential setup

Standard Setup
Full setup

Easy Guide

Basic menus for video surveillance will be provided. After registering a device, the device will be automatically assigned to the administrator user group. So, you can start video monitoring easily.

GO >

Standard Setup

All setup menus for configuring Samsung Security Manager will be provided.

GO >

Set up mode selection

Configuration manager

Remote monitoring via mobile device

SSM mobile

Managers now have access to SSM via SmartPhone or tablet PCs where they can monitor live and recorded videos data. In addition, SSM mobile provides an easy-to-use user interface with preconfigured customized layout configurations that are setup on the main SSM.
※SSM mobile is supported by both Android and iOS(iPhone, iPad) and can be downloaded from the app store.

Bookmark

Live 4ch

LivePTZ

Easy Video Wall Monitor Control

SSM Virtual Matrix is designed for wall monitor/multi-monitors, ensures that operators maintain a complete control of all monitors, allowing immediate video view control and switching event video to resolve incidents fast.

Wall monitor
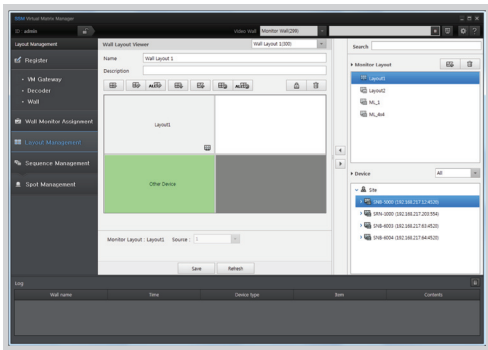
Control

Samsung Security Manager

SSM Virtual Matrix is an important add-on product to enterprise, professional system. The video streams from Media Gateway module combined with the corresponding events for simultaneous viewing on wall monitor.
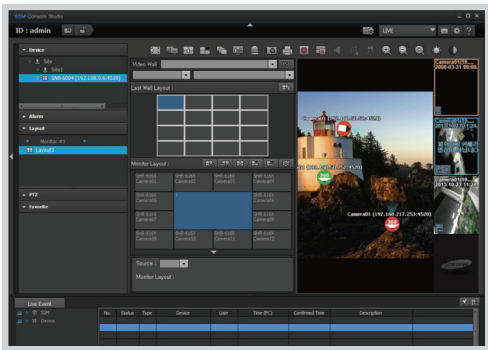
SSM Virtual Matrix provides event based virtual salvo switching, if an important event occurs, (based on pre-setting), the monitors show the video events automatically, admin can select wall spot, monitor spot or tile spot type.

Wall spot
Monitor spot
Tile spot

Event-driven Virtual Salvo Switching

VM Manager
(controls VM Gateway & VM Decoder)

Function on Console
(User can send video streams on Console to wall monitor)

SSM Model

	Model Name	Prduct description	Price
SSM Basic platform	-	Console, Configuration Manager System Manager, Media Gateway	-
SSM Recording Server	SSM-RS00	16 Channels recording, one server only	-
	SSM-RS10	36 Channels recording, scalable recording	Licensed
	SSM-RS20	72 Channels recording, scalable recording	Licensed
SSM Vitual Matrix	SSM-VM00	Managing SPD-400 only	-
	SSM-VM10	16 monitors control, S/W decoding	Licensed
	SSM-VM20	36 monitors control, S/W decoding	Licensed

SSM-RS10/20

SSM Recording Server

		SSM-RS10	SSM-RS20	SSM-RS00
DEVICE				
Supported Device		Samsung's Network Camera, Encoder		
Supported Protocols		Samsung, ONVIF profile S		Samsung
Max. Registered Devices		36	72	16
PERFORMANCE				
Video	Supported Format	H.264, MJPEG, MJPEG		
	Supported Resolution	Depending on the device		
Audio	Supported Audio Compression Format	G.711 u-law (PCM), G.723, G.726 (ADPCM)		
Recording	Performance	Up to 400Mbps (Four or more HDDs (SATA II 7200rpm) should be used for 400Mbps recording performance)		
	Mode	Manual, Continuous mode, Event (Pre/Post alarm recording) Event & Schedule mode		
	Quality	Depending on the device		
	Pre/Post Record Time	Pre : 1 ~ 18CH 60sec, 19 ~ 36CH 30sec, 37 ~ 72CH 15sec Post : 1200sec (when D1 resolution 30fps)		
	Logs	System, User access, Back up, Recording log, Event log (Motion, Alarm, Video loss, Video analytic, Audio)		
Playback	Performance	Up to 100Mbps, Up to 16CH simultaneously		
	Mode	Time, Event, Timeline		
Storage	Max. Controller of HDD	24HDDs		
	Supported HDD Format	SATA2 7200rpm, e-SATA, SAS, iSCSI		
	Functions	Storage space assigning by each disk, Warning against lower disk space		
System	NIC	NIC is selectable by device connection and client connection type		
	SW Status	Device connection, Manual/Schedule recording status		
	Data Security	Login packet encryption		
	Settings	Initialization / Export / Import		
	Functions	Auto power-on record		
	Time Synchronization	NTP client		
Programs	Configuration Manager	Recording & storage settings, User management, Event action setting, Schedule back up, System settings		
	Console	Live monitoring, Playback, Back up		
GENERAL				
System Requirement (Recommeded)		CPU : Intel Core i7 Sandy bridge, RAM : 8GB Video memory : 256MB, 4HDDs (SATA II 7200rpm 64MB) above OS : Windows Server 2008 R2, Windows Server 2012, Windows 7 32/64bit, Windows 8 32/64bit		
System Requirement (Minimum)		CPU : Intel Core i3 Sandy bridge, RAM : 8GB Video memory : 256MB, 2HDDs (SATA II 7200rpm 64MB) above OS : Windows XP SP2, Windows Server 2003 SP2, Windows Server 2008 R2, Windows Server 2012, Windows 7 32/64bit, Windows 8 32/64bit		

* Only 1 Recording Server connection is available with Samsung Security Manager when use the trial version.

SSM-VM10/20

	SSM-VM10	SSM-VM20	SSM-VM00 (for SPD-400)
DEVICE			
Integration software	SSM v1.2		
Maximum number of monitors	16	36	36 (SPD-400 only)
The number of wall per each package	Up to 3		
FEATURES			
Video streams	Receives from SSM(Media Gateway module), Depending on the device		Device >SPD-400 (*See SPD-400 specification)
Live Monitoring — Wall layout (Multi-monitors)	Depends on VM Manager settings, monitor layout components		
Live Monitoring — Monitor layout (Screen-split mode)	(VM Decoder) 4:3 screen modes : 1/4/6/8/9/10/13/16/17/21/25/36/49/64 16:9 screen modes : 6/12/20/30 Full screen mode * While in multi-monitor environment, layouts and split modes for less than 100 channels will be available. (SPD-400) - up to quad view, "Depends on SPD-400"		(SPD-400) Depends on SPD-400 - up to quad view
Live Monitoring — Sequence mode	Wall layout group sequence (Duration Min : 10sec ~ Max : 180sec)		
Live Monitoring — Map monitoring	Split View Mode for Map Layout, 2D/3D View, Zoom in/out, Camera/Sensor/Alarm icons on the map		N/A
Live Monitoring — ETC	OSD On/Off, Wall/Monitor setting sync. function		N/A
Event Monitoring	Wall spot, Monitor spot, Tile spot		N/A
VM MANAGER (CONFIGURATION TOOL)			
Maximum number of managing wall	3		
Wall management	Registration and allocation Decoder to Wall Monitor Registration Wall Layout, Wall Sequence		
Event management (Include spot setting)	When event occurs, automatic wall layout or monitor layout or tile layout can be displayed to wall according to pre-setting, these are called Wall Spot, Monitor Spot, Tile Spot. Event settings (V-Loss, MD, Passing, Entering, Exiting, Appear/Disappear, Tampering, Tracking, Face Detection, Audio Detection, depending on the device)		N/A
Functions	Using I-frame option, Using low-resolution option		N/A
Update	Automatic self upgrade (Connection to Samsung upgrade server)		
GENERAL			
Modules	Providing three types, VM Manager, VM Gateway and VM Decoder		VM Manager, VM Gateway, SPD-400
VM Modules — VM Manager	Configuration tool of virtual matrix, which can manage up to three walls		
VM Modules — VM Gateway	Managing module of VM Decoders and SPD-400(H/W Decoder) simultanesouly, VM Gateway also handles commands and license checking		Managing module of SPD-400 (H/W Decoder) only
VM Modules — VM Decoder	VM Decoder is a video decoding module, one PC installed VM Decoder is control up to 4 monitors, up to 100 channels		N/A
Language	Total 23 languages support English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek , Swedish, Danish, Finnish, Norwegian, Bulgarian		
System Requirement — Recommended	CPU Intel i7 (Sandy bridge) above,RAM 4 GB above, Video memory 1GB above, DirectX 8.1 above. Display resolution : 1,280 x 1,024 above, OpenGL compatible, HDD More than 20 GB of free space for installation. (For operation, the system log database requires 10 GB or more free space.)		
System Requirement — mended	CPU Intel i5 above, RAM 4GB above, Video memory 512MB		
System Requirement — Console	Windows 7 (32bit, 64bit), Windows 8 (32bit, 64bit)		

SSM mobile

		SSM mobile (Version : 1.1)
DEVICE		
Supported Device		Samsung Security Manager
PERFORMANCE		
Video	Supported Format	H.264, MJPEG
Video	Supported Resolution	Up to 1280 x 1024 resolution
Audio	Supported Format	G.711 u-law (PCM), G.726 (ADPCM)
Audio	Functions	Listen (1CH)
Live Monitoring	View list	Providing the layout list and the device list according to SSM user authority, favorite list
Live Monitoring	Screen-split Mode	1CH / 4CH
Live Monitoring	View Mode	Vertical, Horizontal
Live Monitoring	PTZ Control	Pan, Tilt, Zoom, Focus (Encoder / DVR only), Preset
Live Monitoring	Functions	Flip, Capture, Digital zoom (16x), Display the network traffic status
Search & Playback	Search Mode	Date/time, Event
Search & Playback	Playback Mode	1CH only, 8x playback speed
Search & Playback	Functions	Bookmark
Security		Password
GENERAL		
Language		Total 23 languages support English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Swedish, Danish, Finnish, Norwegian
Mobile Device Requirement	Recommended	CPU 1.4GHz, RAM 2G, Available RAM 1G or more, Network 3G, 4G(LTE), Wi-Fi
Mobile Device Requirement	Operating System	Android OS 2.3.x, 4.0.x, 4.1.x and 4.2.x iOS 5.1.1, 6.0 , 6.1 and 6.1.3
Tested Mobile Devices		This application had been tested for listed devices: Android - Samsung Galaxy S2 (Android v2.3.5) series - Samsung Galaxy S3 (Android v4.1.2) series - Samsung Galaxy S4 (Android v4.2.2) series - Samsung Galaxy Note (Android v4.0.4) series - Samsung Galaxy Note 10.1 (Android v4.1.2) series iOS - Apple iPhone 4 (iOS v6.1) model - Apple iPhone 5 (iOS v6.1.4, v7.0.2) model - Apple iPad 2 (iOS v5.1.1) model - Apple New iPad (iOS v6.1.3) model - Apple iPad 4 (iOS v7.0.2) model

* For proper monitoring with SSM mobile on your mobile device, the device should suffice minimum requirements.