

Total Security Solution

Network Video Recorder
Video Management System
Central Monitoring System
Network Display Server

English

2025



High-reliability security equipment for life safety in a networked world, designed and made by **EMSTONE**

EMSTONE develops and manufactures world-class video security equipment that is convenient and reliable. We are doing our best for a safer world based on the technology and experience accumulated over many years. We want to play the role of one HUB by converging various security solutions that are increasing with the development of technology.



www.emstone.com

Competitive Strength of EMSTONE Product

01

PC Type Monitoring Solution based on LINUX

Linux-based applications can monitor, search and store up to 1024CH. Effective resource control ensures the stability of the operating system.

02

Interworking with 3rd Party Solution

It supports video-based system integration through interworking with various 3rd party (LPR, Fire, AI, Emergency bell, Elevator, etc) systems. And API Provided for 3rd party.

03

High resolution image display

Ultra-high resolution of IP Cameras, images, videos, real-time monitoring of servers are possible without physical limitations

04

User-friendly GUI

Intuitive and easy-to-understand interface configurations such as calendar/time search capabilities and easy event settings make it easier for users to access.

Field of Business

City Surveillance



Facility



Power Plant, Factory



Transportation facilities



Military Area



Education facilities



Hospital



Hotel



Department Store



REDBACK VMS is a VMS solution optimized for integrated video control that can store and distribute up to 1024 channels of video on a single server.

Point of view

01

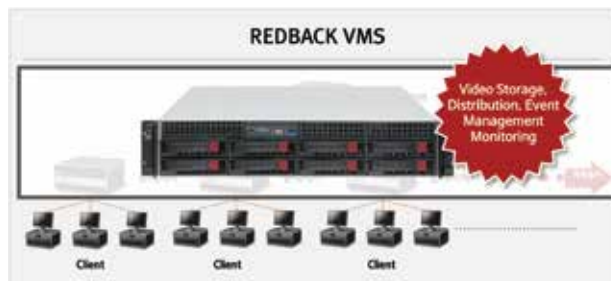
The future VMS market requires not only the operation of the control center but also the role of the HUB.



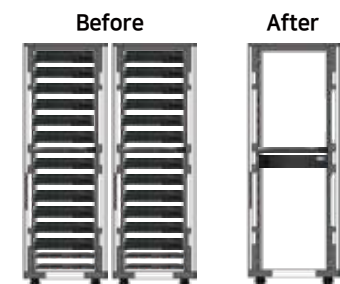
Acts as a pathway to quickly and conveniently connect the ever-growing 3rd-party solutions

02

Space efficiency of the control center needs to be improved due to the increase of physical servers.

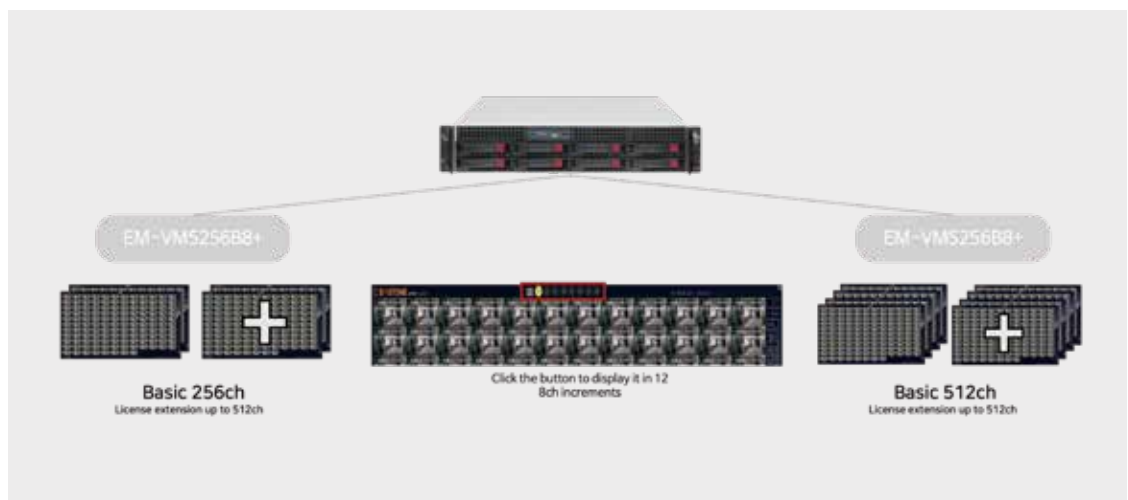


One server acts as a master, distribution, and storage server



2,600 channel image of server racks built on site.

Product Line-up



Feature



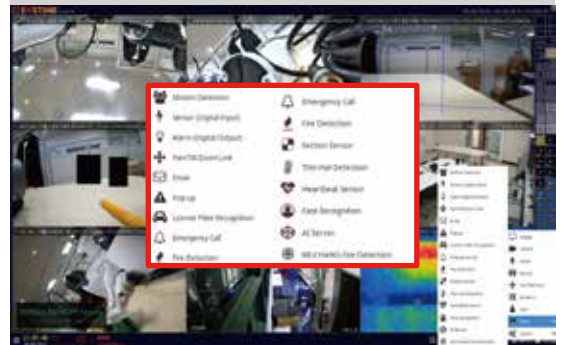
Main Function

The largest number of camera protocols from various manufacturers



- ▶ ONVIF / RTSP standard protocol default application
- ▶ Audio, motion, sensor input/output linkage by various manufacturers

Various solutions can be linked



- ▶ Solution integration and customization possible according to business purpose

User management through fingerprint recognition mouse



- ▶ Biometrics function to restrict access of unregistered people and prevent password leakage

Video search



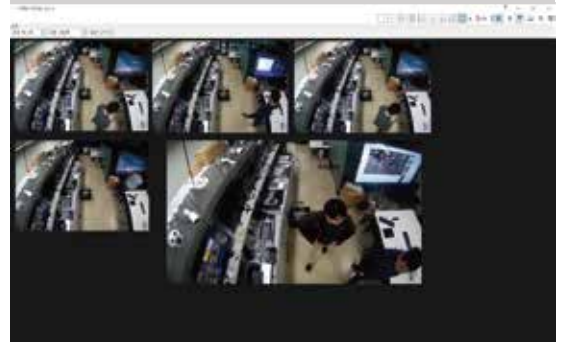
- ▶ Quick search by date/hour/minute

Event search



- ▶ Search by event situation

Event live selection control



- ▶ Real-time live monitoring function for interlocked event occurrence

EMSTONE NVR Series is a recording device that can accommodate various channels and supports high-definition image processing based on integrated software. It supports video-based system integration through interworking with various 3rd party systems.

Product Information

LINUX-based PC NVR integrated monitoring solution



- ▶ Highly reliable 64-bit Linux-based NVR
- ▶ Support all resolutions including 12M / 8M / 5M / 2M / 1.3M
- ▶ ONVIF/RTSP standard protocol support
- ▶ Events such as motion / sensor / camera signal loss / disk error
- ▶ User authentication support using biometric information
- ▶ Two-way voice function support



- ▶ High-efficiency H.265 / H.264 compression method for clear image quality.
- ▶ Various recording modes such as motion detection / event / schedule
- ▶ Multi-user mode and screen lock support
- ▶ Support Failover system
- ▶ Model lineup: 4, 9, 16, 25, 36, 49, 64, 81, 100, 128, 64+, 128+ CH

Main Function

Video search



- ▶ Quick search by date/hour/minute

Event search



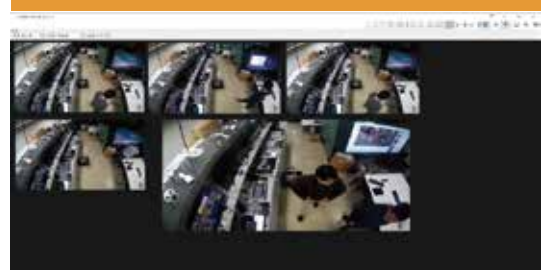
- ▶ Search by event situation

User management through fingerprint recognition mouse



- ▶ Biometrics function to restrict access of unregistered people and prevent password leakage

















Event live selection control



- ▶ Real-time live monitoring function for interlocked event occurrence

Various
solutions
can be
linked

Solution integration and customization possible according to business purpose

 Motion Detection	 Pop-up	 Section Sensor	 AI Server
 Sensor (Digital Input)	 License Plate Recognition	 Thermal Detection	 Elevator
 Alarm (Digital Output)	 Emergency Call	 Heartbeat Sensor	 Measuring Machine
 Pan/Tilt/Zoom Link	 Fire Detection	 Face Recognition	 E-mail

AI Camera Integration



We provide an intelligent integrated control solution that detects people, objects through intelligent camera image analysis, and applies an event based on the analysis result to respond immediately.

AI Box, AI Server Integration



Even for cameras that do not support AI, intelligent video analysis is provided for the corresponding channel video through the interworking of AI BOX and AI SERVER, and an integrated solution is provided through event linkage.

License Plate Recognition



It is a solution to extract the vehicle number by analyzing the video input to the NVR in real time. Analysis, vehicle number storage, image storage, and information display are simultaneously performed and can be searched together with the image, and can be applied to various sites such as roads, urban security, and apartments.

Elevator CRT Integration



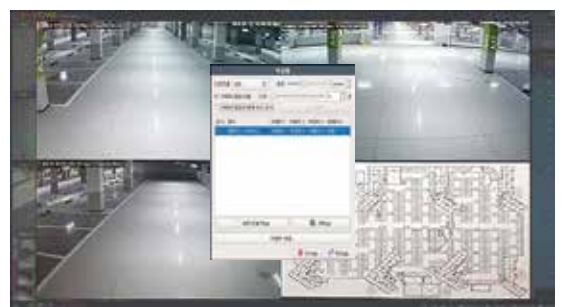
Integration with the elevator CRT system enables operating information of the elevator to be displayed and saved on the screen, and by supporting search of the operating information of the elevator, the solution improves convenience by reducing the search time and provides accurate video analysis by displaying the intuitive operation information of live / search videos.

Flame / Smoke Detection



This solution detects flame and smoke by analyzing camera images in real time. A wide range of surveillance is possible, and users can quickly check whether there is a fire and respond to it through video in real time.

Emergency Call Integration

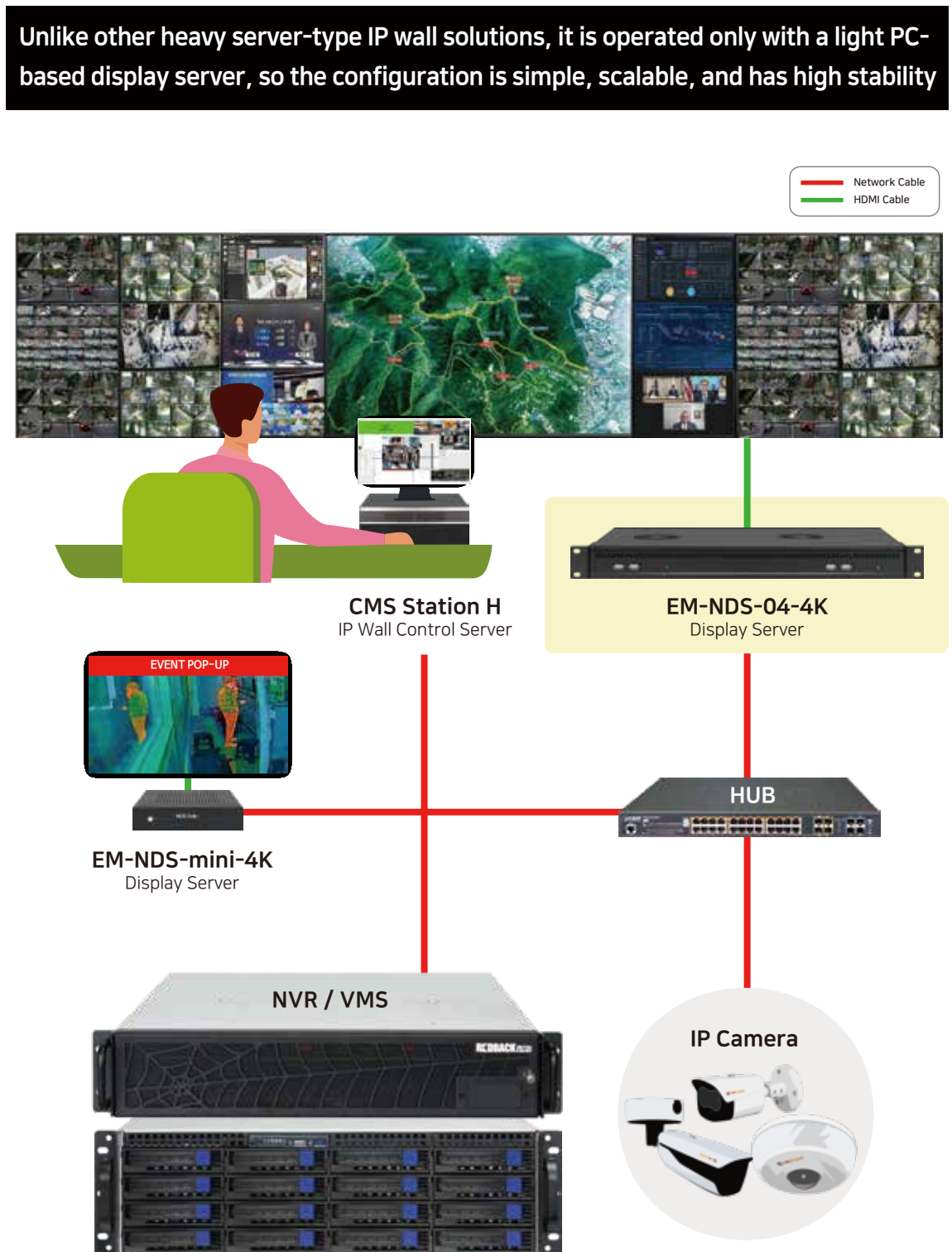


It is a solution that can be promptly delivered and responded to emergency call system through E-Map video pop-up and warning sound in case of emergency.

Smart IP Wall System is a solution that can be applied to all sites requiring integrated CCTV control.

Differences
from other
systems

Diagram



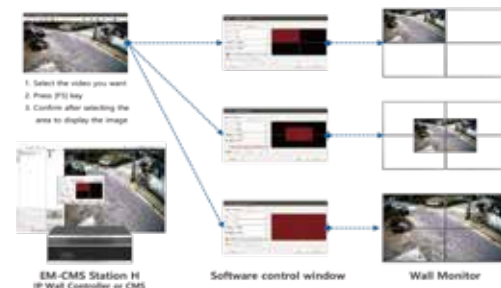
Feature

Simple and intuitive user interface

It supports IP Video Wall Control UI which can control set monitor layout and video preset with one click and reflect and display the currently displayed video in real time.



You can check the image to be displayed on the wall monitor with your own eyes, and anyone can easily operate it with a simple and intuitive configuration to display the desired image on the wall monitors.



Same performance support for scaling

Unlike the existing video wall system, which does not support expansion when adding a wall monitor or degrades after expansion, the system can be expanded by adding a display server and supports the same performance.



Support for multi-user and per-user permission settings

Multiple users can control the video wall at multiple control points, and each user can set the rights for wall monitor control and video control.



Search the video by displaying the search box on the wall monitor

Unlike the existing video wall system that can only display real-time video or encoded video, video search is possible by displaying the search box linked to the recording device on the wall monitor.



IP Video Wall Event Integration Screen

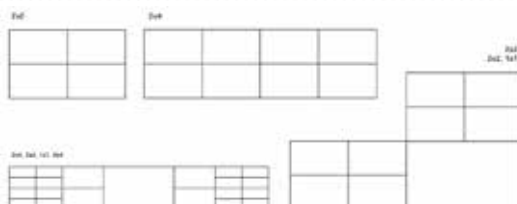
Event display function of NVR and linked system

When events occur in the NVR and the linked system, the wall monitor supports interlocking functions such as video popup, event message, image popup, and videowall preset operation.



Free monitor layout configuration

In addition to the regular horizontal and vertical arrays, both monitor combinations and atypical monitor arrays of different sizes are supported.



Video wall DID monitor control

You can power on/off the video wall DID monitor with one button, and control the brightness and connection method.



Main Product Line-up

Video Management System

REDBACK VMS Performance Series



Network Video Recorder

1U B2



2UB8-E



3UB16-E



4UB24-E



Smart IP Wall

EM-NDS-mini

Network Display Server



EM-NDS-04-4K

Network Display Server



CMS Station H

Central Monitoring Server



The largest number of camera protocols from various manufacturers



- ▶ ONVIF / RTSP standard protocol default application
- ▶ Audio, motion, sensor input/output linkage by various manufacturers

AVIGILON
a Motorola Solutions Company

AXIS
COMMUNICATIONS



BOSCH

Canon

dahua
TECHNOLOGY

FLIR



Hanwha Vision

HIKVISION

Honeywell

JVC

Panasonic

SONY

UDP
TECHNOLOGIES

UNV

VIVOTEK
A Delta Group Company

Performance Series

REDBACKVMS

Specification

Model		EM-VMS256B8+	EM-VMS512B8+
Video Input	IP Camera	256CH	512CH
	Max. License	up to 512CH	up to 1024CH
CPU		Intel i7(12Cores, up to 4.7GHz)	
RAM		DDR5 32GB	DDR5 64GB
SSD		mSATA SSD 120GB(OS, VMS)	
Display	Monitor output	2 x HDMI (4K60Hz)	
	Split screen	(1/2/4/6/7/9/10/13/16/25/36/49/64/81/100/128)	
Performance	Live/Play	FHD 64 channel simultaneous live/ play (Max 32Mo support for 1 camera)	
	Storage	Storage/Transmission of 128 FHD channels per HDD	
Network	Interface	2.5GbE 2ports and 10GbSFP+ 1port	2.5GbE 2ports and 10GbSFP+ 2port
	Bandwidth	15Gbps	25Gbps
	Simultaneous Access	1024(within network bandwidth)	
	Protocol	TCP/IP,UDP,DNS,DDNS,HTTP,NTP,RTP/RTCP,RTSP	
	Bandwidth Control	Auto, Manual	
Recording	Mode	Continuous, Schedule, Event linkage	
	Performance	Max CH x 4Mbps (up to Network Bandwidth of Storage System), CIF-32MP	
	Compression	H.265 / H.264 / MJPEG / MPEG4	
Search/ Play	Search Mode	Date / Time Calendar Search, Channel Bundle Search, Event Search	
	Play-Back Control	Forward / Reverse Playback (High Speed: x1 ~ x32, Low Speed: 1/4 ~ 1/2), Before / After Staff	
IP Camera	Resolution	CIF-32M	
	Protocol	Supported ONVIF / RTSP and Axis / Sony / Panasonic / Hanwha / Truen / Dahua / HIKVISION etc. over 130+	
Operating System		Linux 64bit(Embedded)	
Storage	Default	N/A	
	Available	Up to 8ea SATA type 3.5" HDDs (24TB HDD ~ Max 192TB, Surveillance / Enterprise Level)	
	RAID(option)	Support for external RAID 0/1/5/6/50/60 for EM-JBCD24B connections (up to 2ea) (Enterprise Level HDD only, up to 1,152TB)	
	Non-RAID (option)	HBA for EM-JBCD24B connections (up to 2ea) (Surveillance / Enterprise Level, Max 24TB x 24Bay x 2EA = 1,152TB)	
	SAN (FC,option)	HBA for SAN Storage connections (4G/8G/16G Single/Dual)	
Back-up	Mode	Video (Multiple Channels, Time / Event Subtitle, Encryption), Still Image (Partial Mosaic supported)	
	File Format	MP4, JPG	
Event	Type	Motion Detection, Sensor, Relay, Disk Failure, Camera Signal Loss / Recovery, Emergency Call, LPR, POS, Elevator, Flame / Smoke Detection, Abnormal Sound Detection, Thermal Event, Intelligent Server Integration	
	Action	Recording, Alarm, Camera pop-up, Warning message, Warning sound, E-mail, FTP, Preset	
Application	PC	Live, Search, Backup, Event Manager, E-Map, Multi-monitors, Pan/Tilt/Zoom Control, NVR Setting	
	Web	Live, Pan / Tilt / Zoom for all channels	
	Mobile	iOS / Android Apps	
Security		Multi User Level, Biometric Authentication	
Failover		Supported	
Data/Time Synchronization		NTP timeserver, own NTP server function, self synchronization via GPS(option)	
Intelligent Solution	Built-in SW	EMSTONE video analysis AI-based flame/smoke detection 1 channel(≠ Additional License Options)	
	External	E/L CRT system, EM-call system, LPR Camera, Flame/Smoke Detect system, Password management solution, Video export security system	
	Interworking Analysis Server	EMSTONE-AI, Intellivix, NEXREAL, IVS, HanwhaVision, Truen, ITX, CHAJA, Neotech	
Operating Temp / Humidity		5℃~40℃ / 0%~90%	
Power Supply / Current		SMPS 500W (input from AC100~240V 50/60Hz)	
Product Dimension (W x H x D) / Weight		430.4(W) X 88.4(H) X 480(D)mm / 12kg (without HDD)	
Packing Dimension(W x H x D) / Weight		570(W) X 175(H) X 710(D)mm / 15.5kg (without HDD)	

※ The specification of this product may change without prior notice.

Network Video Recorder

Performance Series

1UB2



Specification

Model		EM-04B2	EM-09B2	EM-16B2	EM-25B2
Video input	IP Camera	4CH	9CH	16CH	25CH
CPU		Dual Core 1.0GHz or Higher			
RAM		DDR4 4GB		DDR4 8GB	DDR4 16GB
Display	Monitor output	1xHDMI / 1xVGA			
	Split screen	1/2/4	1/2/4/6/7/9	1/2/4/6/7/9/10/13/16	1/2/4/6/7/9/10/13/16/25
	Performance (CH/fps)	12M(1CH/15fps) 8M(1CH/30fps) 5M(2CH/60fps) 1080P(4CH/120fps)	12M(1CH/30fps) 8M(2CH/60fps) 5M(4CH/120fps) 1080P(9CH/270fps)	12M(2CH/60fps) 8M(4CH/120fps) 5M(6CH/180fps) 1080P(16CH/480fps)	12M(3CH/90fps) 8M(4CH/120fps) 5M(6CH/240fps) 1080P(25CH/750fps)
Recording	Mode	Continuous, Schedule, Event linkage			
	Performance	Max. 500Mbps / CIF ~12MP			
	Compression	H.265 / H.264 / MPEG4 / MJPEG			
Search/Play	Search Mode	Date / Time Calendar Search, Channel Bundle Search, Event Search			
	Play-Back Control	Play forward / backward (fast:x1~x32, slow:1/4~1/2), Step forward / backward			
IP Camera	Resolution	CIF~12M			
	Protocol	Supported IP Camera and ONVIF / RTSP			
Operating System		Linux 64bit(Embedded) / mSATA SSD 16GB(OS, NVR SW DISC)			
Storage	Default	None			
	Available	Up to 2ea 3.5" HDD can be installed (20TB HDD, available, up to 40TB capacity)			
	RAID/External	Not Supported			
	Hot Swap	Hot Plug Supported			
Back-up	Backup Mode	Video(multiple back up, date/time/event information display, encryption function support), still image(partial mosaic support)			
	File Format	MP4, JPG			
Application	PC	Live, Search, Backup, Event Manager, E-Map, Multi-Monitor, PAN / TILT / ZOOM Control, NVR Setting			
	Web	All Channel Live, PAN/TILT/ZOOM Control			
	Smart Phone	Provide iPhone / Android APP			
Network	Interface	10/100/1000 Base-Tx Ethernet (RJ45) - 1ea			
	Maximum User	1024 (within network bandwidth)			
	Protocol	TCP/IP, UDP, DNS, DDNS, HTTP, NTP, RTP/RTCP, RTSP			
Operating temperature / humidity		5℃~40℃ / 0%~90%			
Power / Power Consumption		DC12V 5A Adapter (AC100 ~ 240V 50/60Hz)			
Dimension (W x H x D)		430.0(W) X 44.5(H) X 249.5(D)mm			
Weight		3.66Kg(without HDD)			

※ The specification of this product may change without prior notice.

Network Video Recorder



Performance Series

2UB8-E



Specification

Model		EM-16B8-E	EM-25B8-E	EM-36B8-E	EM-64B8-E	EM-128B8-E
Video Input	IP Camera	16CH	25CH	36CH	64CH	128CH
CPU		intel Celeron(5Cores, up to 1.1GHz)			intel i5(12Cores, up to 4.4GHz)	
RAM		DDR5 16GB			DDR5 32GB	
SSD		mSATA SSD 16GB(OS, NVR)				
Display	Monitor output	2 x HDMI (4K60Hz)				
	Split screen	(1/2/4/6/10/13/16)	(EM-16B8V2)+ 25	(EM-25B8V2)+ 36	(EM-36B8V2)+ 64	(1/2/4/6/7/9/10/13/16/25/36/48/64 /81/100/128)
Performance	Live/Play	FHD 16CH	FHD 25CH	FHD 36CH	FHD 64 channel simultaneous live/ play (Max 32Mp support for 1 camera)	
	Storage	Storage/Transmission of 128 FHD channels per HDD				
Network	Interface	2.5GbE 2ports				
	Bandwidth	5Gbps				
	Simultaneous Access	1024(within network bandwidth)				
	Protocol	TCP/IP,UDP,DNS,DHCP,HTTP,NTP,RTSP,RTCP,RTSP				
	Bandwidth Control	Auto, Manual				
Recording	Mode	Continuous, Schedule, Event linkage				
	Performance	Max CH x 4Mbps (up to Network Bandwidth of Storage System), CIF-32MP				
	Compression	H.265 / H.264 / MJPEG / MPEG4				
Search/ Play	Search Mode	Date / Time Calendar Search, Channel Bundle Search, Event Search				
	Play-Back Control	Forward / Reverse Playback (High Speed: x1 ~ x32, Low Speed: 1/4 ~ 1/2), Before / After Staff				
IP Camera	Resolution	CIF-32M				
	Protocol	Supported ONVIF / RTSP and Axis / Sony / Panasonic / Hanwha / Truen / Dahua / HikVISION etc. over 130+				
Operating System		Linux 64bit(Embedded)				
Storage	Default	N/A				
	Available	Up to 8ea SATA type 3.5" HDDs (24TB HDD ~ Max 192TB, Surveillance / Enterprise Level)				
	RAID(option)	Support for external RAID 0/1/5/6/50/60 for EM-JBOD24B connections (up to 2ea) (Enterprise Level HDD only, up to 1,152TB)				
	Non-RAID (option)	HBA for EM-JBOD24B connections (up to 2ea) (Surveillance / Enterprise Level, Max 24TB x 24Bay x 2EA = 1,152TB)				
	SAN (FC,option)	HBA for SAN Storage connections (4G/8G/16G Single/Dual)				
	iSCSI (IP SAN)	Supported				
Back-up	Mode	Video (Multiple Channels, Time / Event Subtitle, Encryption), Still Image (Partial Mosaic supported)				
	File Format	MP4, JPG				
Event	Type	Motion Detection, Sensor, Relay, Disk Failure, Camera Signal Loss / Recovery, Emergency Call, LPR, POS, Elevator, Flame / Smoke Detection, Abnormal Sound Detection, Thermal Event, Intelligent Server Integration				
	Action	Recording, Alarm, Camera pop-up, Warning message, Warning sound, E-mail, FTP, Preset				
Application	PC	Live, Search, Backup, Event Manager, E-Map, Multi-monitors, Pan/Tilt/Zoom Control, NVR Setting				
	Web	Live, Pan / Tilt / Zoom for all channels				
	Mobile	iOS / Android Apps				
Security		Multi User Level, Biometric Authentication				
Failover		Supported				
Data/Time Synchronization		NTP timeserver, own NTP server function, self synchronization via GPS(option)				
Intelligent Solution	Built-in SW	EMSTONE video analysis AI-based flame/smoke detection 1 channel(※ Additional License Options)				
	External	E/L CRT system, EM-call system, LPR Camera, Flame/Smoke Detect system, Password management solution, Video export security system				
	Interworking Analysis Server	EMSTONE-AI, Intellivix, NEXREAL, IVS, HanwhaVision, Truen, ITX, CHAJA, Nectech				
Operating Temp / Humidity		5℃~40℃ / 0%~90%				
Power Supply / Current		SMPS 500W (input from AC100~240V 50/60Hz)				
Product Dimension (W x H x D) / Weight		430.4(W) X 88.4(H) X 480(D)mm / 12kg (without HDD)				
Packing Dimension(W x H x D) / Weight		570(W) X 175(H) X 710(D)mm / 15.5kg (without HDD)				

※ The specification of this product may change without prior notice.

Network Video Recorder

Performance Series

3UB16-E



Specification

Model		EM-36B16-E	EM-64B16-E	EM-128B16-E
Video Input	IP Camera	36CH	64CH	128CH
CPU		Intel i5(12Cores, up to 4.4GHz)		
RAM		DDR5 32GB		
SSD		mSATA SSD 16GB(OS, NVR)		
Display	Monitor output	2 x HDMI(4K60Hz)		
	Split screen	(1/2/4/5/7/9/13/15/25/36)	(1/2/4/5/7/9/13/15/25/36/49/64)	(1/2/4/6/7/9/10/13/16/25/36/49/64/81/100/128)
Performance	Live/Play	FHD 36CH	FHD 64CH	
	Storage	Storage/Transmission of 128 FHD channels per HDD		
Network	Interface	RJ45 2.5GbE 2ports		
	Bandwidth	5Gbps		
	Simultaneous Access	1024(within network bandwidth)		
	Protocol	TCP/IP,UDP,DNS,DDNS,HTTP,NTP,RTP/RTCP,RTSP		
	Bandwidth Control	Auto, Manual		
Recording	Mode	Continuous, Schedule, Event linkage		
	Performance	Max CH x 4Mbps (up to Network Bandwidth of Storage System), CIF~32MP		
	Compression	H.265 / H.264 / MJPEG / MPEG4		
Search/ Play	Search Mode	Date / Time Calendar Search, Channel Bundle Search, Event Search		
	Play-Back Control	Forward/Reverse Playback (High Speed: x1~x32, Low Speed: 1/4~1/2), Before / After Staff		
IP Camera	Resolution	CIF~32M		
	Protocol	Supported ONVIF / RTSP and Axis / Sony / Panasonic / Hanwha / Truen / Dahua / HikVISION etc. over 130+		
Operating System		Linux 64bit(Embedded)		
Storage	Default	N/A		
	Available	Up to 16ea SATA type 3.5" HDDs (24TB HDD - Max 384TB, Surveillance / Enterprise Level)		
	RAID(option)	Support for external RAID 0/1/5/6/10/60 for EM-J80024B connections (up to 2ea) (Enterprise Level HDD only, up to 1,152TB)		
	Non-RAID (option)	HBA for EM-J80024B connections (up to 2ea) (Surveillance / Enterprise Level, Max 24TB x 24Bay x 2EA = 1,152TB)		
	SAN (FC,option)	HBA for SAN Storage connections (4G/8G/16G Single/Dual)		
	iSCSI (IP SAN)	Supported		
Back-up	Mode	Video (Multiple Channels, Time / Event Subtitle, Encryption), Still Image (Partial Mosaic supported)		
	File Format	MP4, JPG		
Event	Type	Motion Detection, Sensor, Relay, Disk Failure, Camera Signal Loss / Recovery, Emergency Call, LPR, POS, Elevator, Flame / Smoke Detection, Abnormal Sound Detection, Thermal Event, Intelligent Server Integration		
	Action	Recording, Alarm, Camera pop-up, Warning message, Warning sound, E-mail, FTP, Preset		
Application	PC	Live, Search, Backup, Event Manager, E-Map, Multi-monitors, Pan/Tilt/Zoom Control, NVR Setting		
	Web	Live, Pan / Tilt / Zoom for all channels		
	Mobile	iOS / Android Apps		
Security		Multi User Level, Biometric Authentication		
Failover		Supported		
Data/Time Synchronization		NTP timeserver, own NTP server function, self synchronization via GPS(option)		
Intelligent Solution	Built-in SW	EMSTONE video analysis AI-based flame/smoke detection 1 channel(◆ Additional License Options)		
	External	E/L CRT system, EM-call system, LPR Camera, Flame/Smoke Detect system, Password management solution, Video export security system		
	Interworking Analysis Server	EMSTONE-AI, Intellivix, NEXREAL, iVS, HanwhaVision, Truen, ITX, CHAJIA, Neotech		
Operating Temp / Humidity		5℃~40℃ / 0%~90%		
Power Supply / Current		SMPS 500W (input from AC100 ~ 240V 50/60Hz)		
Product Dimension (W x H x D) / Weight		430.4(W) X 133.4(H) X 550(D)mm /14.6kg (without HDD)		
Packing Dimension(W x H x D) / Weight		570(W) X 225(H) X 765(D)mm /20.3kg (without HDD)		

※ The specification of this product may change without prior notice.

Network Video Recorder

Performance Series

4UB24-E



Specification

Model		EM-36B24V2	EM-64B24V2	EM-128B24V2
Video Input	IP Camera	36CH	64CH	128CH
CPU		intel i5(12Cores, up to 4.4GHz)		
RAM		DDR5 32GB		
SSD		mSATA SSD 16GB(OS, NVR)		
Display	Monitor output	2 x HDMI(4K60Hz)		
	Split screen	(1/2/4/6/7/9/10/13/16/25/36)	(1/2/4/6/7/9/10/13/16/25/36/49/64)	(1/2/4/6/7/9/10/13/16/25/36/49/64/81/100/128)
Performance	Live/Play	FHD 36CH	FHD 64CH	
	Storage	Storage/Transmission of 128 FHD channels per HDD		
Network	Interface	RJ45 2.5GbE 2ports		
	Bandwidth	5Gbps		
	Simultaneous Access	1024(within network bandwidth)		
	Protocol	TCP/IP,UDP,DNS,DDNS,HTTP,NTP,RTP/RTCP,RTSP		
	Bandwidth Control	Auto, Manual		
Recording	Mode	Continuous, Schedule, Event linkage		
	Performance	Max CH x 4Mbps (up to Network Bandwidth of Storage System), CIF~32MP		
	Compression	H.265 / H.264 / MJPEG / MPEG4		
Search/ Play	Search Mode	Date / Time Calendar Search, Channel Bundle Search, Event Search		
	Play-Back Control	Forward/Reverse Playback (High Speed: x1~x32, Low Speed: 1/4~1/2), Before / After Staff		
IP Camera	Resolution	CIF~32M		
	Protocol	Supported ONVIF / RTSP and Axis / Sony / Panasonic / Hanwha / Truen / Dahua / HikVISION etc. over 130+		
운영체제		Linux 64bit(Embedded)		
Storage	Default	N/A		
	Available	Up to 24ea SATA type 3.5" HDDs (24TB HDD – Max 576TB, Surveillance / Enterprise Level)		
	RAID(option)	Support for external RAID 0/1/5/6/50/60 for EM-J80024B connections (up to 2ea) (Enterprise Level HDD only, up to 1,152TB)		
	Non-RAID (option)	HBA for EM-J80024B connections (up to 2ea) (Surveillance / Enterprise Level, Max 24TB x 24Bay x 2EA = 1,152TB)		
	SAN (FC,option)	HBA for SAN Storage connections (4G/8G/16G Single/Dual)		
Back-up	iSCSI (IP SAN)	Supported		
	Mode	Video (Multiple Channels, Time / Event Subtitle, Encryption), Still Image (Partial Mosaic supported)		
Event	File Format	MP4, JPG		
	Type	Motion Detection, Sensor, Relay, Disk Failure, Camera Signal Loss / Recovery, Emergency Call, LPR, POS, Elevator, Flame / Smoke Detection, Abnormal Sound Detection, Thermal Event, Intelligent Server Integration		
Application	Action	Recording, Alarm, Camera pop-up, Warning message, Warning sound, E-mail, FTP, Preset		
	PC	Live, Search, Backup, Event Manager, E-Map, Multi-monitors, Pan/Tilt/Zoom Control, NVR Setting		
	Web	Live, Pan / Tilt / Zoom for all channels		
Security	Mobile	iOS / Android Apps		
		Multi User Level, Biometric Authentication		
Failover		Supported		
Data/Time Synchronization		NTP timeserver, own NTP server function, self synchronization via GPS(option)		
Intelligent Solution	Built-in SW	EMSTONE video analysis AI-based flame/smoke detection 1 channel(◆ Additional License Options)		
	External	E/L CRT system, EM-call system, LPR Camera, Flame/Smoke Detect system, Password management solution, Video export security system		
	Interworking Analysis Server	EMSTONE-AI, Intelivix, NEXREAL, iVS, HanwhaVision, Truen, ITX, CHAJA, Neotech		
Operating Temp / Humidity		5℃~40℃ / 0%~90%		
Power Supply / Current		SMPS 1200W (input from AC100 ~ 240V 50/60Hz)		
Product Dimension (W x H x D) / Weight		430.4(W) X 175.4(H) X 550(D)mm /17.5kg (HDD without)		
Packing Dimension(W x H x D) / Weight		570(W) X 270(H) X 765(D)mm /23.3kg (HDD without)		

※ The specification of this product may change without prior notice.

Smart IP Wall

Network Display Server

NDS-04-4K

Specification

Model		EM-NDS-04-4K
Monitor	Output	4 of HDMI ports
	Output Performance	Full-HD Monitor Display – up to 4ea Ultra HD Monitor Display – up to 4ea
Video output Performance	Full-HD Monitor	D1(720x480): 4 x 1,920fps HD(1280x720): 4 x 960fps Full HD(1920x1080): 4 x 480fps Ultra HD(3840x2160): 4 x 120fps
	Ultra HD Monitor	D1(720x480): 4 x 1,920fps HD(1280x720): 4 x 960fps Full HD(1920x1080): 4 x 480fps Ultra HD(3840x2160): 4 x 120fps
Operating System		Linux 64bit (Embedded)
CPU		2ea Quad Core 2.4GHz or Higher
RAM		DDR4 32G RAM
VGA		Integrated Graphic(Intel® Iris® X® Graphic)
Disk		M.2 SSD 32G
Network	Interface	4ea of 1/2.5Gbps Ethernet (RJ45)
	Bandwidth Control	Auto
Operating Temp / Humidity		0℃~40℃ / 0%~90%
Power Supply / Current		2ea of DC12V 5A
Dimension (W x H x D)		430.0(W) x 45.0(H) x 248.0(D) mm
Weight		Approx. 2.98Kg

※ The specification of this product may change without prior notice.

Smart IP Wall



Network Display Server

NDS-mini-4K



Specification

Model		EM-NDS-mini-4K
Monitor	Output	1 of HDMI
	Output Performance	Full-HD Monitor Display – up to 1ea(60Hz) Ultra HD Monitor Display – up to 1ea(60Hz)
Video output Performance	Full-HD Monitor	D1(720x480): 1,920fps HD(1280x720): 960fps Full HD(1920x1080): 480fps Ultra HD(3840x2160): 120fps
	Ultra HD Monitor	D1(720x480): 1,920fps HD(1280x720): 960fps Full HD(1920x1080): 480fps Ultra HD(3840x2160): 120fps
Operating System		Linux 64bit (Embedded)
CPU		Dual Core 1.8GHz or Higher
RAM		DDR4 16G RAM
VGA		Integrated Graphic
Disk		SSD mSATA 16G
Network	Interface	2ea of 1/2.5Gbps Ethernet (RJ45)
	Bandwidth Control	Auto
Operating Temp / Humidity		0℃~40℃ / 0%~90%
Power Supply / Current		DC12V 5A
Dimension (W x H x D)		185.0(W) x 45.0(H) x 197.5(D) mm
Weight		Approx. 1.04Kg (without VESA Mount)

※ The specification of this product may change without prior notice.

Central Monitoring Server

CMS Station H



Specification

Model		EM-CMS Station H
CMS Version	Default	CMS Basic Version (8 Host)
	Options	16/64/128/512/1024 Host
Operating System		Ubuntu 22.04 with modified Linux Kernel, OpenGL and X-Windows
CPU		Intel Dual Core 1.8Hz
RAM		DDR4 16G RAM (8Gx2ea)
VGA		Integrated Graphic (included 48 Execution Unit)
Disk		M.2 SSD 128G
Display	Monitor Output	2xHDMI(up to 4K 60Hz support)
	Mode	Various display mode and full screen mode like 1x1, 1x2, 2x1, 2x2, 3x3
	Performance	Full HD 32CH Decoding, Up to 8K(7680x4320) Decoding
Search/Replay	Method	Date / Time Calendar Search, Individual / Channel Bundle Search, Event Search
	Replay Control	Forward direction (high speed:x1~x32), Step forward / backward
Backup	Mode	Video, Still Image
	File Format	MP4, JPG, Encrypted Backup
Video Wall		EMSTONE IP Video Wall System Setup / Control
Event	Type	Motion Detection, Sensor, Relay, Disk Failure, Camera Signal Loss / Recovery, Emergency Bell, License Plate Recognition, POS, Elevator CRT, Fire / Smoke Detection, Abnormal Sound Detection, Thermal Imaging Camera
	Action	Alarm Digital-out, Pop-up Camera, Alarm Sound, Warning Message, Preset Control, IP Video Wall Control (Video / Image / Text Output Control, Preset)
Network	Interface	1/2.5Gbps Ethernet (RJ45) -2ea
	Bandwidth Control	Automatic, Manual
Operating temperature / humidity		5℃~40℃ / 0%~90%
Power / Power Consumption		DC12V 5A
Dimension (W x H x D)		224.0(W) X 88.8(H) X 200.0(D)mm
Weight		Approx. 2.7Kg

※ The specification of this product may change without prior notice.

Camera

5MP Sound Detection Dome Type Camera

EM-IQD(F21P)

Specification

모델명		EM-IQD(F21P)
Camera	Image Sensor	1/2.7" 5Megapixel progressive CMOS
	Max. Resolution	2880 x 1620 pixel
	Electronic Shutter Speed	1/3 sec ~ 1/10,000sec
	Min. Illumination	0.006Lux@F2.1 (Color), 0.01Lux@F2.1 (B/W)
Lens	Lens Type	Fixed
	Focal Length	2.1mm
	Field of View	H : 140° / V : 79°
Video	Video Compression	H.265 / H.264
	Video Frame Rate	30 fps for 1080p/720p/D1/CIF 30 fps for 4M(2560 x 1440) 16:9 30 fps for 5M(2880 x 1620) 16:9
Function	Day/Night	Auto / Day / Night(ICR)
	BLC/HLC/WDR	Yes
	White Balance	Auto/Manual
	IVS	Motion detection, Video Shelter, Line Crossing, Area Intrusion, Region Entrance, Region Exiting, Fast Moving
Audio	Sound Detection	Yes
Network	Interface	RJ-45 (10/100 Base-T)
	Protocol	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, IGMP, UPnP, SMTP, UPnP-TM, P2P
	Interoperability	ONVIF(Profile S)
	User/Host	10
Power	Power Supply	12V DC/PoE (802.3af)
Environment	Operating Conditions	-30°C to +60°C /less than ≤ 95% RH
	Protection	IP67, IK10
Structure	Dimensions	112 mm × 87.5 mm

※ The specification of this product may change without prior notice.

Camera



5MP Bullet Type Parrot Camera

EM-IQV(14W5Z)



Specification

모델명		EM-IQV(14W5Z)
Camera	Image Sensor	1/2.8" 5Megapixel progressive CMOS
	Electronic Shutter Speed	1 sec ~ 1/10,000sec(60/30 mode) 1 sec ~ 1/10,000sec(50/25mode)
	Min. Illumination	0.05Lux (Color), 0.01Lux(B/W), 0 Lux (IR)
	Illumination Distance	30 m
Lens	Lens Type	Motorized
	Focal Length	2.7 ~ 13.5mm, F1.6 ~ F2.8
	Field of View	101.9°(W) ~ 33.1°(T)
Video	Video Compression	H.265 / H.264 / MJPEG
	Video Frame Rate	Max. 30 fps for 5M/4M/1080P/720P/D1
Function	Day/Night	Auto / Day / Night(ICR)
	BLC/HLC/WDR	Yes
	White Balance	Auto/Indoor/Outdoor/Manual
	IVS	SMD - Human , Car detection, Line Cross , Region Entrance, Region Exiting, Area Intrusion, Scene change, De-focus detection
Audio	Audio Compression	G.711 A-law, G.711 μ-law, 128kbps, sampling rate 8kHz
	Speaker	14W 6Ω
Network	Interface	RJ-45 (10/100 Base-T)
	Protocol	IPv4, TCP/IP, UDP, RTP, RTSP, RTMP, NTP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP
	Interoperability	ONVIF(Profile S)
	User/Host	10
Power	Power Supply	DC12V 2A / PoE
Environment	Operating Conditions	-30°C to +50°C /less than ≤ 95% RH
	Protection	IP66
Structure	Dimensions	190 mm × 233 mm × 125
	Net Weight	2.1kg

※ The specification of this product may change without prior notice.

Camera

5MP PTZ Type Parrot Camera

EM-IQP(14W5Z)

Specification

모델명		EM-IQP(14W5Z)
Camera	Image Sensor	1/2.8" 5Megapixel progressive CMOS
	Electronic Shutter Speed	1 sec ~ 1/10,000sec(60/30 mode) 1 sec ~ 1/10,000sec(50/25mode)
	Min. Illumination	0.05Lux (Color), 0.01Lux(B/W), 0 Lux (IR)
	Illumination Distance	30 m
Lens	Lens Type	Motorized
	Focal Length	2.7 ~ 13.5mm, F1.6 ~ F2.8
	Field of View	101.9°(W) ~ 33.1°(T)
PTZ	Pan/Tilt Radius	Pan: 360° (Endless) / Tilt : -40° ~ +45°
	Pan/Tilt Speed	Pan: 0.1° ~ 90°/sec / Tilt : 0.1° ~ 20°/sec
	Preset	256
	Group	8 Groups (Max. 16 presets)
Video	Video Compression	H.265 / H.264 / MJPEG
	Video Frame Rate	Max. 30 fps for 5M/4M/1080P/720P/D1
Function	Day/Night	Auto / Day / Night(ICR)
	BLC/HLC/WDR	Yes
	White Balance	Auto/Indoor/Outdoor/Manual
	IVS	SMD - Human , Car detection, Line Cross , Region Entrance, Region Exiting, Area Intrusion, Scene change, De-focus detection
Audio	Audio Compression	G.711 A-law, G.711 μ-law, 128kbps, sampling rate 8kHz
	Speaker	14W 6Ω
Network	Interface	RJ-45 (10/100 Base-T)
	Protocol	IPv4, TCP/IP, UDP, RTP, RTSP, RTMP, NTP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP
	Interoperability	ONVIF(Profile S)
	User/Host	10
Power	Power Supply	DC12V 3.5A / PoE
Environment	Operating Conditions	-30°C to +50°C /less than ≤ 95% RH
	Protection	IP66
Structure	Dimensions	190 mm × 233 mm × 125
	Net Weight	3.3kg

※ The specification of this product may change without prior notice.



More videos including product demonstrations and references



YouTube

