

SIEMENS



VECTIS HX

H.264

HD
1080p

ONVIF
Driving network video through global standardization

Vectis HX

Not everyone will want you to discover our latest masterpiece

Answers for infrastructure.



A new choice for reliable hybrid surveillance

Vectis HX has been designed and engineered with the next generation of hybrid technology in mind. By bridging the technological division between analog and IP surveillance capabilities, the Vectis HX has the ability to provide crisp, full HD display clarity, whilst maintaining high, feature-rich performance.

With powerful search options and extensive storage capabilities, the Vectis HX offers users a simple and cost-effective migration to IP video surveillance. The flexible design makes it suitable for a number of applications ranging from single system to multi-site requirements.

Bridging the gap with the next generation of digital technology

Hybrid recording system with up to 32 camera inputs

The hybrid design of the Vectis HX unifies analogue and digital technologies into one manageable system, allowing for a seamless upgrade to an IP surveillance solution over time. With 16 and 32 channel models to choose from, up to 16 standard analogue cameras and 16 IP cameras can be connected simultaneously to a single device.

High-quality images

The Vectis HX utilises H.264 video compression technology, which delivers high-quality images, smaller file sizes and better streaming over limited bandwidth connections.

Direct unit control and PTZ capability

The Vectis HX has an easy-to-use front panel for direct unit control, as well as an optional IP keyboard that allows the user to control both dome and PTZ cameras.

Remote access via RAS, Internet or Smartphone

The Vectis HX can be remotely accessed via a standard Web browser, and all Vectis HX models include license-free remote administration software (RAS), that can be used to retrieve and view images from one or more remote workstations. Additionally HX RAS offers two-way audio functionality, allows users to set up and perform site tours, create site plans and offers full control of PTZ devices. Vectis HX RAS Mobile enables remote access from Apple or Windows Mobile based Smartphones or PDAs.

Support of ONVIF compatible IP cameras

ONVIF and Siemens are committed to the adoption of common IP communication in the security market. The ONVIF specification enables the Vectis HX to be interoperable with both Siemens IP camera range, as well as other 3rd party ONVIF IP-based cameras. In the case of PTZ cameras, the Vectis HX supports PTZ control over the network.

Full "pentaplex" operation

Vectis HX is a pentaplex system that enables the user to simultaneously archive footage, watch a multi screen picture display at real time, play back previously recorded incidents, whilst another workstation is operating remote viewing and playback via a remote network connection.

Easy operation

The new style of graphical user interface for the Vectis HX is perfectly optimized for full HD monitor display. With an innovative control bar interface it is very easy to configure and use, with a very logical menu structure enabling instant access to all functionality without distracting the user from the live view screen. As a result, training requirements are minimal.

True archiving flexibility

In addition to storing video images on its internal hard drive, the Vectis HX can archive data to the built-in DVD drive and external devices, such as USB memory sticks and external hard drives. The standard Vectis HX device provides 1TB of SATA HDD capacity, with the capable of being expanded up to 5TB of internal storage space. The high SATA HDD capacity combined with the H.264 compression make it possible to achieve significantly longer storage times of both analogue and IP footage.

Selectable resolution for real-time or real-half-time recording

Vectis HX is 1080p HD ready, and is capable of providing real-time recording for connected cameras. The 16 channel model has a maximum global recording speed of 300ips (resolution dependent), and the 32 channel model provides 500ips (resolution dependent). The Vectis HX offers a high level of flexibility in configuring camera recording rates, and has multiple resolution options selectable via the on-screen menu. Analogue connections can be selectable between CIF/2CIF and 4CIF, whilst the optimum resolution for each IP input is 2 megapixels. All resolutions can be selected to best match the monitor being used with the device, allowing real-time or half-real-time recording on selected cameras at these resolutions.

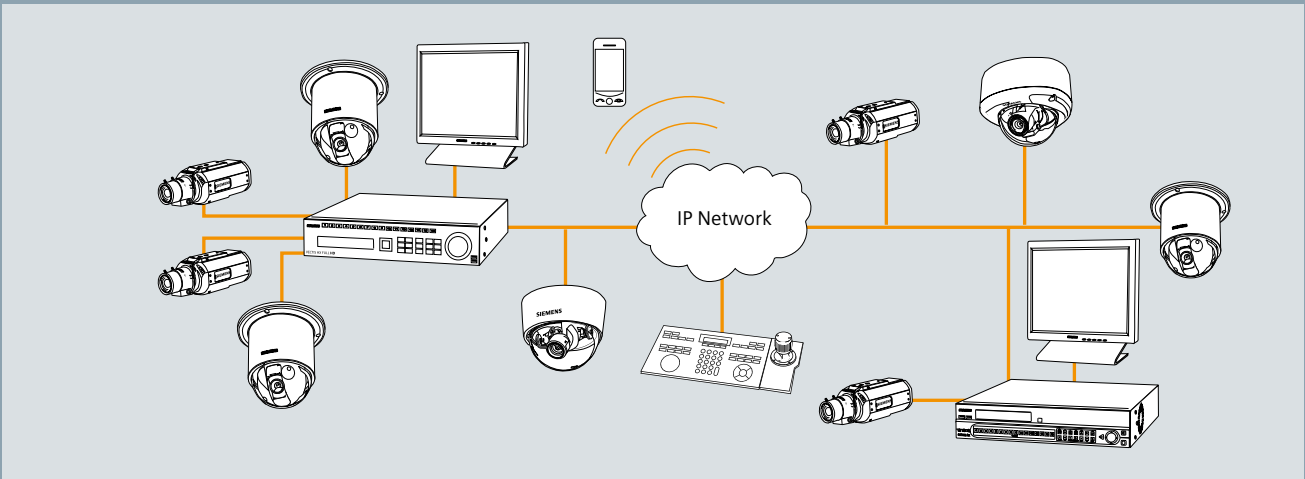


Intuitive graphical user interface

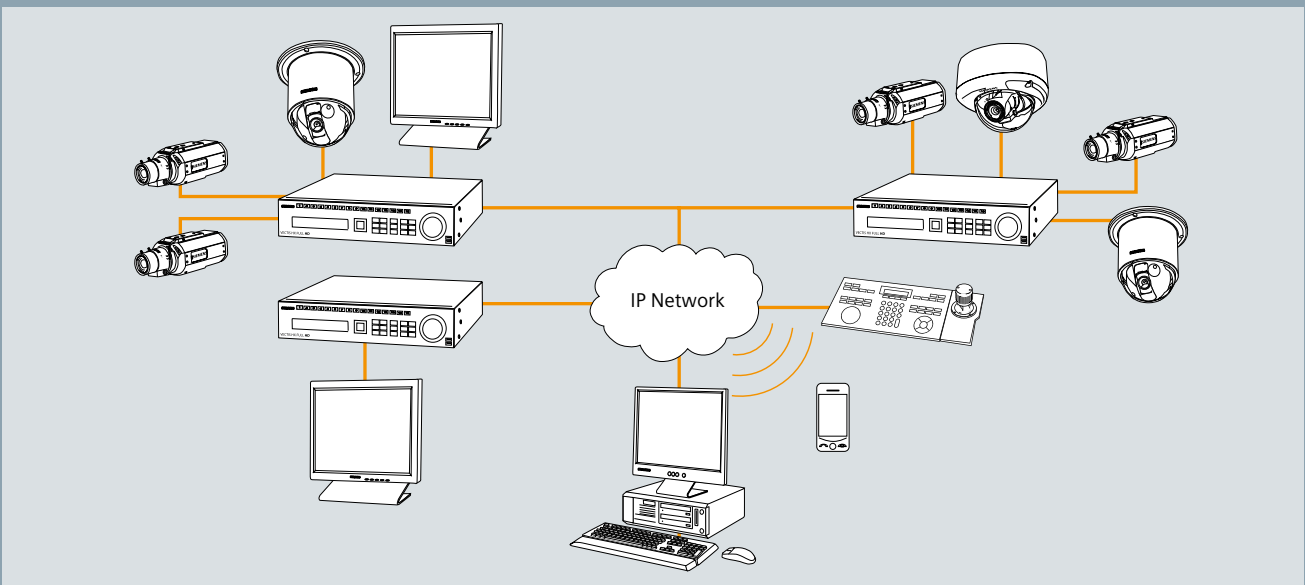
Highlights

- Hybrid technology for easy migration from analogue to digital systems
- Remarkable HD image quality
- Optimised storage capacity utilising H.264 technology
- Easy configuration and operation
- Intuitive graphical user interface
- Remote viewing and searching using RAS software, a standard web browser or the Smart Phone App
- Flexible archiving options
- Recording up to 500 images per second

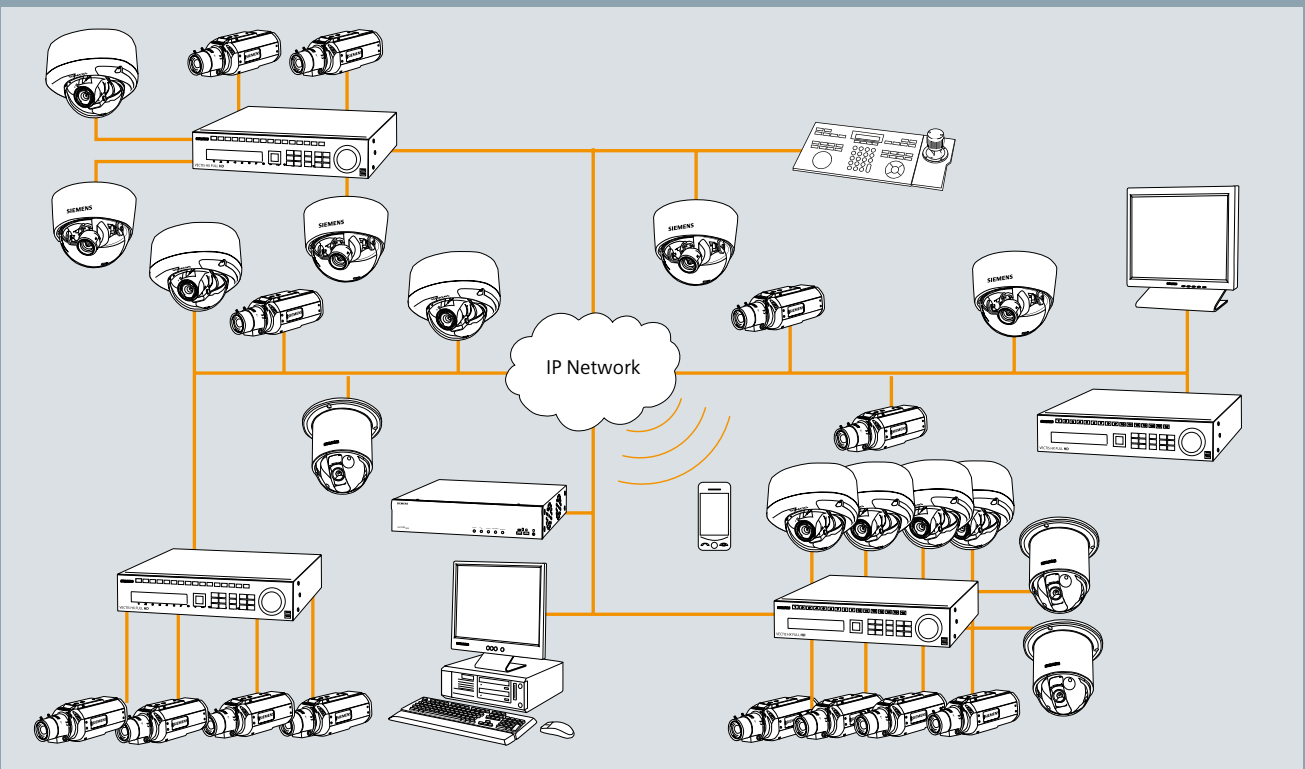
Standard system example



Networked system example



Enterprise system example (planned phase 2 release)





VGA, 1.0 Megapixel WDR and 2 Megapixel Full HD IP cameras and domes



Vectis HX keyboard

Record for more than a month in a single unit

Utilising H.264 technology enables the Vectis HX to record images continuously for more than a month. The recorded data is protected against tampering with a digital signature so that the authenticity of each recorded image can be verified.

Recording modes

Vectis HX can provide an optimized recording mode for any situation. Both recording speed and image quality can be increased in response to an external alarm input or built-in motion detection, therefore recording more information. During standard time-lapse recording both image quality and recording speed can be decreased to reduce the storage space required, therefore optimizing achievable recording times. Furthermore, if a video signal loss alarm occurs on a camera, the Vectis HX can start recording an additional camera in the same room. This allows the cause of the video loss to be determined quickly and easily. Pre-event recording can be configured to allow better determination of what led to an event, by recording images of the event itself as well as immediately beforehand.

Flexible searching

The powerful search functions of the Vectis HX help you find the images you need quickly. Searching is possible using time and date, by particular events, the system logbook and by individual camera. To ensure the fastest method of finding images, a mask can be defined in the area of interest, filtering the playback to only that area and ensuring no time is wasted watching hours of useless video.

Video loss events and text entries from cash registers can also be used as search criteria, therefore providing powerful search flexibility.

Audio recording

Each model of the Vectis HX family allows audio recordings for up to four audio channels. Two-way audio functionality is available when Vectis HX RAS is used.

Remote monitoring

In networked applications during an alarm condition, Vectis HX can provide a direct link to the remote viewing software, to allow immediate access to the images over the network, or send SMS and if required an e-mail. The mobile RAS software can be used to retrieve and view images from one or more Apple or Windows Mobile based Smartphones or PDAs.

Motion detection

To optimise hard disk storage, the pixel based motion detection system allows the user to define areas of interest in a scene and only when motion occurs inside this area, will the images be recorded.

Support of megapixel recording

Vectis HX fully supports the recording of 2 megapixel IP cameras, capturing full HD quality images, resulting in more information, particularly useful when using the integrated digital zoom feature.

Reference image

Benefiting both installers and end users is the facility to store a "reference image" of the installed camera – so should it be moved, maliciously or otherwise, or simply if it has to be serviced, there is an exact record of its viewing position.

Covert camera mode

Any camera can be recorded, but whether or not the output is displayed depends upon the user level, so cameras monitoring cash registers could only be monitored by managers, for example.

Panic button


Vectis HX offers "panic button" recording to provide better support of security personnel. Pressing the panic button in suspicious situations starts recording all cameras at the independently configurable panic mode. This allows the lower quality and frame rate of time-lapse recording to automatically switch to a higher quality and frame rate during a panic-recording situation.

Assigning rights

Vectis HX ensures the highest security and flexibility when accessing the system via configurable administration rights.

The Vectis HX network keyboard is designed as a desktop network controller suitable for controlling both analogue and network devices. Its primary use is for the direct control of analogue cameras with pan/tilt drives along with functional lenses and peripheral devices over a network, with the added capability of supporting and controlling additional components including DVRs and network video servers. With the ability to utilise both Ethernet and RS485 connections, and its ergonomic and compact design, the Vectis HX offers enhanced usability whilst making operators feel comfortable.

Technical overview

	Vectis HX0808 1000/300 Vectis HX1616 3000/500
	
Display	
Video inputs (analogue)	8 or 16
Video inputs (digital IP/Ethernet)	8 or 16
Monitor outputs	5 (1 x HDMI, 2 x BNC; 2 x VGA)
Audio inputs/outputs	RCA Input: 8 or 16 Line In / RCA Output: 1, Line Out
Video resolution (H x V)	CIF/2CIF/4CIF (analogue) Optimum 2 megapixels (IP-cameras)
Live display resolution	Max. 1920 x 1080
Covert camera mode	■
Recording and transmission	
Recording speed	200 ips (analogue)/100 ips (digital) 400 ips (analogue)/100 ips (digital)
Recording standard	H.264
Transmission	H.264
Alarms	
Alarm inputs	8 or 16
Alarm outputs	4
Video loss detection	■
Motion Detection / Video Analytics	■
Internal buzzer	■
Alarm log	■
Sabotage detection	■
Controls	
SmartSearch	■
PTZ/dome control	■
Fast forward/rewind controls	■
Pentaplex operation	■
Connectivity	
Ethernet LAN/WAN connector	■
External modem connector (ISDN)	via USB
Change to RAS software	■
Export/backup	
Image export	USB, DVD, FTP
Image backup/archive	USB to CD/DVD
Max. hard disk capacity (int.)	5 TB

Watchdog functionality

The Vectis HX has an intelligent watchdog function that recognises if the software or hardware becomes disabled and activates a fast failsafe report to check the DVR. If the system is unable to recover itself, it automatically reboots the device to minimise its down time.

Transaction devices

Vectis HX can be connected to a transaction device, such as an ATM or a point-of-sale (POS) system. This allows detailed transaction information to be recorded with the relevant video and used as supplemental information and for searching. The serial interface of the Vectis HX can be used to connect a variety of ATMs, making the system specifically suitable for use in banks and financial institutions. Based on a special word filter placed on the data sent from the cash register as well as defined alarm filters, corresponding camera will be triggered to start recording. The same filter words can then be used as search criteria for subsequent research making the system suitable for use in shopping centres and retail applications.

Tamper protection and temperature management integrated

The recorded data in the Vectis HX is protected by its own encryption. The clip-player is equipped with integrated sabotage protection, recognising camera re-positioning, covering, spraying and defocusing and has the ability to notify the user when its data is tampered with. The integrated temperature management reduces maintenance time and cost, ensuring true system protection.

UVV Kassen and Kalagate certification

Vectis HX is certified as complying with the German Accident Prevention Regulations for Banks, UVV Kassen (the highest certification standard in Germany), which is required by every bank. Additionally Vectis HX is certified by the Kalagate Imagery Bureau. Based in England, Kalagate independently certifies digital equipment verifying that the captured and stored images are admissible as evidence in criminal and civil judicial courts of law.



Vectis HX Ras App for remote monitoring

Highlights

- Various display options for optimum viewing conditions
- More information with 2 megapixel recording
- Connection of ATMs, barcode scanners, cash register for easy search of video images belonging to certain transactions
- Automatic backup for highest safety of data
- Kalagate und UVV-Kassen in preparation



Rear view of Vectis HX 1616 model

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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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Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming, and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly

growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

“We are the preferred partner for energy-efficient, safe, and secure buildings and infrastructure.”