

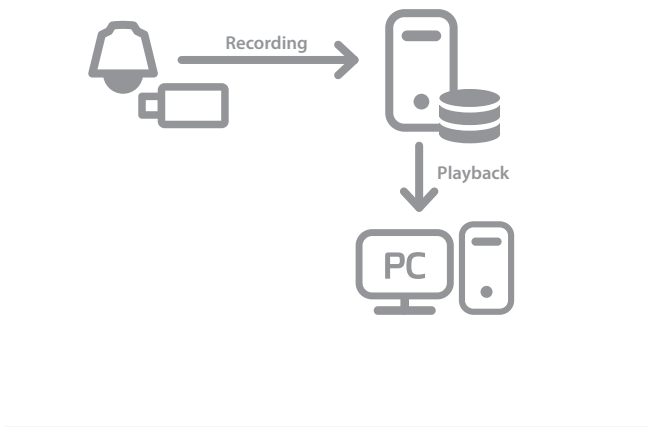
SSM Professional / Enterprise

		Professional	Enterprise
GENERAL			
Maximum Number of Cameras		288	Unlimited
Maximum Number of Clients		5	Unlimited
Centralized Management		Yes	Yes
Architecture		Multi-server	Multi-server
Clients		SSM console, Configuration manager, SSM Mobile	SSM console, Configuration manager, SSM Mobile
Supported Devices		Network Camera / Encoder / Decoder, DVR / NVR	Network Camera / Encoder / Decoder, DVR / NVR
SUMMARY			
Basic Component	System Manager	Yes	Yes
	Media Gateway	Yes	Yes
	Recording Server	Yes	Yes
Add-on Component	Screen Mirroring	Yes	Yes
	Virtual Matrix	-	Yes
	Tranaction Server	-	Yes
Features	Transcoder	-	Yes
	Failover Server	-	Yes
	Live Monitoring	Yes	Yes
	Search Playback	Yes	Yes
	Event Monitoring	Yes	Yes
	Map Monitoring	Yes	Yes
	POS/ATM Monitoring	Yes	Yes
	Wall Management	-	Yes
	Google Map Monitoring	-	Yes
	Video analytics Monitoring	-	Yes
	Advanced Health Monitoring	-	Yes
	Access Control Monitoring	-	Yes
	Video Summary Search	-	Yes
	Active Directory Integration	-	Yes
	Site Federation	-	Yes
COMPONENT			
Media Gateway	Max. Media Gateway's	4	Unlimited
	Max. Bandwidth (In / Out)	400 / 600Mbps	400 / 600Mbps *
	Max. Devices per Server	128 network cameras or 288 cameras of recorder	128 network cameras or 288 cameras of recorder *
Recording Server	Max. Cameras	128	128
	Recording Performance	400Mbps	400Mbps*
	Playback Performance	100Mbps	100Mbps
	Mode	Manual, Continuous, Event (Pre / Post), Schedule	Manual, Continuous, Event (Pre / Post), Schedule
	Auto Recovery Backup	Yes	Yes
	Video Summary	-	Yes
	Event Boostup Recording	Yes	Yes
Screen Mirroring	ONVIF Protocol	Profile S (except SSM-RS00L)	Profile S (except SSM-RS00L)
	PC screen Streaming for recording	Yes	Yes
	Max. monitors	4	4
Virtual Matrix	Max. Streaming	5	5
	Frame rate	Up to 30fps	Up to 30fps
	Max. Monitors	-	48
	Modules	-	VM manager, VM Gateway, VM decoder
	Sequence Monitoring	-	Yes
Transaction Server	Event Monitoring	-	Yes
	Map Monitoring	-	Yes
	Playback on Wall Monitor	-	Yes
	Screen Merge	-	Yes
	Access Control	-	Samsung, Honeywell, JCI, Gallagher, Siemens
Transcoder	Intrusion Detection	-	Bosch, Honeywell
	Intercom	-	Samsung, Stentofon
	Video analytics	-	Agent Vi
	Playback transcoding	-	For console and Mobile
Federation	Max. Input Resolution	-	5M
	Max. Output Resolution	-	D1
	Max. Transcoding Channels	-	10
	Max. Site Hierarchy Level	-	4 *
Federation Server	Max. Sites	-	25 *
	Cameras per Site	-	288 *
	Auto System Failover	-	Yes
Architecture	Target Server	-	MG, RS, VM
	Architecture	-	Active / Standby

* The latest product information / specification can be found at hanwha-security.com
* Design and specifications are subject to change without notice.

SSM-RS10L/20L/30L

SSM Recording Server
(Video Recording Server Solution)



Key Features

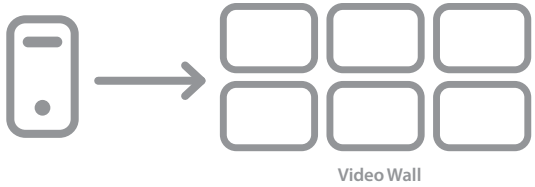
- 4 models from 16 to 128 channels recording
- Supports H.265, H.264, MPEG-4, JPEG codec
- 400Mbps / 100Mbps for Recording / Playback
- Supports various recording mode :
Manual, Continuous, Event with pre/post and schedule
- For faster video search, Video summary feature provides minutes video clip for several hours
- Supports failover recording system
- Supports automatic data recovery from network failover with camera SD card (ARB)

		SSM-RS10L	SSM-RS20L	SSM-RS30L	SSM-RS00L
DEVICE					
Supported Device		Network camera, Encoder			
Supported Protocols		Samsung, ONVIF profile S			Samsung
Max. Register Device		36	72	128	16
PERFORMANCE					
Video / Audio	Video Compression Format	H.265, H.264, MPEG-4, MJPEG			
	Multi-Profile	Live 1, Live 2, Record, Event record, Mobile			
	Audio Compression Format	G.711 u-law (PCM), G.723, G.726 (ADPCM), AAC			
Recording	Performance	Up to 400Mbps (@ 4 HDD's)			
	Manual Recording	Yes			
	Continuous Recording	Yes			
	Event Recording	Yes			
	Schedule Recording	Yes			
	Pre / Post Event Recording	Pre : 10 ~ 60sec Post : 1,200sec			
	Event Notification	Audio, E-mail, SSM C console			
Search & Playback	Performance	Up to 100Mbps, Up to 16CH			
	Time Search	Yes			
	Event Search	Yes			
	Timeline Search	Yes			
	Smart Search	Yes			
	Bookmark Search	Yes			
	Video Summary	Yes			
	Synchronous Playback	Yes			
System	Security	Multi-Level user access authority			
	Data Security	SSL			
	Number of HDDs	Up to 24			
	Supported Storages	SATA II 7200rpm, e-SATA, SAS, iSCSI			
	System Failover	Yes (by SSM-HA)			
	Network Failover	Yes (Auto recovery Backup)			
	Time Synchronization	NTP			
MISC.					
System Requirements	Recommended	CPU Intel Core i7-4770@3.40GHz RAM 16GB, HDD SATA II 7200rpm (SSD is Recommended for OS) * RAID : RAID 5, 8Bay, HW RAID Controller (AF Supported)			
	Minimum	Windows Server 2008 R2 *, Windows Server 2012 R2 *, Windows 7, Windows 8/8.1, Windows 10 * Recommended			

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SSM-VM10L/20L

SSM Virtual Matrix
(Video Wall Display Solution)



Key Features

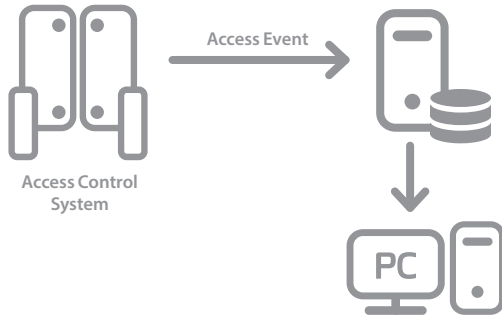
- 3 models from 16 to 48 monitors
- Consists of gateway, Decoder and manager
- Provides various live monitoring mode :
Wall layout, wall / monitor sequence and map monitoring
- Screens of multi monitors can be merged like one monitor
- Event spot per wall, Monitor and tile makes operators to focus only on event occurred live video

		SSM-VM10L	SSM-VM20L	SSM-VM00L
GENERAL				
Max. Number of Monitors		16	36	48 (H/W decoder)
Modules		VM manager, VM gateway, VM decoder		
Control Interface		SSM console, VM manager		
FEATURES				
Live Monitoring	Wall Layout	Upto 8 x 8 split mode		
	Wall Sequence	Yes		
	Monitor Sequence	Yes		
	Map Monitoring	Yes	-	
	Screen Merge	Yes	-	
	Auto Profile Change	Yes	-	
Event Monitoring	Wall Spot	Yes	-	
	Monitor Spot	Yes	-	
	Tile Spot	Yes	-	
Playback	Video Playback on Wall	Yes	-	
MISC.				
Data Security		SSL		
3 rd Party IP Video Wall Integration		Leadtech		
System Requirements	Recommended	CPU Intel Core i7-4770@3.40GHz, RAM 8GB, 10GB HDD, NVIDIA GTX760, Video memroy 2GB, DirectX 9.0		-
	Operating System	Windows 7, Windows 8/8.1, Windows 10 VMG : Windows Server 2008 R2, Windows Server 2012 R2 Recommended		-

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SSM-TS10L

SSM Transaction Server
(3rd party System Integration Solution)



Key Features

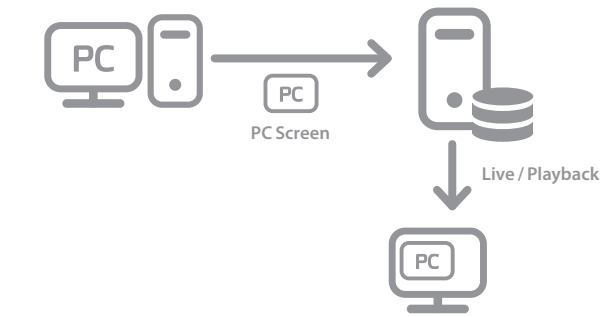
- 3rd Party System Such as Access Control System, Intrusion Detection System and Video analytics can be Integrated with SSM by Transaction Server
- Provides Event Popup with Personal Information of a Person who Passed a Gate on Map
- Translated Events Can be Used as Event Action Setup that Can Meet on Various End-User Requirements

		SSM-TS10L
GENERAL		
Supported System	Access Control	Samsung, Honeywell, JCI, Gallagher, Siemens
	Intrusion Detection	Bosch, Honeywell
	Intercom	Samsung, Stentofon
	Video analytics	Agent Vi
ACCESS CONTROL		
Supported System	Samsung SAMS	21 events
	Honeywell Pro3000 / Pro3200	13 events
	JCI-P2000	15 events
	Gallagher CCFT	7 events
	Siemens Sipass	12 events
	Controller	INPUT_SIGNAL_OCCURRED / INPUT_SIGNAL_OCCURRED, INPUT_SIGNAL_RELEASED / SYSTEM_SETUP_MODE / INPUT_DISCONNECTED
Supported Event	Door	ACCESS_GRANTED / ACCESS_DENIED / INVALID_TIME_SCHEDULE / ANTIPASS_BACK_ENTRY / ANTIPASS_BACK_EXIT / INVALID_PASSWORD / ACCESS_DOOR_ERROR / BIOMETRIC_ERROR / DURESS_ALARM / ARM / DISARM / OVERTIME_DOOR_OPENED / OVERTIME_DOOR_CLOSED / FORCED_DOOR_OPENED / 2MEN_TIME / ACCESS_TRIAL_WHITE_ARMED / IO_STAUS_CHANGE
INTRUSION DETECTION		
Supported System	Bosch IP7400	1 event
	Honeywell VISTA128	1 event
Supported Event	Detector	BURGLARY_ALARM
INTERCOM		
Supported System	Samsung SAMS	6 events
	Stentofon XE1	6 events
Supported Event	Intercom	STNT_STATION_BUSY / STNT_STATION_FREE / STNT_STATION_CONNECT / STNT_STATION_DISCONNECT / STNT_CALL_REQUEST / IO_STAUS_CHANGE
VIDEO ANALYTICS		
Supported System	Agent Vi	9 events
Supported Event	Camera	ASSET_PROTECTION / CAMERA_TAMPERING / CROWN_DETECTION / LOITERING / OCCUPANCY / STOPPED_VEHICLE / SUSPICIOUS_OBJECT / THERMAL_CAMERA / VEHICLE_TAILGATIONG
MISC.		
System Requirements	Recommended	CPU Intel Core i7-4770@3.40GHz, RAM 8GB, 20 GB HDD(SSD is recommended)
	Operating System	Windows 7, Windows 8/8.1, Windows 10, Windows Server 2008 R2, Windows Server 2012 R2

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SSM-SC10L

SSM Screen Capture
(PC Screen Capture and Streaming Solution)



Key Features

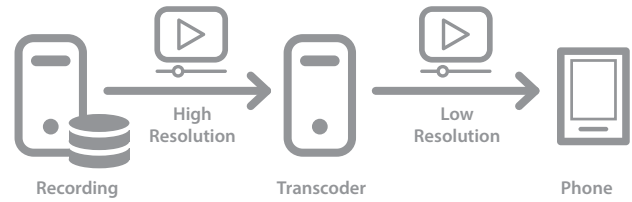
- Captures PC screen and make Video Stream
- The Video Stream acts same as a camera so it can be displayed on SSM console or recorded in Recording Server
- Supports max. 2560 x 1600 Resolution
- Supports H.264 and MJPEG
- Supports max.5 Output streams

		SSM-SC10L
FEATURES		
Video Source	Max. Resolution	2560 x 1600
	Source	PC monitor screen
Video Stream	Protocol	IPCAM2
	Video Codec	H.264, MJPEG
	Audio Codec	G.711
	Max. Output stream	5
	HW Acceleration (H.264)	NVidia : GTX-650 series, 340.33 driver Intel : HD 2000 AMD VGA : Radeon HD 7700, R7 250, R9 270 (Single monitor is needed for AMD)
MISC.		
Language		English, Korean
System Requirements	Recommended	CPU Intel Core i7-4770@3.40GHz, RAM 8GB, 10GB HDD, NVIDIA GTX760, Video memroy 2GB, DirectX 9.0
	Operating System	Windows 7, Windows 8/8.1, Windows 10 Windows Server 2008 R2, Windows Server 2012 R2

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SSM-TC10L

SSM Transcoder
(Video Transcoding Solution for Mobile Users)



Key Features

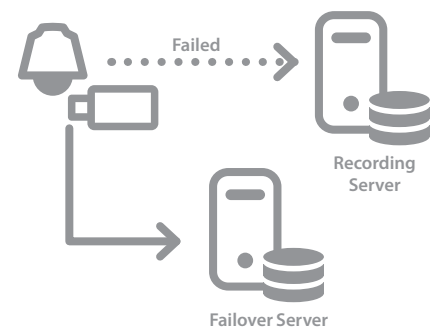
- Transcoder is for Mobile users in Bandwidth Limited Environment
- Transcoder Runs in Media Gateway and Activated by Additional License
- Supports H.264, MPEG-4, MJPEG
- Max. 10 Streams Can be Transcoded
- Max. D1 Resolution for Transcoded Output Stream

SSM-TC10L		
GENERAL		
Supported Client		SSM Mobile
Video Source		Recorded Video Data for Playback
FEATURES		
Video Input	Max. Channels	10
	Codec	Input : H.264, MJPEG, MPEG-4
	Resolution	5M
Video Output	Codec	H.264 High Profile at 50 GoP size
	Codec	20fps@D1
		25fps@CIF
		30fps@QCIF
	Codec Misc.	Entropy Coding Type : CAVLC Deblocking : ON Bit rate Type : VBR

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SSM-HA

SSM Failover Server
(System Faliover Solution for SSM Components)



Key Features

- Failover Solution for Recording Server, Media Gateway and Virtual Matrix Gateway
- Active and Standby Failover architecture
- Number of Target Server is not Limited
- Configuration Can be Done by any Browsers

SSM-HA		
GENERAL		
Failover Architecture		Active (Target) - Standby, N + M Redundancy
Target Servers		Recording Server, Media Gateway, Video Matrix Gateway
Max. Target Server		Unlimited
Configure Interface		IE 9, FireFox 12, Safari 5.1, Chrome 18
FEATURES		
Standby Server	Failover	Thru Heartbeat Check
	Heartbeat	1 second
Standby Server	IP Address	Yes
	Data Recovery on RS	Yes
	Auto Failback	Yes
Data	Auto Recovery	Yes
Recovery	Pause-Resume	Yes
REQUIREMENTS		
Storage Needed		Needs More Than 2GB
Disk limitation for RS		2 HDDs for the Recording and Recovery Except the OS Disk
System Requirements		Active and Standby System Spec should be Same (OS, HDD's, Ethernet)

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SSM Mobile

SSM Mobile Viewer for Android / iOS



Key Features

- Local / Remote Connection to SSM
- View Layout / Device List by User
- View Live Streaming Video with PTZ Control
- Supported Format : H.264, MJPEG
- Video Image Flip / Mirror, Video Image Capture
- Calendar Search / Playback / Bookmark Functions
- SSM Login for Security
- Quick & Easy Access at Mobile Environment & Wi-Fi Networks
- Compatible with "Dynamic Domain Naming Service" (DDNS)
- Multi-Language

* The SSM Mobile Application Can be Downloaded
from Google Play Store & Apple App Store.

SSM Mobile		
GENERAL		
Max. Video Resolution	1920 x 1080	
Device List with Thumbnail Image	Yes	
Mobile Network Status Display	Yes	
FEATURES		
Live Monitoring	Screen-split Mode	1, 4, 9, 16
	PTZ Control	Yes
	Screen Capture	Yes
	Digital Zoom	Yes
	Camera Focus Control	Yes
	Audio Listen	Yes
Search & Playback	Auto / Manual Profile Change	Yes
	Date / Time Search	Yes
	Event Search	Yes
	Bookmark Search	Yes
	Playback Resolution Change	Yes (SSM transcoder is needed)
MISC.		
Language	English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Swedish, Danish, Finnish, Norwegian	
System Requirements	Recommended	CPU 1.4GHz, RAM 2G, Available RAM 1 G or more, Network 3G, 4G (LTE), Wi-Fi
	Operating System	Android OS 4.4.x, 5.x, 6.x iOS 7, iOS 8, iOS 9
	Mobile Phone Tested	Android Galaxy S3 (v4.4.4), Galaxy S5 (v4.4.2) Galaxy S6 Edge (v6.0.1), Galaxy Note 4 (v5.1.1) Galaxy Tab S2 10.1 (v5.0.2) iOS iPhone 5S (v8.4.1), iPhone 6 (v8.1.1), iPhone 6S (v9.2), new iPad 3 (v7.0.4), iPad 2 (v8.3)

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