

**SIEMENS**



Answers for infrastructure.

# Video Surveillance

Portfolio Overview



## A broad range of solutions to meet all needs

Video surveillance provides full visual control over a facility around the clock. With the help of digital storage you can identify people and provide evidence that a series of events has occurred. Video surveillance improves security and safety, and is used today in sectors ranging from retail to industrial complexes and other types of buildings.

Siemens Security Products provides a complete range of video surveillance products and systems. This includes IP and analogue cameras, lenses, digital video recorders (DVRs), monitors and much more.

# System design tips

The purpose of video surveillance is to discourage criminals, but if a crime does take place it also makes it possible to establish the course of events and identify the people and objects involved. To optimize the use of a video surveillance system the following criteria should be met:

- There should be two types of cameras: wide-angle "overview" cameras and close-up cameras.

- The number of wide-angle cameras and their placement should be sufficient to cover all the points of interest in the monitored area(s) with good image quality.

- There should be close-up cameras whose placement and type should be such that they can provide detail-rich images with the right proportions. It is preferable that these images show both the whole body of the person(s) in the shot,

and closer head-and-shoulders shots as well. Appropriate places for close-up cameras would be at the cash register and the entrance, for example.

- There should be enough light.

- There should be a set schedule and routines for regular system evaluations.

- There should be a documented action plan for what should be done if there is suspicion of criminal activity.

- Staff should be trained to operate the system correctly and given the opportunity to keep their knowledge up to date.

- Recordings that show criminal activity must be handled in such a way that the original images can be handed over to the justice system in a manner that is in accordance with the law.

## Portfolio highlights

- IP and analogue cameras
- Day-night cameras
- Dome cameras
- SISTORE AX digital video recorders
- SISTORE MX digital video recorders
- SISTORE MX NVS
- Lenses, monitors and power supplies
- Housings, mounts and other accessories



# Analogue or IP?

■ Reliable security cameras play a key role in monitoring security both inside and around buildings - in a modern security system, the camera has become the front end. As with all Siemens products, the latest manufacturing techniques have been used to produce cameras with exceptional build quality. Combine this with our high performing electronics inside the camera, we ensure high-quality professional pictures around the clock, 24 hours a day.

## ■ Why choose Siemens Analogue cameras?

Only a camera optimally adjusted to prevailing light conditions can deliver clear, crisp images. Siemens has met this challenge at the highest level and created a range of cameras to cover all customer needs.

Siemens offers solutions for every application, for indoor and outdoor, from the inexpensive 1/3" CCD DSP version to to high-performance colour cameras as well as specialised Wide Dynamic day/night cameras.

Our "All-in-one" high-resolution day-night cameras offer an integrated auto focus zoom lens for up to 22x optical zoom. The range includes models for both indoor and outdoor use. The outdoor models are particularly installer-friendly as they are pre-assembled (camera with integrated zoom lens in a housing with sunshield and wall mount bracket), saving installation time on site making the process as easy and flexible as possible.

Cameras by Siemens can be used for monitoring in public areas, for traffic monitoring, in tunnels, casinos, train stations, airports and many other applications. With their uniformly attractive design, the cameras offer a "sharper image" in any environment.

In addition, our cameras are designed to look good wherever you position them. With modern housings, and the discreet colours blend in perfectly with any environment; whether it is ultramodern or has a more traditional décor. Speaking of tradition, our cameras have proved their worth at the De Beers diamond mine in Botswana, the 21st Century Plaza in China and at Munich airport in Germany. From this point of view too, Siemens cameras clearly see more than the others.

## ■ Why choose Siemens IP cameras?

Siemens network IP cameras offer selectable compression as standard, ensuring the highest flexibility and allowing a system to be optimised depending upon image quality or bandwidth. The high performance CCD sensor enables very high light sensitivity to deliver outstanding images when either used in- or outdoors, by day or night. With a camera range that encompasses VGA to full HD ready image quality and Onvif compliant, Siemens IP camera portfolio offers the best image quality along with an easy integration platform to 3rd party systems seamlessly.

The easy-to-use networkable, indoor Soho colour cameras, are specially designed for home security applications with a compact, stylish exterior. With its ultra compact size, it incorporates many advanced features to match security requirements. The 1, 1.3 and 2 Megapixel resolution box and fixed dome cameras have the ability to deliver more image details when required.

Siemens IP cameras capture and send live streaming video directly over an IP network that enables users to view and manage the camera using a standard Web browser on any local or remote computer, SISTORE MX 3G, or SISTORE MX NVS (Network Video Software) on a network. Therefore transmission distances are no longer a problem. With a wide range of solutions to choose from, Siemens IP camera portfolio ensures that the best camera solution is available for any networking application.

Office buildings



Airports



Casinos



## Analogue cameras

■ The CCD-chip technology used in Siemens analogue cameras makes it possible to provide high resolution and sharp colour images provided that the light conditions are good.



Model number	CCBC1345-LP / MP	CCBS1345-LP / MP
Article number	2GF1183-8GA / B	2GF1118-8GA / B
CCD chip	1/3"	1/3"
Resolution	480 TVL	480 TVL
Back-light compensation (BLC)	on/off	on/off
Dip switch setting	Yes	Yes
Light sensitivity	0.6 Lux	0.6 Lux
Operating voltage	12VDC or 24VAC / 230V AC	12VDC or 24VAC / 230V AC
Current consumption	4W	4W

## Day-night cameras

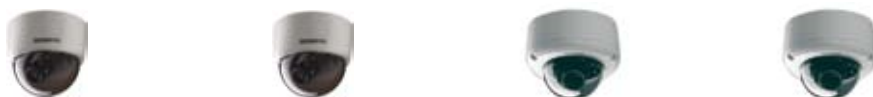
■ All of Siemens' day-night cameras build on the latest CCD chip technology and deliver clear images around the clock. To take full advantage of the day-night technology we recommend the use of some form of infrared (IR) lighting that switches on automatically at the same time that the camera switches over to night mode. The integrated IR filter should also be disabled at this time.



Model number	CCBS1337-LP	CCBS1337-MP
Article number	2GF1118-8FA	2GF1118-8FB
CCD chip	1/3"	1/3"
Resolution	540 TVL	540 TVL
Back-light compensation (BLC)	6 zones	6 zones
On Screen Display (OSD)	Yes	Yes
Light sensitivity	0.4/0.08 Lux	0.4/0.08 Lux
Operating voltage	12VDC/24VAC	230V AC
Current consumption	4W	4.5W

## Dome cameras

■ This attractive series includes different models for discrete surveillance of both indoor and outdoor environments. Choose between colour monofocal domes, colour varifocal domes, or day-night varifocal domes. These camera types are ideal for surveillance in shops, restaurants and hotels, for example. A stylish one-channel video server that transforms an analogue camera to an IP camera is available as an accessory.



Model number	CFVC1317-LP	CFVS1317-LP	CVVC1317-LP	CVVS1317-LP
Article number	S54561-C61-A1	S54561-C62-A1	S54561-C63-A1	S54561-C64-A1
CCD chip	1/3"	1/3"	1/3"	1/3"
Resolution	540 TVL	540 TVL	540 TVL	540 TVL
Lens	3.7-12 mm	3.7-12 mm	3.7-12mm	3.7-12mm
Day-night	No	Yes	No	Yes
Back-light compensation (BLC)	6 zones	6 zones	on/off	on/off
Vandal resistant	No	No	Yes	Yes
Dome colour	Toned	Toned	Toned	Toned
Light sensitivity	0.46 Lux	0.53/0.43 Lux	0.46 Lux	0.53/0.43 Lux
Operating voltage	12VDC/24VAC	12VDC/24VAC	12VDC/24VAC	12VDC/24VAC
Current consumption	3.5W	3.5W	3.5W	3.5W
IP rating	-	-	IP66	IP66

## All in one cameras

■ This family of high-resolution colour and day-night cameras offers an integrated auto focus zoom lens for up to 22x optical zoom. The range includes four models for both indoor and outdoor use. The outdoor models are particularly installer-friendly as they are preinstalled – camera with integrated zoom lens in a housing with sunshield and wall mount bracket – as easy and flexible as possible. The range also includes a fixed dome model with auto focus zoom in a vandal resistant IP66 housing, particularly suitable for discreet monitoring of car parks or public areas.



Model number	CCAW1417-LPI	CCAW1417-LPO	CCAW1417-LPOIR	CVAW1417-LP
Article number	S54561-C34-A1	S54561-C35-A1	S54561-C36-A1	S54561-C37-A1
CCD chip	1/4"	1/4"	1/4"	1/4"
Resolution	560/600 TVL	560/600 TVL	560/600 TVL	560/600 TVL
Lens	3.9 ~ 85.8 mm	3.9 ~ 85.8 mm	3.9 ~ 85.8 mm	3.9 ~ 85.8 mm
Day-night	Yes	Yes	Yes	Yes
Back-light compensation (BLC)	Auto / Manual / Off	Auto / Manual / Off	Auto / Manual / Off	Auto / Manual / Off
Vandal resistant	No	No	No	Yes
Zoom optical/digital	22x (optical), 16x (digital)	22x (optical), 16x (digital)	22x (optical), 16x (digital)	22x (optical), 16x (digital)
Light sensitivity	0.5/0.05 Lux	0.5/0.05 Lux	0.5/0.05 Lux	0.5/0.05 Lux
Operating voltage	12VDC/24VAC	12VDC/24VAC	12VDC/24VAC	12VDC/24VAC
Current consumption	6.5W	9W	9W	6.5W
IP rating	Indoor only	IP66	IP66 + IR / White LEDs	IP66

## High-speed varifocal dome cameras

■ Siemens high-speed dome cameras are available in a variety of formats: one colour model and three day-night models with exceptional functionality in challenging light conditions. Mechanical IR filters make it possible for day-night cameras to produce clear monochrome images. A wide range of mounting accessories is available, including outdoor, indoor or vandal-resistant camera housings.



Model number	CCDA1445-ST18	CCDA1445-DN18	CCDA1445-DN26	CCDA1445-DN36
Article number	S54561-C10-A1	S54561-C11-A1	S54561-C12-A1	S54561-C13-A1
CCD chip	1/4"	1/4"	1/4"	1/4"
Resolution	480 TVL	530 TVL	530 TVL	530 TVL
On Screen Display (OSD)	Yes	Yes	Yes	Yes
Integrated lens	4.1-73.8mm	4.1-73.8mm	3.5-91.0mm	3.4-122.4mm
Zoom	18x	18x	26x	36x
Light sensitivity	1.0 Lux	0.7/0.01 Lux	1.0/0.01 Lux	1.4/0.01 Lux
Operating voltage	24VAC	24VAC	24VAC	24VAC
Current consumption	20VA	20VA	20VA	20VA

## IP networkable indoor colour cameras

■ This range of easy-to-use networkable, indoor colour cameras, are specially designed for home security applications with a compact, stylish exterior. With its ultra-compact size, it incorporates a good many advanced features to match security requirements.



Model number	CCIC1410-L	CCIC1410-LA	CCIC1410-LAW
Article number	S54561-C90-A1	S54561-C90-A2	S54561-C90-A3
Specification	VGA	VGA, Alarm in/out, Audio	VGA Audio /WLAN
Video sensor	1/4"CMOS	1/4"CMOS	1/4"CMOS
Compression	MJPEG/MPEG4	MJPEG/MPEG4	MJPEG/MPEG4
Pixel resolution	640x480	640x480	640x480
Light sensitivity	0.4Lux	0.4Lux	0.4Lux
Current consumption	Max. 5W	Max. 5W	Max. 7W

## IP fixed dome cameras

■ The new range of Siemens IP fixed dome day / night cameras combines the requirements of classic analogue CCTV cameras with the high performance, flexibility and IT-security of a modern Video-over-IP device. Thanks to hybrid technology, this camera range allows the upgrade of existing video installations to state-of-the-art IP systems. The new range includes 3 model variations that all benefit from varifocal lenses that ensure the best camera solution is available for almost any networking application. The three models range from VGA up to 2 megapixel resolution (full HD image quality) and ensure the best possible image quality for indoor requirements. Thanks to the H.264, MPEG-4 & MJPEG triple encoding functionality, and their Onvif compliance these cameras can be easily integrated into 3rd party systems. Their compact design is an ideal fit even for stylish environments.



Model number	CFIS1425	CFMW1325	CFMS2025
Article number	S54561-C93-A2	S54561-C93-A4	S54561-C93-A5
Video sensor	1/4"CMOS (VGA)	1/3" WDR CMOS (1.3MP WDR)	1/2.7" 1080p HD CMOS (2MP)
Compression	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264
Pixel resolution	680x512	1280x960 (HD)	1920x1080 (Full HD)
Light sensitivity	0.5Lux	3Lux	0.8Lux
Image frame rate	25 fps @ H.264 D1	25 fps @ H.264 720P	12 fps @ H.264 1080p
Audio feature	Two-way Mono / full duplex	Two-way Mono / full duplex	Two-way Mono / full duplex
Alarm	Yes; 3x Alarm In & 1x Alarm Out	Yes; 3x Alarm In & 1x Alarm Out	Yes; 3x Alarm In & 1x Alarm Out
Motion detection	Yes	Yes	Yes
Wide Dynamic	No	Yes	No
Day / night	Yes	Yes	Yes
Current consumption	Max. 5.5W	Max. 5.5W	Max. 5.5W

# IP box cameras

■ With three day / night models, the new range of Siemens IP box cameras offers the right camera for every application. The high performance CMOS sensor enables very high light sensitivity to deliver outstanding images when either used in- or outdoors, by day or night. The three models range from VGA up to 2 megapixel resolution (full HD image quality) and ensure the best possible image quality for indoor requirements. Thanks to the H.264, MPEG-4 & MJPEG triple encoding functionality, and their Onvif compliance these cameras can be easily integrated into 3rd party systems. Their compact design is an ideal fit even for stylish environments.



Model number	CCIS1425	CCMW1325	CCMS2025
Article number	S54561-C91-A2	S54561-C91-A4	S54561-C91-A5
Video sensor	1/4" CMOS (VGA)	1/3" WDR CMOS (1.3MP WDR)	1/2.7" 1080p HD CMOS (2MP)
Compression	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264
Pixel resolution	680x512	1280x960 (HD)	1920x1080 (Full HD)
Light sensitivity	0.5Lux	3Lux	0.8Lux
Image frame rate	25 fps @ H.264 D1	25 fps @ H.264 720P	12 fps @ H.264 1080p
Audio feature	Two-way Mono / full duplex	Two-way Mono / full duplex	Two-way Mono / full duplex
Alarm	Yes; 3x Alarm In & 1x Alarm Out	Yes; 3x Alarm In & 1x Alarm Out	Yes; 3x Alarm In & 1x Alarm Out
Motion detection	Yes	Yes	Yes
Wide Dynamic	No	Yes	No
Day / night	Yes	Yes	Yes
Current consumption	Max. 5.5W	Max. 5.5W	Max. 5.5W

## 1.3 Megapixel CCD IP cameras

■ These IP cameras offer 1.3 Megapixel resolution delivering clearly more image details. The range includes standard colour and day/night camera models, as well as a colour fixed dome model allowing easy and fast installation.

## IP colour PTZ dome camera

■ This IP colour PTZ dome offers VGA resolution MPEG4/MJPEG streaming, delivering crisp video images. The integrated pan/tilt mechanism allows comfortable tracking of moving objects and people and precise positioning to predefined positions in the scene in case of an alarm.



Model number	CCMC1315-LP	CCMS1315-LP	CFMC1315	CCID1410-ST
Article number	S54561-C80-A1	S54561-C80-A2	S54561-C81-A1	S54561-C82-A1
Video sensor	1/3" CCD	1/3" CCD	1/3" CCD	1/4" CCD
Compression	MJPEG/MPEG-4	MJPEG/MPEG-4	MJPEG/MPEG-4	MJPEG/MPEG4
Pixel resolution	1280x960	1280x960	1280x960	640x480
Day / night	-	Yes	Yes	-
Back-light compensation (BLC)	BLI-6 on/off	BLI-6 on/off	BLI-6 on/off	on/off
Light sensitivity	0.4 lux	0.4/0.1 lux	0.4/0.1 lux	0.7Lux
Current consumption	Max. 7W	Max. 8.5W	Max. 7W	Max. 16W



# High-speed varifocal IP dome cameras

■ Siemens high-speed IP dome cameras are available in a variety of three day-night models with exceptional functionality in challenging light conditions. Mechanical IR filters make it possible to produce clear monochrome images. A wide range of mounting accessories is available, including outdoor, indoor or vandal-resistant camera housings.



Model number	CCID1445-DN18	CCID1445-DN28	CCID1445-DN36
Article number	S54561-C31-A1	S54561-C32-A1	S54561-C33-A1
Video sensor	1/4"	1/4"	1/4"
Compression	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264	MPEG4/Motion JPEG/H.264
Pixel resolution	D1 720x576	D1 720x576	D1 720x576
Light sensitivity	0.7/0.01 Lux	1.0/0.01 Lux	1.4/0.01 Lux
Image frame rate	H.264 D1 @ 25 fps	H.264 D1 @ 25 fps	H.264 D1 @ 25 fps
Audio feature	Two-way Mono	Two-way Mono	Two-way Mono
Alarm	Yes; 4x Alarm In & 1x Alarm Out	Yes; 4x Alarm In & 1x Alarm Out	Yes; 4x Alarm In & 1x Alarm Out
Motion detection	Yes	Yes	Yes
On Screen Display (OSD)	Yes	Yes	Yes
Integrated lens	4.1-73.8mm	3.5-91.0mm	3.4-122.4mm
Zoom	18x	28x	36x
Operating voltage	24VAC	24VAC	24VAC
Current consumption	25VA	25VA	25VA

## IP vandal dome with IR illumination

■ The IP vandal dome with IR illumination offers full HD resolution, resulting in clear image details with the integrated illuminator. The vandal resistant IP66 housing means that this dome is particularly suitable for discreet monitoring in most environments.



Model number	CVMS2025-IR
Article number	S54561-C95-A7
Video sensor	1080p/720p HD color CMOS
Compression	MPEG4/Motion JPEG/H.264
Pixel resolution	Full HD
Light sensitivity	0.8 Lux
Image frame rate	H.264 Full HD @12 fps
Audio feature	Two-way Mono
Alarm	Yes; 3x Alarm In & 1x Alarm Out
Motion detection	Yes
Day-night	Yes
Back-light compensation (BLC)	on/off
Current consumption	Max. 8 W

## Network video encoder

■ This state-of-the-art 1-channel IP encoder is the ideal device for supporting the cost effective migration of analogue to IP video systems. It is provided with PoE functionality and in addition includes an integrated power output, allowing the external power supply of an analogue camera.



Model number	CNE1000
Article number	S54561-C880-A1
Video input	CVBS 1 Vpp, BNC connector
Compression	MPEG4/Motion JPEG/H.264
Pixel resolution	720x576
Light sensitivity	Not applicable
Image frame rate	H.264 720x576 @25 fps
Audio feature	Two-way Mono
Alarm	Yes; 1x Alarm In & 1x Alarm Out
Motion detection	Yes
Day-night	Not applicable
Back-light compensation (BLC)	Not applicable
Current consumption	Max. 5 W

# Lighting

■ Poor lighting is one of the most common causes of poor image quality. For best results it is necessary that the lighting be strong enough and balanced in each camera's range of view. There should be light shining on the object rather than light shining directly into the lens. Uneven lighting can be caused by a number of factors such as the use of spotlights, too much sunlight, light that is reflecting off shiny objects, or by there simply not being enough light at all. Strong light coming toward the lens causes high contrasts. This can result in a person's face being hidden in shadows, which can make identification difficult or even impos-

sible. Uneven lighting can also make it difficult to tell if a small change in the frame reflects a real change in the environment or if it is just the result of the lighting. To avoid these problems it is important to use the right camera and the right lighting. These two parameters depend upon each other. When installing a camera, select dynamic scope so that the camera is adjusted to suit the light dynamics in the area it will monitor. Keep in mind that refurbishing or renovating the area could negatively impact on the light dynamics and thereby affect the camera's performance.

## ■ Indoor lighting

Traditional indoor lighting is provided by light bulbs, fluorescent lamps or halogen lamps. All of these light sources work well together with the camera sensor's light spectrum.

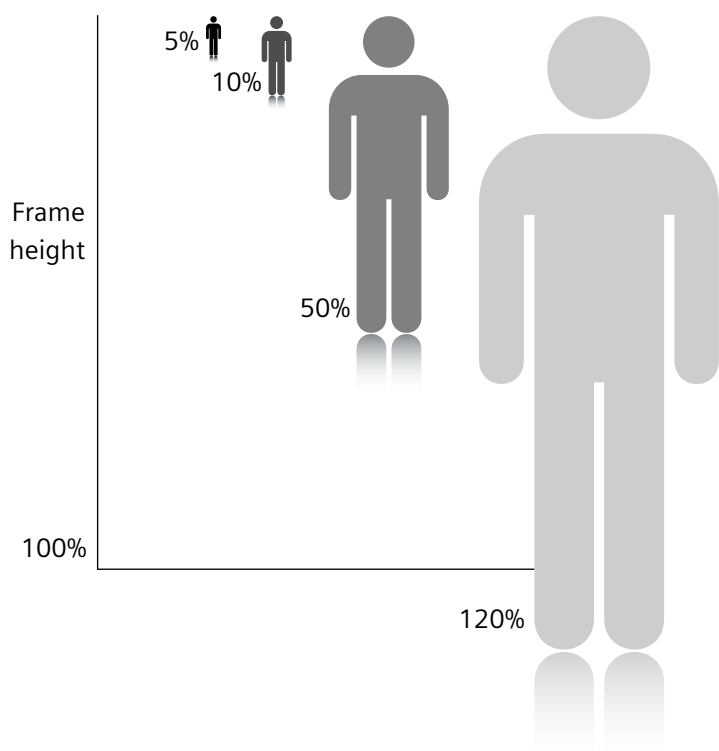
## ■ Outdoor lighting

The best image quality is achieved when halogen lamps are used. If lighting is triggered (by an alarm, for example), incandescent halogen should be used. If the lighting is constant, metal halogen should be used.

## ■ Solutions for larger facilities

It is quite common at larger facilities to use infrared light at night, because it is partially invisible for the human eye. This can be useful in order to avoid disturbing residents of nearby buildings with harsh lighting, or if one doesn't want to give potential intruders "help" with visible light. Only monochrome cameras, day-night cameras (with the IR filter disabled in night mode) and specific IR cameras can be used for these applications.

# Definitions



## Surveillance

The object must fill at least 5% of the frame in order to be distinguishable from other objects. One must be able to distinguish between a person or an object/overview image of what is happening in an area.

## Detection

The object's height must be at least 10% of the image height. A video motion detection (VMD) system must be able to detect a movement/get a detailed overview of an area.

## Recognition

To recognize a person or an object the person or object must be at least 50% of the image height. One must be able to recognize a person or recognize a typical characteristic of a person.

## Identification

To be able to identify a person on a TV screen the person must be represented in close-up and be 120% of the image height. The image must be so detail-rich that the person can be identified when one compares the video image with a photograph, for example.

# Siemens digital video recorders

■ Different situations and businesses demand different types of cameras. Similarly, different types of digital video recorders (DVRs) are required to archive and replay recorded material. Siemens' DVR portfolio includes DVRs for all imaginable needs. The portfolio includes a hybrid system that makes it possible to combine analogue and digital cameras, which can be

quite useful for those who want to extend an existing video surveillance system, for example. As well as compact units Siemens also offers a software solution that can be installed on the end user's own server(s). Siemens SISTORE series DVRs can also be integrated into a SiPass Entro or SiPass integrated access control system to create a complete security system.

## SISTORE AX DVRs

■ SISTORE AX is a modern and flexible system for digital storage of images from up to 16 cameras. This model is particularly well suited to smaller applications such as gas stations, small shops and offices.



Model number	AX4 LITE V4	AX8 V4	AX16 V4
Article number	S54569-C51-A3	S54569-C72-B3	S54569-C92-B3
Video inputs (with looping)	4	8	16
Monitor outputs	1 BNC + 1 VGA	1 BNC + 1 S-VHS + 1 VGA	1 BNC + 1 VGA + 1 SPOT
Audio inputs / outputs	4 / 1	4 / 1	4 / 1
Resolution in view mode	720x576	800x600, 1024x768, 1280x1024	800x600, 1024x768, 1280x1024
Hard disk size (standard)	1000GB	1000GB	1000GB
Number of internal hard disk drives	1	3	3
Maximum hard disk size	1000GB	3000GB	3000GB
File format	H.264	H.264	H.264
Resolution	CIF / 2CIF / 4CIF	CIF / 2CIF / 4CIF	CIF / 2CIF / 4CIF
Maximum recording speed	100 ips	200 ips	400 ips
Alarm inputs / outputs	4 / 1	8 / 2	16 / 2
PTZ / dome control	Yes	Yes	Yes
Password protection	Yes	63 groups / 256 users per group	64 groups / 256 users per group
Power supply	100-240 VAC (25W)	100-240 VAC (45W)	100-240VAC (45W)
Dimensions	340 x 46.5 x 310 mm	430 x 88 x 405 mm	430 x 88 x 405
Integrated with SiPass Entro	Yes	Yes	Yes
Integrated with SiPass Integrated	Yes	Yes	Yes
Operating system	Linux Embedded	Linux Embedded	Linux Embedded

## Did you know?

H.264 is the latest development of the MPEG standard. H.264 is a compression format that significantly enhances the ability to store images by compressing them more efficiently.

# SISTORE MX DVRs

■ SISTORE MX is a flexible system for surveillance and digital storage of images from up to 64 cameras and come in either hybrid or full IP version. It is a good choice for all types of buildings, including train stations, shopping centres, factories and banks. SISTORE MX is also well suited for integration with other security systems. Integrated motion detection makes it possible to use SISTORE MX both indoors and outdoors.



Model number	MX1604 3G HVR 1TB 200 ips MX1608 3G HVR 1TB 300 ips MX1608 3G HVR DVD 1TB 300 ips MX1608 3G HVR 4TB 300 ips	MX1616 3G HVR 1TB 500 ips MX1616 3G HVR DVD 4TB 500 ips	MX3232 3G HVR 2TB 900 ips MX3232 3G HVR 4TB 900 ips	MX 1600 3G IPVR 1TB 400 ips MX 1600 3G IPVR 2TB 400 ips MX 1600 3G IPVR 4TB 400 ips
Video inputs (analogue)	4/8	16	32	0
Maximum number of IP cameras	16	16	32	32
Monitor outputs	4 BNC	4 BNC	4 BNC	4 BNC
Audio inputs / outputs	8 inputs / 4 outputs	16 inputs / 4 outputs	16 inputs / 4 outputs	16 inputs / 4 outputs
Resolution in view mode	2048x1536	2048x1536	2048x1536	2048x1536
Hard disk size (standard)	1000GB/4000GB	1000GB/4000GB	2000GB/4000GB	4000GB
Maximum hard disk size	4TB (DVD 3TB)	4TB (DVD 3TB)	4TB	4TB
File format	MJPEG	MJPEG	MJPEG	MJPEG
Resolution (analogue)	CIF / 2CIF / 4CIF	CIF / 2CIF / 4CIF	CIF / 2CIF / 4CIF	CIF / 2CIF / 4CIF
Resolution (IP)	Max 5MPix	Max 5MPix	Max 5MPix	Max 5MPix
Maximum recording speed (analogue)	100ips/200ips@4CIF	400ips@4CIF	800ips@CIF	N/A
Maximum recording speed (IP)	100ips	100ips	100ips	800ips@CIF
Alarm inputs / outputs	16 / 4	16 / 4	16 / 4	16 / 4
Outputs	4	4	4	4
PTZ / dome control	Yes	Yes	Yes	Yes
Password protection	Yes	Yes	Yes	Yes
Integrated DVD burner	Depending on model	Depending on model	Depending on model	Depending on model
Power supply	110-240VAC max 150W	110-240VAC max 150W	110-240VAC max 150W	110-240VAC max 150W
Dimensions	430 x 87 x 440 mm	430 x 87 x 440 mm	430 x 87 x 440 mm	430 x 87 x 440 mm
Integrated with SiPass Entro	Yes	Yes	Yes	Yes
Integrated with SiPass integrated	Yes	Yes	Yes	Yes

## Siemens recording software (NVS) for IP cameras

■ SISTORE MX NVS is an open software program for up to 32 IP cameras. It works together with most of the leading brands of IP cameras on the market. SISTORE MX NVS is available for 4, 9, 16, 32 or 64 cameras.



Model number	NVS 4	NVS 9	NVS16	NVS 32	NVS 64
Article number	S24245-P5099-A1	S24245-P5099-A2	S24245-P5099-A3	S24245-P5099-A4	S24245-P5099-A5
Number of digital IP cameras	4	9	16	32	64
Megapixel support	Yes	Yes	Yes	Yes	Yes
Integrated with SiPass Entro	Yes	Yes	Yes	Yes	Yes
Integrated with SiPass integrated	Yes	Yes	Yes	Yes	Yes
PC requirements	P4 2.4GHz or higher, at least 1024 MB RAM, Windows XP SP3 or Windows Vista, 120 GB hard drive				

# SISTORE CX intelligent digital video codecs

■ SSISTORE CX is an intelligent digital video codec capable of performing multiple tasks simultaneously over a network. Utilising MPEG4 technology, SISTORE CX offers incredible performance in both transmission speed, image quality and detailed video analysis. It provides three operating modes for real-time video: transmitter mode (encoding), receiver mode (decoding) or the combination transceiver mode, plus recording. With its unique, user-friendly, web-based installation, SISTORE CX can be tailored to the application's needs with a few simple clicks on the home page.



Model number	CX4 000/100	CX4 1000/100	CX8 000/100	CX8 1000/200
Analogue video inputs	4 (with loop through)		8 (with loop through)	
Digital video inputs (IP/Ethernet)	2		4	
Streaming and recording	100 ips encoding (CIF, 2CIF) 50 ips encoding (4CIF) 50 ips encoding & 25 ips decoding (2CIF) 25 ips encoding & 25 ips decoding (4CIF) 50 ips decoding (2CIF, 4CIF)		200 ips encoding (CIF, 2CIF) 100 ips encoding (4CIF) 100 ips encoding & 50 ips decoding (2CIF) 50 ips encoding & 50 ips decoding (4CIF) 100 ips decoding (2CIF, 4CIF)	
Video recording resolution (H x V)	(704x576) = ~DVD quality 2CIF (704x288) = ~SVHS quality CIF (352x288) = ~VHS quality			
Client live display formats	2x2 (quad), 4x4, multi layout mode			
Hard disk size (standard)		250/500/1000 GB		500/1000 GB
Internal RAID 1		■		■
Digital inputs	4		8	
Digital outputs	4		8	
Video loss detection	■	■	■	■
Activity detection	100,000 zones			
Alarm log	■	■	■	■
Sabotage detection	■	■	■	■
Analytics modules – EDS, ODR	Via license			
Smart search via perspective mask	■	■	■	■
PTZ/dome control	■	■	■	■
Fast forward/rewind controls	■	■	■	■
Password protection	■	■	■	■
Ethernet connector	■	■	■	■
Client software	■	■	■	■
IVM video software interface	■	■	■	■
Image export	■	■	■	■
Image backup/archive	■	■	■	■
Storage expansion possibility	■	■	Via SCSI (RAID 5/6)	■
Network attached storage	■	■	■	■

# Siemens monitors

■ Siemens TFT monitors provide value for money and provide excellent image quality. Choose between two variants: eco or standard. All models are optimized for CCTV applications and are very easy to use.



Model number	CMTC1730 / CMTC1930	CMTC1723 / CMTC1923	CMTC2225
Article number	S54573-C10-A1 / S54573--C11-A1	S54573-C6-A1 / S54573-C7-A1	S54573-C23-A1
Size	17" / 43cm or 19" / 48 cm	17" / 43cm or 19" / 48 cm	22" / 56 cm'
Resolution	SXGA 1280x1024	SXGA 1280x1024	1680 x 1050 pixels
Refresh rate	12ms / 8ms	5ms	5ms
Contrast	800:1	1000:1	1000:1
Brightness	250cd/m2	250cd/m2	300 cd/m2
On Screen Display (OSD)	Yes	Yes	Yes
Video inputs	1xBNC, 1xSVHS, 1xDVI-I	2xBNC, 1xSVHS, 1xDVI-I	2xBNC, 1xSVHS, 1xDVI-I, 1 x HDMI
VESA standard	4xM4, 100x100mm	4xM4, 100x100mm	4xM4, 100x100mm
Power supply	100-240VAC	100-240VAC	100-240VAC

# Lenses

■ Lenses are a very important component in a camera system. Siemens lenses are made of glass and supplied in metal housings to ensure the best possible image quality. Choose between adjustable lenses with or without IR correction (day/night).



Model number	CLVD1318/2.8-11	CLVD1318/10-40	CLVD1315/2.8-12	CLVD1325/5-50	CLVD1316/3-8	CLVD1316/5-50
Article number	2GF1667-8AR	2GF1667-8AS	S54561-B304-A1	2GF1667-8AU	S54561-B300-A1	S54561-B302-A1
Focal length	2.8-11 mm	10-40 mm	2.8-12mm	5-50mm	3-8 mm	5-50 mm
Image chip	1/3"	1/3"	1/3"	1/3"	1/3"	1/3"
Maximum relative aperture	f1.4 - 360	f1.4 -360	F1.4-360	F1.4-360	f1.0-360	f1.4-360
Horizontal angle of view	26.2-97.4°	7.0-27.5°	24.1-97.4°	5.6-53.6°	35.4-92.5°	5.5-53.8°
Iris	DC	DC	DC	DC	DC	DC
IR corrected (for day-night cameras)	Yes	Yes	-	-	Yes	Yes
Megapixel lens	-	-	-	-	Yes	Yes (1.3MP)

# Power supplies for cameras and camera housings



Model number	PSU230-12	CAPA2410-P230	CAPA2415-C230	CAPA2415-W230	AA-4124-04	MAG-15120
Article number	2GF1800-8BE	2GF1800-8BJ	2GF1800-8BK	2GF1800-8BL	2GF1705-8GH	2GF1705-8GG
Voltage	12VDC	24VAC	24VAC	24VAC	230 VAC to 24VAC	100-240 VAC to 12VDC
Amp	640mA	500mA	2.5A	2.5A	-	-
Note	-	-	-	-	400 mA, designed for camera housings CHSL2610/CHSM2510	1A, designed for camera housings CHSL2610/CHSM2510

# Siemens camera housings and accessories

■ Siemens camera housings for outdoor use are not only designed in black and silver to make them look attractive, but also because these colours reflect the sun's heat best which keeps the temperature inside the camera housing as low as possible even when the sun is shining at its brightest. With a wide variety of fittings and other accessories there are few places where a Siemens' camera housing cannot be mounted.



Model number	CHSM2510	CHSL2610	CHSM2210	CHSM2211	CHSM2210-B	CHSM2211-B	CHSL4010	CHSL4011
Article number	2GF1705-8NA	2GF1705-8PA	S54561-C601-A1	S54561-C601-A2	S54561-C602-A1	S54561-C602-A2	S54561-C603-A1	S54561-C603-A2
Voltage	230V AC	230V AC	230V AC	12-24 VAC	230V AC	12-24 VAC	230V AC	12-24 VAC
Power consumption	40 W	40 W	25W	25W	25W	25W	25W	25W
IP rating	IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
Integrated heating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max. camera dimensions (mm)	77x67x250	90x85x260	85x80x225	85x80x225	85x80x225	85x80x225	125x100x400	125x100x400
Dimensions (mm)	114x115x427	144x141x470	133x125x454	133x125x454	133x125x627	133x125x627	155x143x627	155x143x627

## Camera mounts

■ Siemens camera mounts are designed to match all Siemens fixed cameras. They are easy to install and available in two lengths.



Model number	CAB 1420	CAB 1920	CWCB140	CCCB210
Article number	2GF1710-8BD	2GF1710-8BE	2GF1710-8BC	2GF1710-8AR
Length (mm)	140	190	140	190
Colour	Black/silver	Black/silver	Black/silver	Black/silver

## Camera housing accessories



Model number	CHBC2020	CHBS2310	CHBA0111	CHBA0211	CCID1410-AB
Article number	S54561-B611-A1	2GF1705-8LE	2GF1705-8LG	2GF1705-8LH	S54561-B202-A1
Cabling	Hidden	Visible	N/A	N/A	N/A
Additional information			Accessories to enable corner-mounting of camera housings CHSL2610/CHSM2510		Adapter to use CCDA accessories for the CCID1410-ST

## Speed Dome accessories



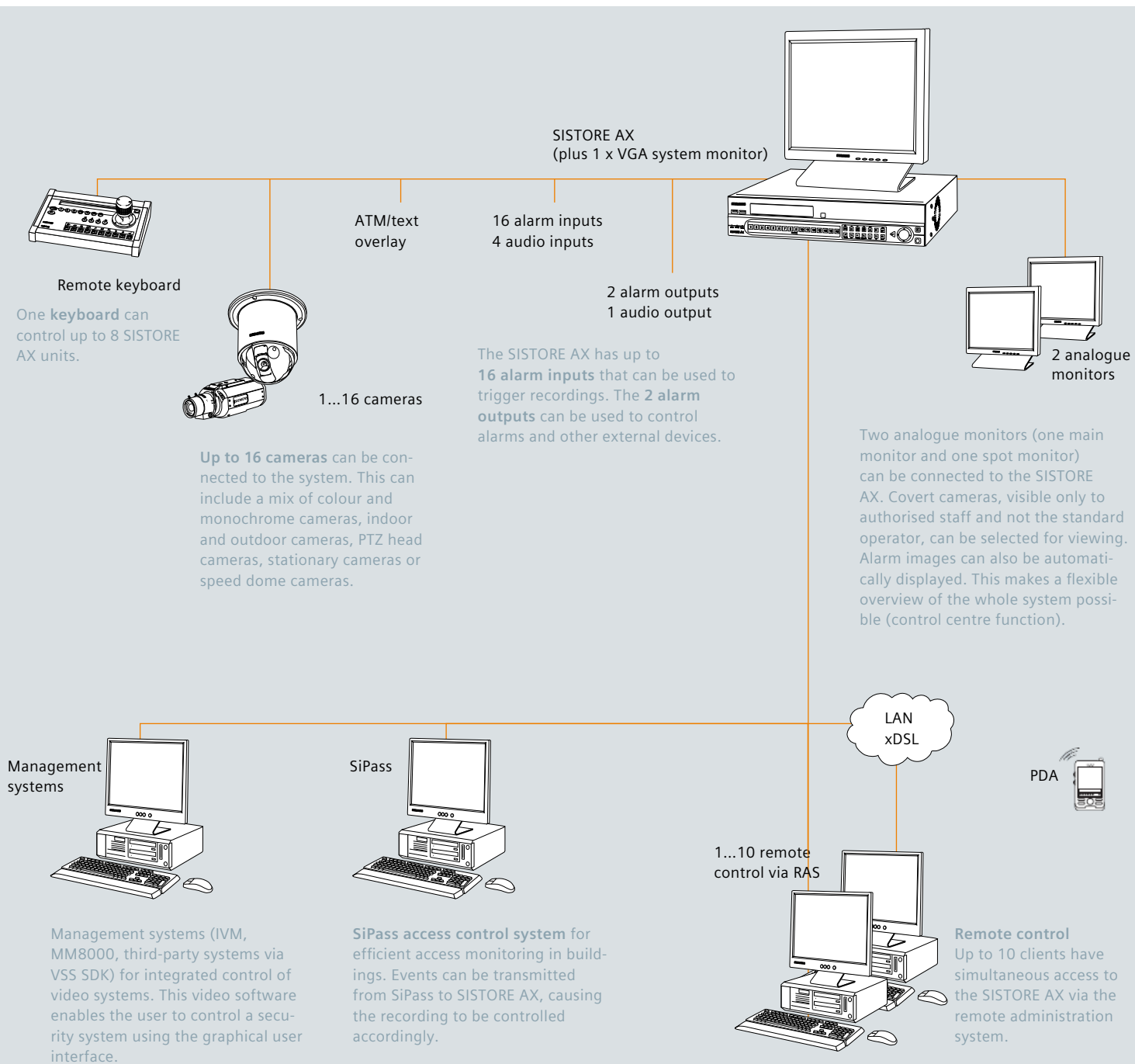
Model number	CCDA1425-WPH	CCDA1425-SM	CCDA1425-FM
Article number	2GF1192-8CA	2GF1192-8BB	2GF1192-8BC
Dimensions	335x240	228x225	250x232

# Examples

Here are a few examples of different video surveillance solutions that meet different requirements.

## SISTORE AX system example

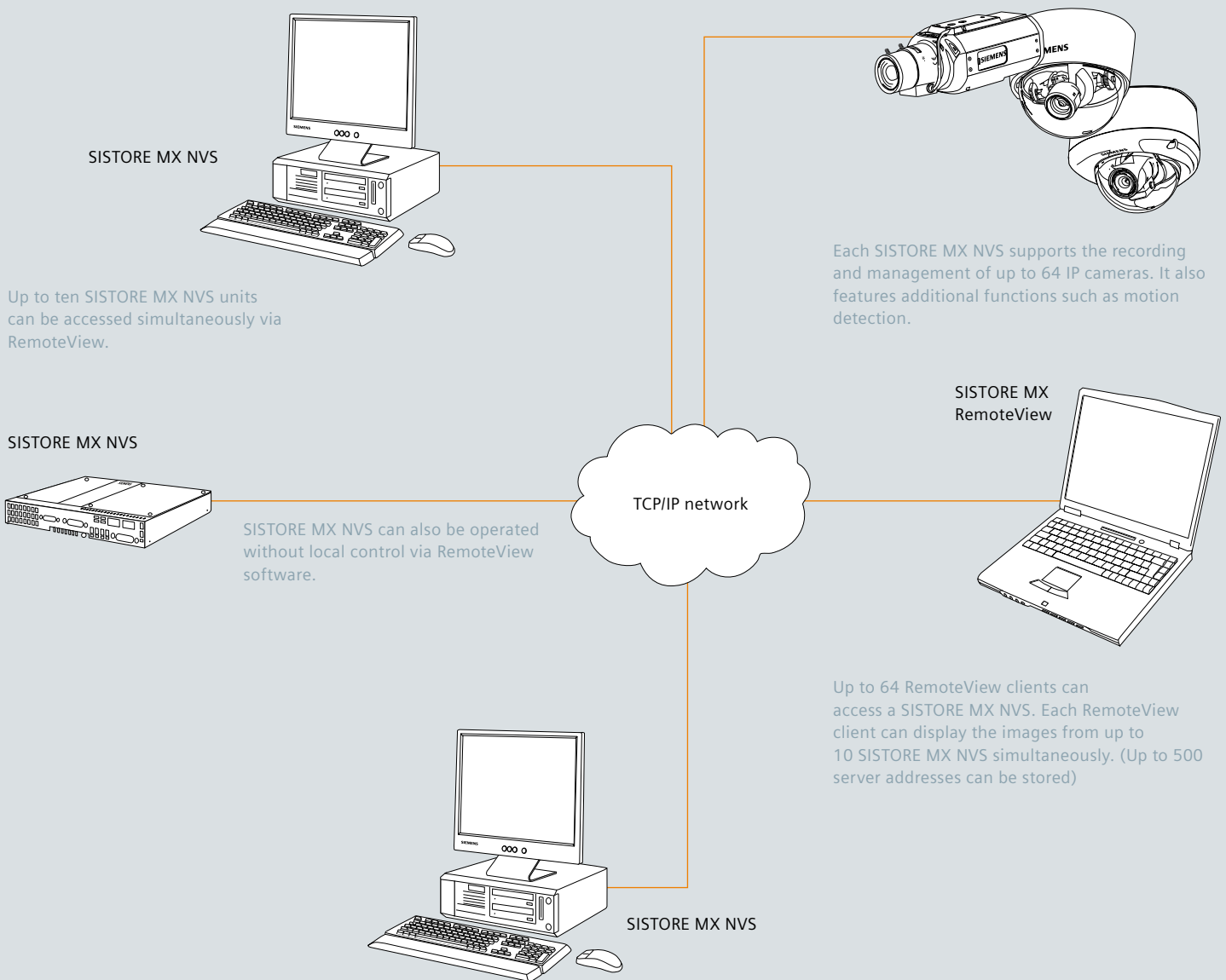
SISTORE AX offers all the advantages of digital video surveillance in a single compact unit. Developed for smaller applications, SISTORE AX can be used anywhere for recording up to 16 cameras, for example in petrol stations, small shops, supermarkets, museums etc. Quick and easy to install, SISTORE AX is particularly simple to operate. Flexible control, efficient H.264 compression, easy access to recorded images and powerful search functions ensure that you always get the images you need.





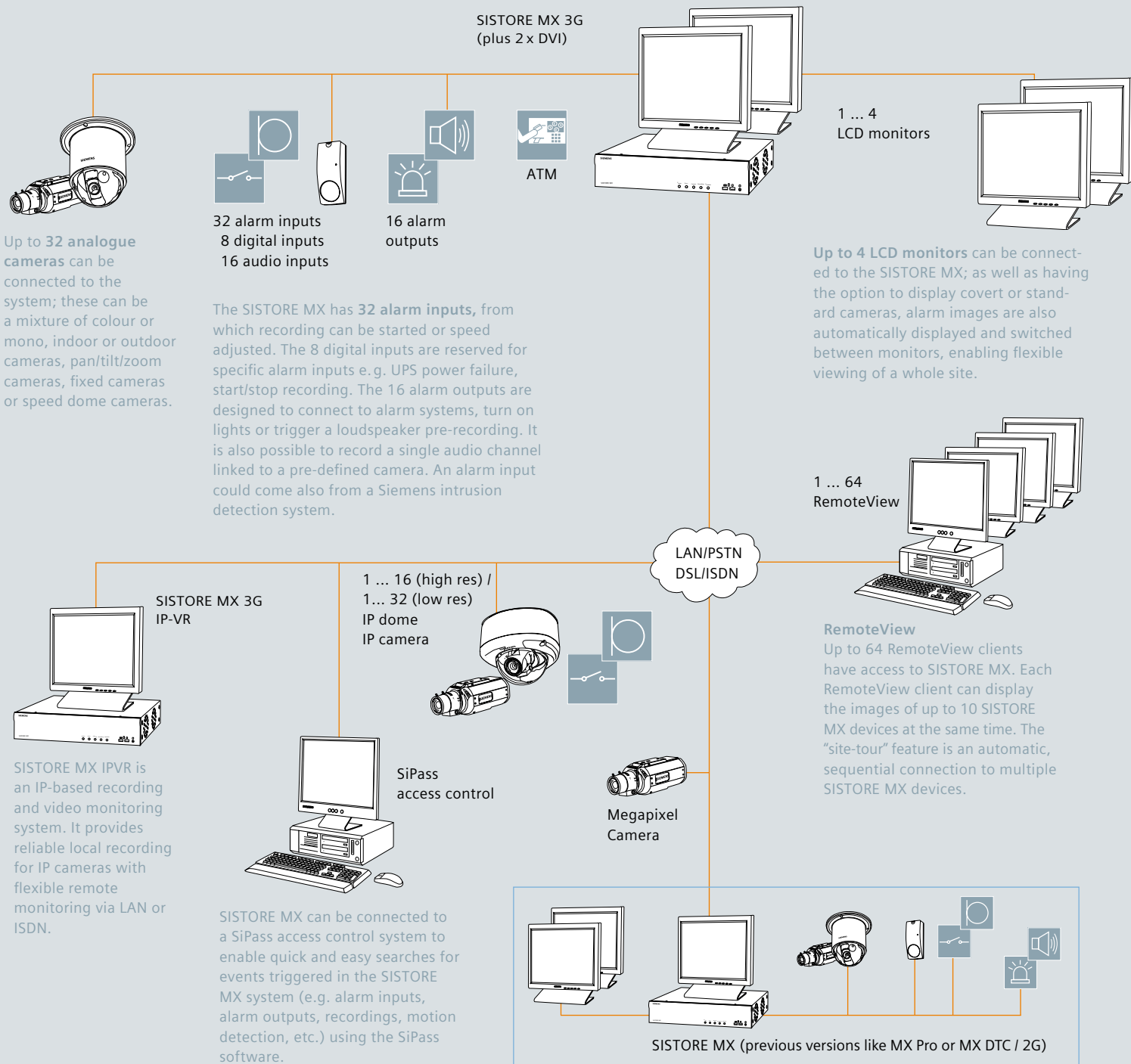
# SISTORE MX NVS system example

■ SISTORE MX NVS is a software package for network video recording, allowing the operator to view live images, as well as to support recording, playback and remote access for up to 64 IP cameras per installed system. SISTORE MX NVS can be used in a wide variety of applications, including retail, banking, traffic and transportation, to name but a few. It fully supports the connection of a variety of network cameras (IP cameras) and video servers from different manufacturers. SISTORE MX NVS can be installed on high-performance industrial PCs – optionally equipped via USB with alarm inputs and outputs – this Network Video Software satisfies the requirement for special security applications to optimum effect.



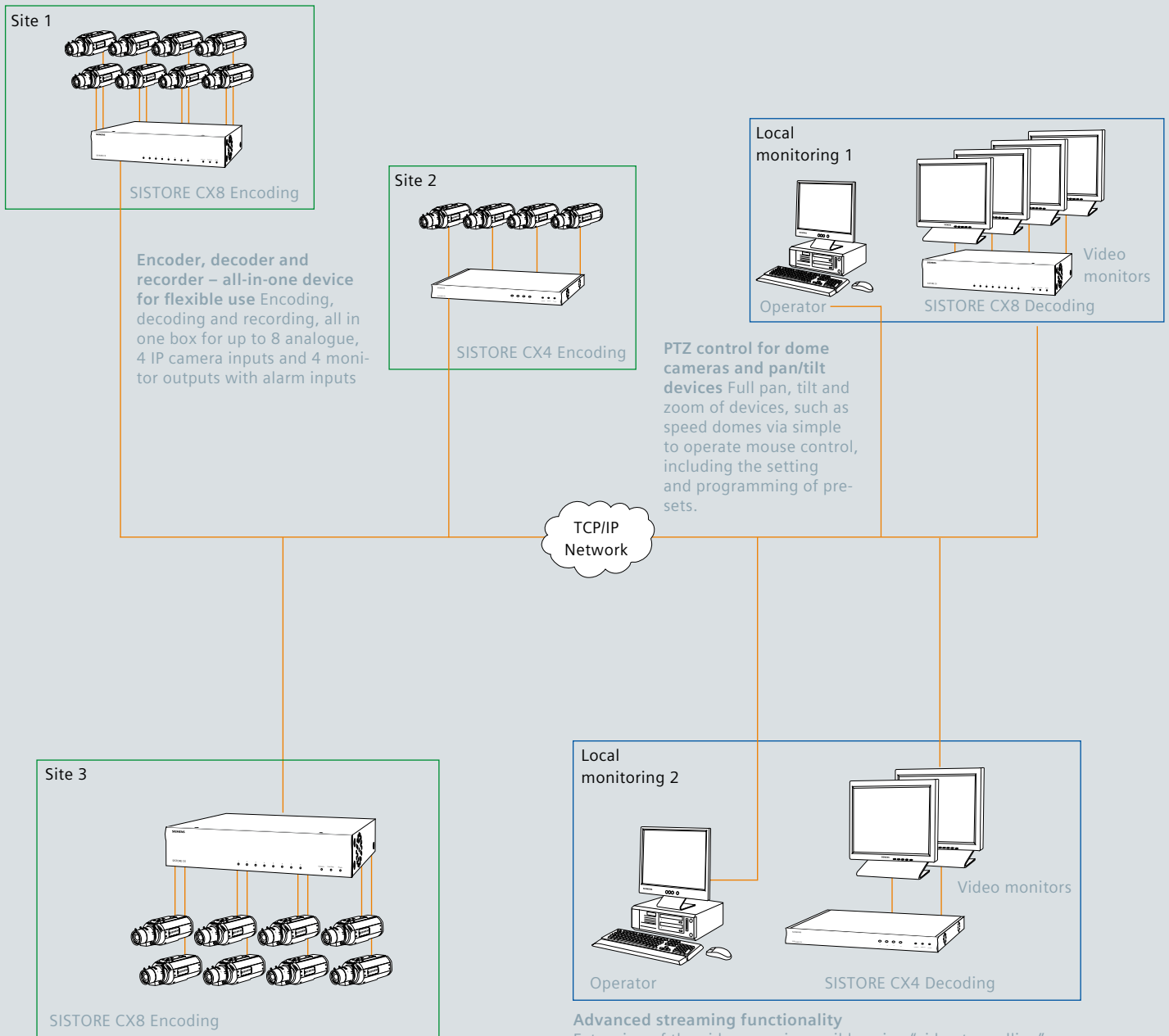
# SISTORE MX 3G system example

■ SISTORE MX is a hybrid video surveillance system capable of recording both IP and analogue cameras simultaneously. The flexible design makes it suitable for a number of applications such as banks and financial institutions, industrial facilities, shopping centres and retail stores, public transport and seaports. The flexible connection abilities of the SISTORE MX 3G ensure easy integration to other security or building management systems.



# SISTORE CX system example

■ SSISTORE CX offers virtual matrix switching from cameras placed anywhere connected to the network to traditional analogue monitors. The user interface presents cameras located on the network on one side of the screen and monitors on the other – it is simply a case of dragging a camera on top of a monitor and the video “tunnels” through the network in milliseconds to present the streaming video on the monitor.



**“Reference image” and “Sabotage detection”**  
Once a camera is set, a reference image can be saved. Working in conjunction with the additional function of sabotage detection – if the camera is moved, covered, de-focused or sprayed, then a sabotage alarm is triggered. The reference image can be viewed to reset the camera to its original position.

**Advanced streaming functionality**  
Extension of the video coax is possible using “video tunnelling” where the camera signal goes into the network at one location and out again in a different location. Virtual matrix functionality – replacing an analogue matrix switcher, enabling video switching over the network, simply by selecting a camera and dropping it to a monitor.

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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