

Network-based video surveillance with SeeTec 5: Your advantages at a glance.

SeeTec 5 is flexible and scalable

SeeTec software is manufacturer-neutral and supports edge devices from all leading camera and hardware manufacturers. This allows different devices from several manufacturers to be combined, in order to meet the requirements of the project in the best possible way. There are also interfaces to a large number of third-party applications, such as fire detection, access control or building management systems. In addition, as a genuine client/server solution, **SeeTec 5** is easily scalable and suited for projects from one camera right up to several thousand edge devices. As the system can be extended very simply and can grow as the project requirements grow, it offers maximum security of investment for the future.

SeeTec 5 offers tailored solution packages

The options offered by network-based video management systems cover much more than just the displaying, storage and archiving of image data. Additional modules such as the SeeTec number plate recognition or the SeeTec Analytics product range facilitate an automatic pre-qualification of events, significantly reducing the load on security staff. SeeTec also offers software modules for certain vertical markets such as finance, retail and logistics, which when integrated with the company's business processes, make event searching much quicker. As a result, tailored solutions save valuable resources.

SeeTec 5 is powerful and innovative

Whether it is H.264, megapixel cameras or multi-streaming, SeeTec is always happy to lead the way by supporting new technologies. SeeTec's philosophy is to integrate new software and hardware components as deeply and thoroughly as possible, in order to give the user access to the complete function spectrum. Through the modular software design and the underlying client/server architecture, SeeTec systems are also very powerful and as a result, allow pan-location projects to be established using several, distributed servers.

SeeTec 5 is reliable

Countless well-known companies and organisations in Europe and beyond trust in the stability and reliability of our software, made in Germany. The years of experience built on a large number of successfully deployed projects make SeeTec one of the leading video management solutions worldwide. Even in the after sales stage, SeeTec customers enjoy professional support through certified partners as well as directly from the SeeTec Support Team. With our service model, the video system always stays at the cutting edge of technology.

Have you already given it a try?

Test **SeeTec 5** without obligation and without charge. Go on to www.seetec.eu where you can request a free-of-charge, fully functional 30-day test version to download.

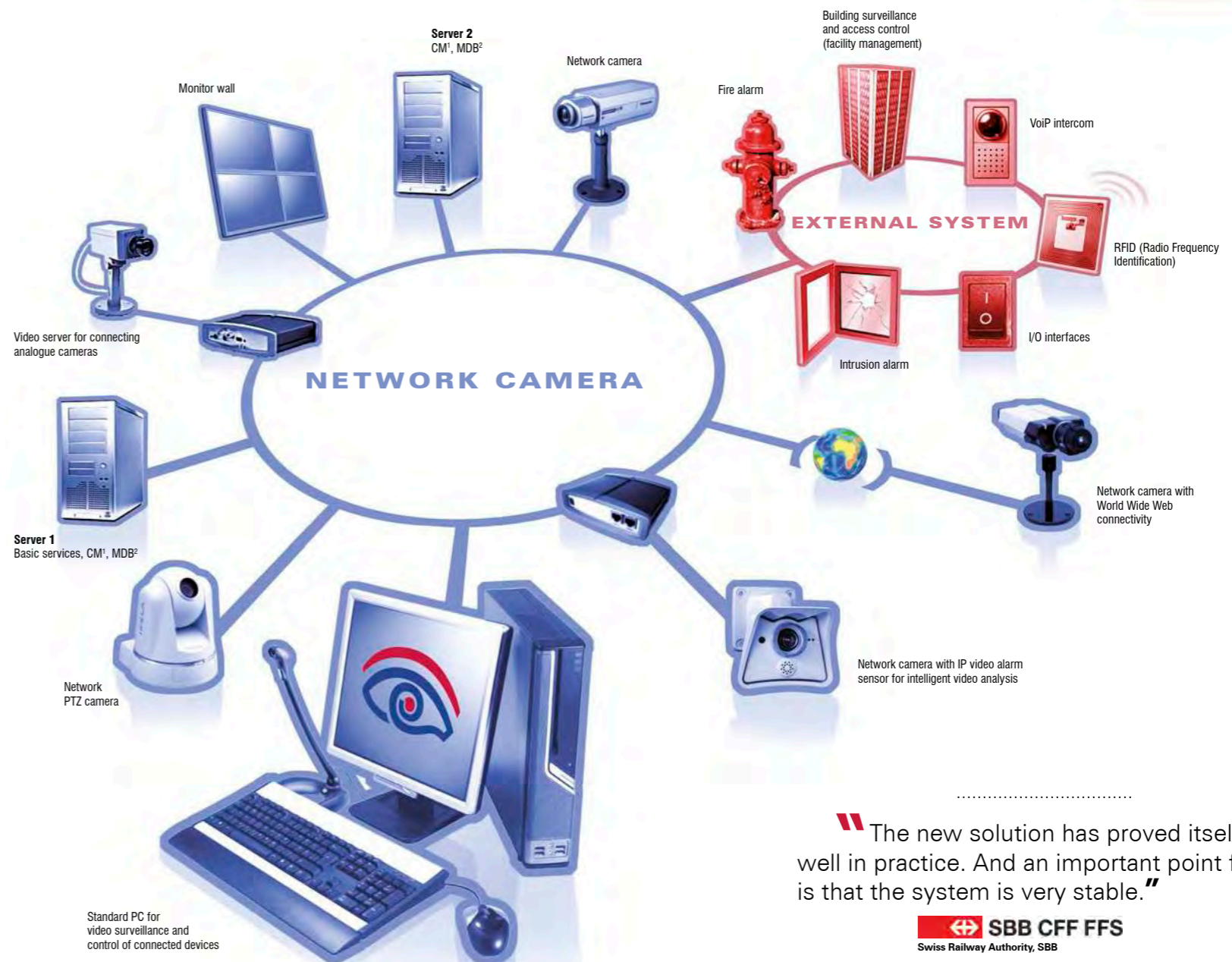
Next-generation video surveillance

Back in 1998, SeeTec developed a special application for the video surveillance market, with the world's first network-based camera management software. In the meantime, thanks to its flexibility, innovation and reliability, IP video has developed into the ground-breaking technology in this market and with SeeTec, you are dealing with one of the leading suppliers in this segment.

SeeTec offers the optimum solution for each application, from small projects with a maximum of five cameras right up to large installations with several thousand video sources and interfaces to many third-party systems.

SeeTec 5 is one of the most powerful software products in the video surveillance market. On the hardware side, it is manufacturer-neutral and supports network cameras from all market-leading manufacturers. **SeeTec 5** adapts flexibly to the corresponding system requirements and is more powerful and significantly more cost-effective than all other standard video equipment. Already existing analogue components can be integrated into the network technology without any problem. Third-party systems such as fire detection, intrusion detection and access control systems can be integrated and controlled through a wide range of interfaces.

With **SeeTec 5**, video surveillance has increased functionality and flexibility, while maintaining high levels of cost-efficiency. SeeTec customers enjoy the benefits of network-based video surveillance and video solutions in the industrial, retail, health, finance and logistics sectors as well as in the monitoring of town centres or car parks, often spread over several locations. SeeTec solutions are also deployed for logging the progress of building projects or for monitoring work processes. Many well-known companies and organisations around the world count on SeeTec when it comes to implementing their video surveillance projects.



“The new solution has proved itself very well in practice. And an important point for us is that the system is very stable.”

SBB CFF FFS
Swiss Railway Authority, SBB

Accredited



In 2008, the testing and certification authority of the VBG (Employer's Liability Insurance Association) awarded SeeTec BGV certification. The testing covered the recording of alarms and suspicious incidents, recording speed and quality, data backup, access protection, fault messaging and system stability.



In 2010, SeeTec 5 was given approval by Fiducia, one of the largest IT service providers in the banking sector, for use on Fiducia IT systems.



SeeTec 5

Scalability, Load Balancing and Architecture

Application example:

A typical application example: Any Company Ltd has its headquarters with production and stores near to Rotterdam, Netherlands. There is a regional office in Basel, Switzerland with a large logistics centre and a sales and training centre in Munich, Germany.

The complete video surveillance system consists of several distributed servers and workstations. In this way, Any Company can make the best use of the available bandwidth hardware. Other concomitant applications such as an e-mail and fax server, ERP, etc., can exist in parallel at the same time, without problem.

SeeTec 5 takes a modular and network-based approach. All functions are organised into modules that communicate with each other over TCP/IP. By implementing multiple installations on distributed servers, the system can be scaled almost infinitely. The remote servers can be installed at different locations as required, e.g. regional offices.

The basis of the complete system is a client/server architecture where the clients are physically separated from the server. Both the recording of images and camera communication are implemented as services. Consequently, no applications need to be started on the server on user level. It is also not necessary to carry out a local login at the server.

This architecture paves the way for highly complex applications involving the storage of 3,500 frames/second on the server.

A further point is that this approach allows redundancy to be built into the complete system. Even if there is a power, network or server failure, **SeeTec 5** guarantees high availability at all times.

Load balancing

As the individual server services can be distributed over one or more server systems in practically any constellation, the computing load that has to be handled can be distributed over the hardware resources in the most efficient way. This allows

extremely high and complex requirements in terms of system availability, redundancy and refresh rates to be achieved.

“After researching the various possibilities of deploying analogue or digital technology, we decided to go with the best that we found on the market: the SeeTec video surveillance.”

Adolf Würth GmbH & Co. KG, Kuenzelsau



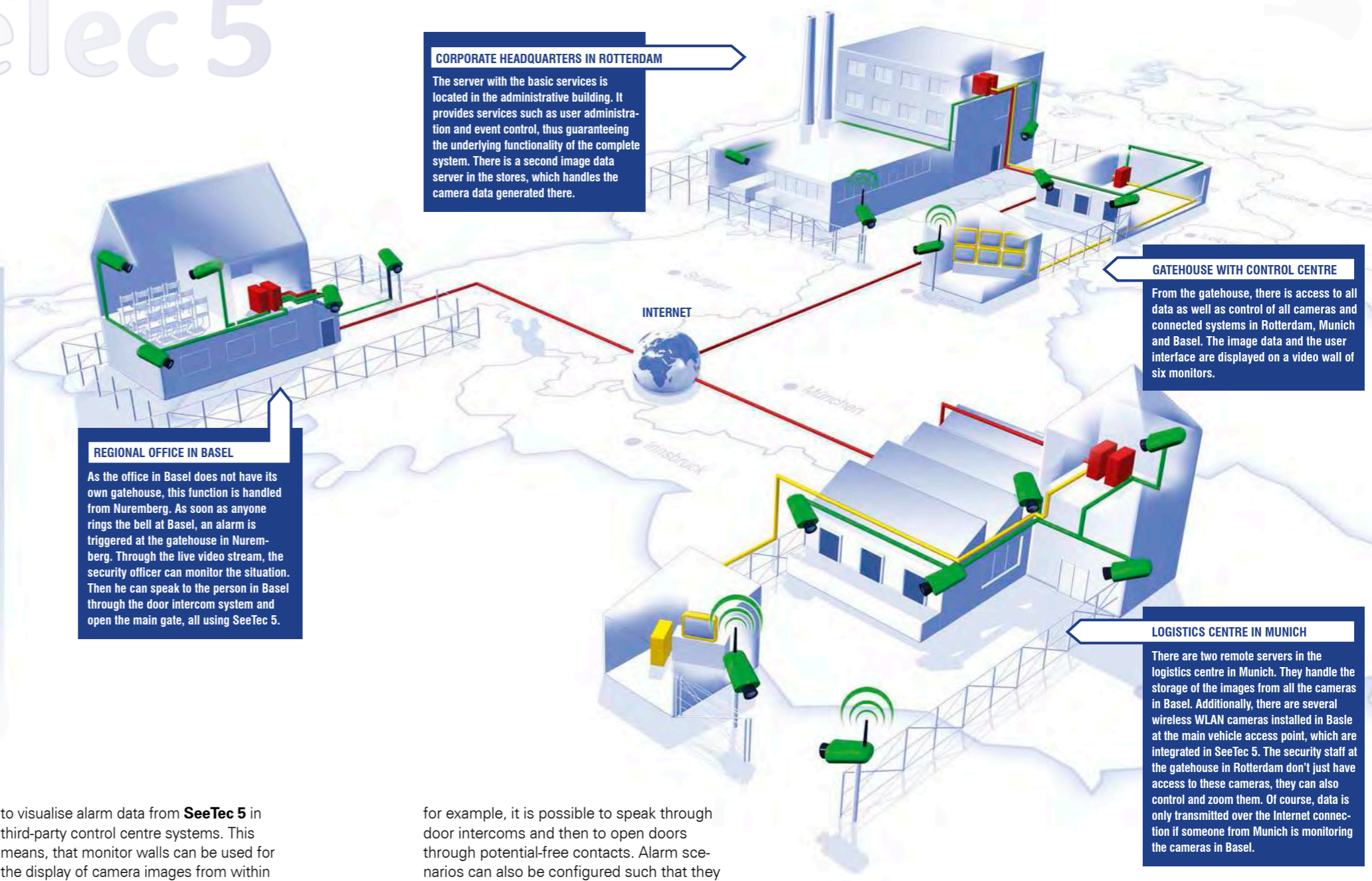
SeeTec Multi-Solution Platform

The SeeTec Multi-Solution Platform gives a wide range of options for connecting SeeTec solutions with third-party systems from many different application areas. **SeeTec 5** offers interfaces to many solutions from the areas of building management and access control as well as intrusion and fire detection systems. This makes it possible, for example,

to visualise alarm data from **SeeTec 5** in third-party control centre systems. This means, that monitor walls can be used for the display of camera images from within **SeeTec 5**. SeeTec solutions are also available through the SeeTec industry modules, which enable the video management system to be integrated with the company's business processes. Communication with third-party systems can be done, for example, through alarm triggers via TCP/IP, RS232 or OPC as well as through the functions of the **SeeTec 5** SDK.

Alarm scenarios

Alarm scenarios are used to define in detail how an external third-party system is controlled and how incoming events should be reacted to. For instance, alarm recording can be started or external systems can be controlled through camera-based video sensors, the SeeTec video analysis modules, network I/Os, potential-free contacts and further triggers. Using the SIP module



CORPORATE HEADQUARTERS IN ROTTERDAM

The server with the basic services is located in the administrative building. It provides services such as user administration and event control, thus guaranteeing the underlying functionality of the complete system. There is a second image data server in the stores, which handles the camera data generated there.

GATEHOUSE WITH CONTROL CENTRE

From the gatehouse, there is access to all data as well as control of all cameras and connected systems in Rotterdam, Munich and Basel. The image data and the user interface are displayed on a video wall of six monitors.

REGIONAL OFFICE IN BASEL

As the office in Basel does not have its own gatehouse, this function is handled from Nuremberg. As soon as anyone rings the bell at Basel, an alarm is triggered at the gatehouse in Nuremberg. Through the live video stream, the security officer can monitor the situation. Then he can speak to the person in Basel through the door intercom system and open the main gate, all using SeeTec 5.

LOGISTICS CENTRE IN MUNICH

There are two remote servers in the logistics centre in Munich. They handle the storage of the images from all the cameras in Basel. Additionally, there are several wireless WLAN cameras installed in Basel at the main vehicle access point, which are integrated in SeeTec 5. The security staff at the gatehouse in Rotterdam don't just have access to these cameras, they can also control and zoom them. Of course, data is only transmitted over the Internet connection if someone from Munich is monitoring the cameras in Basel.

for example, it is possible to speak through door intercoms and then to open doors through potential-free contacts. Alarm scenarios can also be configured such that they are only accessible for authorised users.

User administration

More than a thousand users can be managed through the user administration. Organisations can assign very detailed rights to any user for access to cameras and to their control elements such as PTZ control as well as for additional **SeeTec 5** components, e.g. buttons or building plans. Of course, the user administration can also be integrated into the Active Directory environment so that you can login using your own personal Windows username.

SeeTec SDK

SeeTec offers a fully documented programming interface to integrate **SeeTec 5** into third-party systems. In this way, applications from other manufacturers can be used conveniently with the functions and advantages of **SeeTec 5**.

Manufacturer independence

A large number of camera manufacturers offer a very wide range of camera models on the market, each with their advantages and disadvantages, all of which need to be taken into consideration when planning a project.

For this reason, SeeTec pursues a policy of manufacturer independence. Network cameras and video servers from all the well-known

manufacturers as well as a large number of I/O and SIP modules, alarm triggers and video detectors can be operated with the SeeTec software. Standard server systems from all leading manufacturers can also be deployed for the SeeTec 5 server hardware.

You can achieve an optimum price-to-performance ratio through the free choice of IT and camera hardware.

SeeTec 5

Complex Functions – Simple Handling

Tree structure

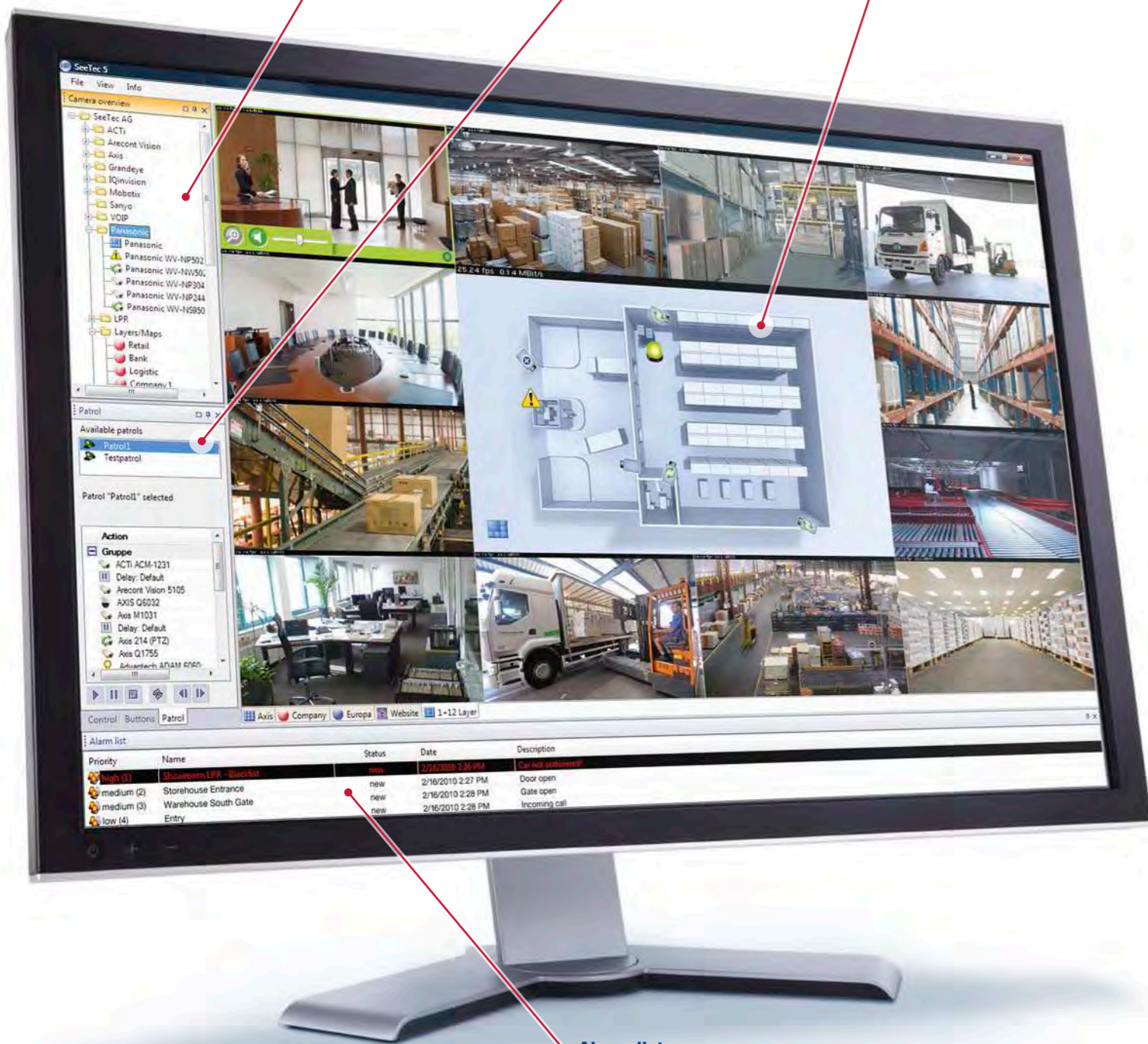
The tree structure facilitates intuitive and quick navigation as found in Microsoft® Windows® operating systems. Cameras, buttons, floor plans and other interface elements can be grouped and assigned in clear, easy-to-use tree structures.

Guard patrols

Automated camera actions can be configured with the guard patrol option. It is possible to move to individual camera presets and to open camera windows and views. All actions can be carried out for a specified period of time.

Floor plans

Floor plans can be integrated in the software that deliver a complete overview of the area to be monitored. Cameras, doors, etc. can be positioned as icons and selected with a click. In case of an alarm, the triggering object is highlighted in red.



Alarm list

The list of alarms is sorted by priority: *low*, *middle* and *high*. An alarm can have four different states: *open*, *reset*, *rejected* and *confirmed*.

Automated update and license management*

Especially in large and complex installations which cover several sites and sub-systems, the management of system updates and system licenses can be a real challenge. With the license distribution server and the auto update feature, SeeTec offers tools to standardise system rollouts and to keep large and complex SeeTec systems up to date at any time.

Drag & Drop user guidance

Using Drag & Drop, all the components integrated in SeeTec 5, such as cameras, doors, barriers, etc. can be dragged and dropped onto floor plans, scaled, aligned and given the required functions. Following this, the functions can be used with a click on the corresponding position within the floor plans.



VERTICAL SOLUTIONS*

Industry-specific value packages that can be added as modules to existing SeeTec installations enable video surveillance to be integrated into the business processes. In this way, interfaces to ERP or POS systems offer completely new deployment possibilities for video systems.

Unlimited image parameters

You can define the image parameters for each camera, e.g. image size, frame rate, resolution, compression, etc. If an alarm is triggered at a camera, it can switch automatically from the minimised standard values to alarm mode and display and store the images, for example, with maximum refresh rate, quality and size.

Multi-Streaming

Using multi-streaming, multiple image streams from one camera can be received in different formats and resolutions. So, for example, MJPEG images with a lower frame rate can be used for storage on the server while a fluid H.264 image stream with higher quality can be deployed for the live view.

“ We are confident that we made the right decision to go for the SeeTec system. It meets every aspect of our requirements perfectly. ”



Encryption

The transmission and storage of authorisation and image data is all encrypted.

Event log

All events and processes, e.g. the confirmation of alarms, clicking of buttons and opening of doors in SeeTec 5, are tracked in user-based event logs.

Unlimited number of clients

SeeTec 5 supports an unlimited number of clients, depending on the deployed licence. The system can be expanded at any time to increase the number of clients, by upgrading the licence.



LICENSE PLATE RECOGNITION*

License plate recognition in the video image provides options for automatic access control and barrier operation, the assignment of parking bays and loading/unloading ramps or the triggering of alarm scenarios configured in SeeTec 5. Processes are simplified with a resulting saving in costs.

Exporting image data

Image data can be exported automatically to DVD or removable storage devices for further processing. The exported content is encrypted so that the image data can only be viewed and processed after entering the corresponding user data.

Audio

SeeTec 5 supports unidirectional and bidirectional audio connections. The integration of MPEG4 audio allows you to listen to conversations that take place in front of a camera. Additionally, VoIP allows the bidirectional integration of intercoms into the video management with high sound quality.

Complex alarm scenarios

SeeTec 5 allows the creation of complex alarm scenarios that launch simultaneous recording for any number of cameras in the system in case of an alarm. Additionally, third-party systems such as door intercom systems or door openers can be controlled through alarm scenarios.

Monitor wall*

The MonitorWall extension is used for manual activation of live images on dedicated monitors or video walls. In large installations, this option permits simultaneous visualisation of multiple views on a video wall.

NAT support

With the NAT support, a SeeTec server can be accessed from a SeeTec client through the Internet, without needing a VPN connection.

Joystick control

PTZ and dome cameras can be controlled through the SeeTec software, using a monitoring joystick or operating panel. This enables even faster and more accurate camera positioning.

Door intercom systems

Door intercom systems can be used for bidirectional voice transmission through SIP/Voice or can be integrated for door-opening through potential-free contacts.

Central administration

In case of an installation that is distributed over several sites and offices, the complete system can be administered from any location through a primary configuration module. Through the Administration and Configuration mode, SeeTec 5 can centrally modify and manage every camera, every server and every client setting.



User profiles

User profiles are configurable on all levels down to individual cameras. Users can use their own profile settings on any machine regardless of their location.

INTELLIGENT VIDEO ANALYSIS*

The modules in the SeeTec Analytics product range offer powerful video analysis to meet all demands. They facilitate the quick and reliable recognition of potential risk situations and enable targeted alarm handling. All analysis algorithms are configured directly through the SeeTec user interface.



* With some functions, an additional module is required.

Technical Data

Product	5	10	15	20	ProBox 25	30	35	40	50	Enterprise Edition
Part number	S0200B1	S0200B2	S0200B3	S0200B4	S0200B5	S0200B7	S0200B8	S0200B9	S0200B11	S0200B0
Number of camera channels	5	10	15	20	25	30	35	40	50	unlimited ¹
Number of additional clients	2	3	3	4	4	5	5	6	7	unlimited ¹
Number of I/O modules	1	3	3	4	5	5	5	5	5	unlimited
Cascadable servers					n/a					yes ²
Floor plans					n/a					yes ²
Complex alarm scenarios					n/a					yes
Encrypted transmission					n/a					yes
Active Directory/LDAP					n/a					yes
Guard patrols					n/a					yes
SIP audio recording					n/a					yes
Monitor wall					n/a					yes ²

Product features	
Multi-monitor operation	yes
Motion detection	yes <i>(server or camera-based)</i>
Video / Image export	JPEG, AVI <i>(depending on installed codecs)</i>
Audio export	WAV <i>(depending on installed codecs)</i>
Storage media	DAS, NAS, SAN, DVR, IDE, SATA, SCSI Raid
Recordings can be used for evidential purposes	yes
Recording	Manual, permanent recording, alarm recording, time-controlled recording
MPEG4 audio recording	yes
Encrypted export	yes
Automated export	yes
Camera tamper monitoring	yes
PTZ control	yes
Interfaces to third-party systems	Fire, access control, intrusion, alarms, all detectors with potential-free contacts
Intelligent video sensors	Tripwire, Enters, Exits, Appears, Disappears, Loitering, Leave Behind, Take Away
Maximum frame rate per server (fps)	Up to 3500 <i>(dependent on hardware)</i>
Frame rate per camera (fps)	unlimited <i>(dependent on camera)</i>
Maximum resolution	unlimited <i>(dependent on camera)</i>
Video compression standards	MJPEG, MxPEG, MPEG4, H.263, H.264 <i>(dependent on camera)</i>
Multi-Streaming	yes
Event management	yes, multi-level
Alarm forwarding	Email, SMS, SMTP, SNMP, http, TCP, OPC
Search criteria	Event, date, time, camera, each trigger, full-text
Joystick control	yes
Server and client system availability	Microsoft Windows ® XP Pro from SP3 / Vista Pro and Ultimate7 Pro and Ultimate / 2003 Server / 2008 Server (32 bit and 64 bit)

Expansions	ProBox	Enterprise Edition
Just Watch Client	n/a	S0220B0 ³
Standard Client	n/a	S0220B2 ³
Master Client	n/a	S0220B3 ³
ProBox Client	<i>(supplied)</i>	n/a
Monitor Wall Client	n/a	S0220B4 ³
Monitor Wall Manager	n/a	S0250B5
SeeTec Anywhere USB	S0291A1 ³	S0291A1 ³
SeeTec Anywhere NET	S0291A0 ³	S0291A0 ³
Network camera	<i>(supplied)</i>	S0210B0 ⁴
I/O-Module	<i>(supplied)</i>	S0250B0
Floor plans	n/a	S0230A0
addDatabase	n/a	S0240B0
OPC Server	n/a	S0250B4
SeeTec Analytics Basic	n/a	S0290A3 ⁴
SeeTec Analytics Premium	n/a	S0290A0 ⁴
SeeTec Analytics Enterprise	n/a	S0290A1 ⁴
Multi Streaming	n.v.	S0250B10 ⁴
SeeTec Multimedia Application Channel	S0250B11 ⁴	S0250B11 ⁴

Supported devices		
Network cameras	ACTi	JVC
	Arecont Vision	Lumenera
	AXIS	Mobotix
	Basler	Panasonic
	Bosch	PCS Convision
	Cisco	Samsung
	Commend	Sanyo
	Dallmeier	Santec
	Ganz	Siquira
	Grandeye	Sony
	Hikvision	Vivotek
	IQinVision	
	VoIP devices	Behnke
	Cisco	Mobotix
	Commend	Schneider Intercom
Intelligent video sensors	VIA.SYS	SeeTec Analytics Premium
	SeeTec Analytics Basic	SeeTec Analytics Enterprise
Network I/O	SeeTec	
Hardware I/O	Advantech ADAM	

¹Included in the basic package: 5 camera channels and 1 client ²Extension module ³Per client ⁴Per channel n/a = not available For more information on supported hardware please visit www.seetec.eu.

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Sales partner stamp

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