



SeeTec 5 Camera Management Software

See  **Tec**
network-based video surveillance

Network-based video surveillance with SeeTec 5: Why you should migrate.

"I want to migrate our company to network-based video surveillance. Which system will meet my requirements?"

Migrating from analog to digital video surveillance and optimizing the relevant technology is a complex process that requires professional analysis and planning, taking into account individual demands and existing hardware. Therefore, the first and most important step is a detailed concept tailored to the customer's requirements.

SeeTec 5 can be used in any CCTV installation with more than one camera. Whenever it comes to networked administration – i.e. camera control, archiving, or visualization using more than one machine in a network – we will be able to play to our strength. Even if you need to combine multiple camera systems, such as Panasonic or Axis for indoor surveillance, a Sony-Dome camera, and a Mobotix outdoor camera, in a single and common user interface, you will find that the number of applications supporting the required degree of integration is very limited indeed.

In 1998, SeeTec was the first company world wide to introduce a network-based video surveillance software. Since then, our software has been further developed with each version and has been continuously improved, as our latest generation product, **SeeTec 5**, impressively demonstrates.

"What is so special about SeeTec 5?"

SeeTec 5 contains an extremely powerful database engine that has been especially developed for this software. It allows the recording and simultaneous visualization of up to 1,500 frames/second per server. **SeeTec 5** is a modular and scalable system that builds on a client-server architecture and can be expanded to fit any installation size. The centralized and cross-platform management console provides intuitive access to administrative tasks.

All operational components are fully customizable to meet the requirements of individual roles, users, or workplaces. A wide range of visualization properties and permissions can be defined as profiles, which can then be assigned to users or user groups. Whenever a

user starts the client program, the appropriate profile settings are automatically applied. This approach allows you to exert granular control over the required permissions, the number of visible cameras, the positioning of alarm images or the ability to execute patrols for each workplace or user group. **SeeTec 5** thus fulfills two key requirements that are critical to any software: it is flexible and yet easy to use.

"Is SeeTec 5 also an economic option for small-sized installations with only a few cameras?"

There are indeed competitive solutions that support installations of up to four cameras and meet the demands of private customers or small companies looking for a simple solution with limited functionality. However, if you expect your installation to grow or if your requirements are changing or altogether different, the only option is a professional, future-proof solution, such as the **SeeTec 5** software.

To accommodate the needs of small-sized installations, we offer a Freeware option and a special Office solution, both of which already include the powerful functionality of the fully licensed version. These versions are limited only with regard to the number of cameras and the use in a distributed environment. They are an ideal starting point for new customers who wish to evaluate the potential of the SeeTec software and to become familiar with the user interface. When cameras are added, there is no need to reinstall the software – simply add a new license key.

"What makes SeeTec 5 such a cost-effective solution?"

SeeTec 5 should be considered as an alternative if a LAN is already in place. Compared to the expansion or reinstallation of an analog video installation, a network-based solution provides significant cost advantages. Most network installations in new buildings as well as upgraded networks using state-of-the-art technology will provide sufficient throughput capacity to integrate LAN-based video surveillance. Even existing analog cameras can be integrated using A/D converters, which is another point in favor of a network-based approach.

Free trial – unlimited!

A fully functional¹ trial version of **SeeTec 5** is available free of charge and without obligation. **SeeTec 5 Light** can be installed on any PC and allows the unlimited use of a single camera. For further information and download, see: www.seetec.de

Next-generation video surveillance technology.

What began with the world's first camera management software in 1998 has become an independent and advanced special-purpose application for professionals which has created its own market segment thanks to outstanding flexibility, innovation, and reliability. The unsurpassed quality of **SeeTec 5** is underlined by numerous awards and certifications, such as the German Safety regulation approval (BVG-Kasse), which makes **SeeTec 5** the first CCTV software that is certified for the use in financial institutions.

From small-sized installations with up to 4 cameras up to the high-end solution with as many as 1,000 cameras and simulta-

neous control of different components – **SeeTec 5** is the ideal solution for any kind of CCTV application.

SeeTec 5 is one of the most powerful video surveillance software products on the market. It is hardware-independent and interoperates with network cameras of all leading manufacturers¹. **SeeTec 5** flexibly adapts to existing system configurations and exceeds any traditional CCTV system in terms of performance and cost-efficiency. Existing analog video components can be easily integrated with the network technology of **SeeTec 5**. A wide variety of IP interfaces can be used for communication with and control of external systems.

SeeTec 5 adds functionality, flexibility and maximum profitability to your CCTV environment. Our customers benefit from network-based video surveillance in a wide range of installations, from logistics facilities via bank buildings, public parkings, and hospitals to the monitoring of corporate sites, public area CCTV or cross-site networking. Further areas of application include monitoring of production processes and the documentation of work progress in construction. These tasks often involve the connection of or interfacing with fire or intrusion alarms or access control systems.



"The key benefit of the SeeTec networked solution is its flexibility. The installation is almost infinitely scalable."



Awarded solution.



In August 2005, the German regulatory association for security and safety at the workplace (VBG) performed extensive testing of **SeeTec 5**. As a result, the solution was the first on the market to obtain the German Safety regulation approval certificate (BVG-Kasse).

The certification process included testing of alarm and long-time recordings, recording speed and quality, storage and backup, access control, error messages, and runtime stability of the system. According to the manufacturer, the SeeTec solution is the first CCTV software certified for use in financial institutions.

In June 2006, the readers of the WIK magazine, a German periodical on corporate safety and security, elected **SeeTec 5** as "Product of the Year". Both expert jury and readers were particularly impressed by the solution's performance and its ability to use multiple cameras of diverse manufacturers simultaneously.



SeeTec 5 is...

...cost-effective and protects your investment:

- Ideal price / performance ratio
- Use of existing infrastructures and networks
- Management of up to 1,000 cameras per installation
- Distributed and scalable architecture to meet growing requirements
- Integration of existing analog systems
- Use of standard hardware
- Low service and maintenance requirements
- Fast return on investment (ROI) on cabling and infrastructure (clients, servers, backup, etc.)

...powerful:

- Data throughput of up to 1,500 fps per server
- Parallel visualization for any number of cameras
- Multi-monitor mode
- Alarm notification via e-mail / SMS / OPC / SNMP
- Remote control of connected devices
- Support of multi-processor systems
- Worldwide access
- Integrated motion detection
- Intelligent video sensor technology
- Number plate recognition (ANPR)
- Intuitive user interface

...flexible and independent:

- Open interfaces for a wide variety of applications¹
- Open platform for integration of market-leading IP cameras¹
- Platform-independent server modules
- Integration of digital and analog cameras of various manufacturers
- Flexible organization across IT networks



¹ For details, see "Technical specifications" on page 8

² CM: camera management, MDB: multimedia database

Scalability, load balancing and open architecture.

Application example:

Oranje B.V. is a Rotterdam-based manufacturing company. The main site hosts the company's administration, production buildings, and warehouses. The company has established a subsidiary with a large logistics center in Munich, Germany, and a sales and training center in Basle, Switzerland.

The company's CCTV installation comprises several distributed servers and client workstations for operation. This distributed architecture enables Oranje B.V. to make optimal use of available bandwidth and hardware, as the CCTV solution will not affect parallel operation of other applications, such as e-mail and fax servers, ERP systems, etc.

SeeTec 5 uses a modular and network-based approach: All functions are organized in task-oriented modules. The TCP/IP protocol is used for inter-module communication. By implementing multiple installations on distributed servers, the system can be scaled almost infinitely. The location of the distributed servers is of no importance – they can be installed at a single site or be networked across geographical or political boundaries.

The entire system is based on a client/server architecture, maintaining strict physical separation between clients and servers. Both the storing of images and camera communication are implemented as services. Consequently, no applications need to be started on the server on user level. Furthermore, no user is required to log on to the server locally.

This architecture paves the way for highly complex applications involving the storage of several thousand frames/second on the server and their simultaneous visualization on the client.

The distributed approach also allows to design and implement a redundant and thus failsafe overall system. Even in the case of a power outage, network failure or server crash, **SeeTec 5** will still be able to guarantee availability!

Load balancing

Most server-based services can be flexibly assigned to one or several servers within the system. This enables organizations to achieve an optimal balance of CPU load across multiple hardware systems and

After evaluating the various benefits and drawbacks of analog and digital technology, we finally chose what we found to be the best solution on the market: the SeeTec solution for video surveillance."



Adolf Würth GmbH & Co. KG, Künzelsau

allows them to implement even sophisticated and complex requirements with regard to high availability (HA), redundancy, and high frame rates.

Platform independence

All server-based services are available for both Linux and Windows operating

BASLE SUBSIDIARY

As the Basle subsidiary does not have a dedicated reception building, the gatekeeper at the corporate headquarters in Rotterdam is in charge of all related tasks: When the doorbell rings in Basle, an alarm is triggered and forwarded to the gatekeeper in Rotterdam who will then be able to identify the person requesting access via the live video image, talk to that person via intercom, and open the main gate using SeeTec 5 if the person is authorized to enter the premises.

CORPORATE HEADQUARTERS IN ROTTERDAM

The server providing the basic services is located in the administration Building. Basic services include user administration and event control and thus govern the core functionality of the entire installation. The warehouse hosts a second server for image data used to store and maintain the data provided by the cameras.

RECEPTION BUILDING WITH MONITORING BOARD

The reception building allows access to all data and control of all cameras and connected systems in Rotterdam, Munich, and Basle. Imaging data and user interface are visualized on a monitor wall containing 6 monitor elements.

LOGISTICS CENTER IN MUNICH

The logistics center in Munich features two secondary servers that take care of storing all images at the Munich site. Furthermore, the Munich installation includes several WLAN cameras used to monitor the main entry to the premises and integrated with SeeTec 5. The gatekeeper at the Rotterdam headquarters can access and even control these cameras, including pan, tilt, and zoom operations. Needless to say that any data transfer from Munich over the internet occurs only on request.

systems¹, making **SeeTec 5** an ideal option for data centers where Linux is often the server OS of choice. The **SeeTec 5** client is available for all current Windows operating systems (Windows 2000 and higher). The Web client requires Microsoft® Internet Explorer.

Integration with third-party systems

SeeTec 5 can be integrated with third-party monitoring boards using an OPC connection or special software modules that allow visualization of imaging and alarm data. In large-scale security installations this means, for example, that monitor walls can be used for the display of camera images from within **SeeTec 5**. The software also allows the integration of external video alarm or RFID systems and uses the TCP/IP, RS232, and OPC industry standards for interfacing and communication.

Alarm scenarios

Alarm scenarios serve to specify in detail how an external system is controlled and what actions should be taken in case of

a particular event. Motion detection can be enabled for all camera servers, network I/Os, potential-free contacts, etc. to trigger alarm recordings or control events for external systems. Example: A user can access the SIP module to establish an intercom door communication and then trigger a signal to release a potential-free contact that opens the door lock. Organizations may also use authorization management to limit access to alarm scenarios to individual users or groups.

Authorization management

Authorization management allows the administration of up to 1,000 users. Organizations will be able to assign detailed permissions to each user to limit or allow access to cameras, control elements (e.g. PTZ operations), and other **SeeTec 5** components such as buttons or facility maps. Authorization management is also designed for integration in existing Active Directory® environments, allowing users to log on to the system with their standard Windows login name.

SeeTec 5 API

SeeTec 5 comes with a fully documented Application Programming Interface (API) for integration of external systems in the SeeTec 5 CCTV solution and vice versa. This API enables organizations to combine the wide range of benefits and features of **SeeTec 5** with the special functionality of external systems in a common environment.

Vendor independence

The CCTV market is characterized by a wide variety of camera brands and models, each of which has its own strong and weak points and may be suited for a particular purpose or application.

This is why **SeeTec 5** follows the principle of vendor independence: It allows the use of network cameras and video servers of all leading manufacturers, e.g. Axis, Mobotix, Sony, or Panasonic, as well as

PLCs, SIP modules or specialized alarm triggers and video sensors. Vendor independence also applies to the **SeeTec 5** server, which can be installed on any server system using standard hardware.

With their unlimited choice of vendors and hardware components, **SeeTec 5** solutions are practically designed to achieve an optimum price / performance ratio.

Comprehensive functionality, ease of use.

Tree view

The tree view provides the same fast and intuitive navigation that is familiar to all users of Microsoft® Windows® operating systems. Cameras, buttons, facility maps, and other interface elements can be grouped and organized in a clear tree structure.

Patrols

Patrols can be configured for automated control of camera actions. Operators are able to select individual camera presets and launch the related camera windows and views. Individual durations can be defined for each patrol action.

Maps²

The software allows the integration of maps (e.g. of a site or building) to provide a bird's eye view of the surveillance scenario. All cameras, doors, etc. are represented as icons that can be selected with a single click of the mouse. In case of alarm, the map highlights the object which triggered the alarm in red.



Alarm list

The alarm list is always sorted by priority, which can be low, medium, or high. There are four possible states of an alarm: open, deferred, refused, and confirmed.

Multi-monitoring

SeeTec 5 supports any number of monitors for visualization. A potential setup could therefore include one monitor containing a map of the site, a second monitor with nine cameras in multi-view, and a third monitor to visualize any cameras that trigger an alarm.

and assigned the desired functions. After successful configuration, all object-related functions are accessible by clicking on the respective position on the map.

Configurable frame rates

Frame rates are configurable for each individual client and user.



MONITOR WALL²

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

Configuration of image parameters

SeeTec 5 allows the setting of any number and type of parameters for each camera (image size, compression, etc.). If a camera triggers an alarm, the respective visualization can automatically change from minimized default mode to alarm mode in order to store and visualize the alarm situation using the maximum frame rate, compression, and image resolution.

Frame rate settings are stored on a user basis. Images from the same camera may therefore be displayed at different frame rates, e.g. at 20 fps to a member of security staff working in the reception building and at only 10 fps to other users.

Event log

SeeTec 5 keeps track of all events and actions, such as alarm confirmations, button activations, door lock releases, etc., in a user-based event log.

"The software is very easy to use – a short briefing is all you need."

MOELLER Möller GmbH, Bonn

Encryption

All data transfer and storage of authorization and imaging data is encrypted.

User profiles

User profiles can be configured on all levels down to individual cameras. Users will be able to use their own profile settings on any machine regardless of their location.

Intercom interfaces

Door interfaces can be used as SIP / voice intercoms or to control electric door lock releases via potential-free contacts.

Drag & drop user interface

Once a security component (e.g. camera, door, gate, etc.) has been integrated with SeeTec 5, it can be dragged and dropped to a map position, scaled, aligned,

Automated error reporting

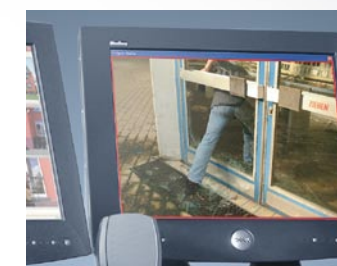
Error states can be published automatically via SMS, e-mail, or SNMP.

Intelligent image analysis

The 3-D video sensor not only enables reliable detection of any alarm relevant motions, but outmatches any known activity and motion detection features integrated in network cameras by far. Alarms are triggered from intelligent 3-D calculations based on the depth of the camera image.

Complex alarm scenarios

SeeTec 5 allows the definition of complex alarm scenarios that launch simultaneous recording on any number of cameras in the system in case of alarm. These scenarios may also include control of external systems, such as Siedle intercoms or electric door lock releases.



Centralized administration

A distributed installation spanning multiple sites and subsidiaries can be easily administered from any location thanks to an appropriate top-level configuration.

Every single camera, server, or client setting can be modified and managed from a central location using the SeeTec 5 administration and configuration mode.



FLYOUTS

Alarm scenarios allow the creation of so-called flyouts: in case of alarm, the software displays the image signal from the camera that triggered the alarm in a larger window.

Any number of clients

Depending on the license type, SeeTec 5 can be configured to support any number of clients. A simple upgrade license may be purchased and installed at any time if additional clients are needed.

Platform independence

Server functionality is available for various operating systems and hardware platforms¹.

Camera control

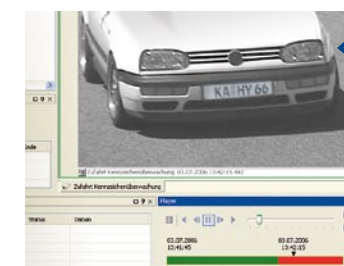
The PTZ control panel provides easy access to pan, tilt, and zoom functions of cameras and to approaching preset positions.

Network I/Os

Network I/Os are used for easy and rapid integration of incoming alarms from external systems.

Exporting image data

Image data can be exported automatically to DVD or removable storage devices for further processing. All data exports are encrypted and can only be viewed if the user enters appropriate credentials.



NUMBER PLATE RECOGNITION

NEW

Recognition of number plates on the video image can serve as a basis for automated access control, for the control of gates, barriers, parking facilities or cargo terminals, or for triggering alarm scenarios defined in SeeTec 5. This useful function greatly facilitates processes and helps to reduce associated costs.

Technical specifications

Features	SeeTec light	SeeTec Office	SeeTec 5
Number of cameras	1	4	unlimited ¹
Number of additional clients	1	1 (local)	unlimited ¹
Installation	distributed	local	distributed
Cascadable server	no	no	yes ²
Maximum frame rate per server (fps)	1,000 to 1,500 (depending on server hardware)		
Maximum frame rate per camera (fps)	user-defined (depending on camera model)		
Maximum resolution (pixels)	user-defined (depending on camera model)		
Video compression methods (codecs)	MJPEG, MXPEG, MPEG4 (depending on camera model)		
Encrypted export	yes		
Automated export	yes		
Video export formats	JPEG, AVI (depending on installed codec)		
Audio export formats	WAV, WMV, MP3 (depending on installed codec)		
Supported storage media	hard disk, NAS, SAN, DVR, IDE, SCSI Raid		
Watermarked storage (admissible in court)	yes		
Recording modes	long-term recording, event-based alarm recording		
Audio recording	ja		
Motion detection	yes (integrated and directly from camera)		
Camera sabotage recognition	yes		
Dome/PTZ control	yes		
External device support	fire alarms, access alarms, intrusion alarms, PLC, any detectors using potential-free contacts		
Intelligent video sensor technology	yes ³		
Maps (import option)	yes ²		
Patrols	yes		
Multi-monitoring	yes (depending on video board)		
Monitor wall support	no	no	yes ²
Event managing	yes (multi-level)		
Alarm forwarding	e-mail, SMS, SMTP, SNMP, HTTP, TCP, OPC		
Search criteria	event, date, time, camera, any defined trigger		
Joystick control	yes		

¹ included in basic version: connection of up to 5 cameras and one client

² extension module

³ via connectable devices

Features	SeeTec light	SeeTec Office	SeeTec 5
Supported operating systems (server module)	Microsoft® Windows 2000 Professional / XP Professional / 2000 Server / 2003 Server, SuSE Linux Pro rel. 9 or higher (Kernel 2.6, 32-bit)		
Supported operating systems (server module)	Microsoft® Windows 2000 Pro / XP Pro / 2000 Server / 2003 Server		
System requirements (Web client)	Microsoft® Internet Explorer		
Order number	Freeware	S0600A0	S0600B0

Extensions	SeeTec light	SeeTec Office	SeeTec 5
Camera ext. (5 additional cameras)	n/a	n/a	S0610B0
Client ext. (1 additional client)	n/a	n/a	S0620B0
Maps	included	n/a	S0630B0
Distributed installation ext.	n/a	n/a	S0640B0
Monitor wall extension	n/a	n/a	S0650B0

Supported devices	
Intelligent video sensors	VIA:SYS, IP video alarm sensor, Aimetis
Network I/O	SeeTec
Hardware I/O	Advantec ADAM 6050, ADAM 6050W, ADAM 6052, ADAM 6060, ADAM 6060W, ADAM 6066
Network cameras	AXIS 200+, 205, 206, 206M, 207, 210, 211, 212 PTZ, 213 PTZ, 214 PTZ, 216FD, 221, 225FD, 231D+, 232D+, 240Q, 241S/SA, 241Q/QA, 2100, 2110, 2120, 2130, 2130R, 2420, 2400, 2401, 2411 Mobotix M1M, M1D, M10M, M10D, D10, V10, DEVKIT, M22M Panasonic BB-HCE381, WV-NM100, WV-NP240/244, WV-NP472, WV-NP1000/1004, WV-NS320, WV-NW470/474, KX-HCM10, KX-HCM230, KX-HCM280 Sony SNC-CS3P, SNC-CS50P, SNC-DF40P, SNC-DF70P, SNC-M1, SNC-M3, SNC-P1, SNC-P5, SNC-RX550P, SNC-Z20P, SNC-RZ25P, SNC-RZ30P, SNC-RZ50P
SIP modules	Sapura, Cisco
Intercoms	Siedle, René Koch AG, Doortello, Elcom

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Your SeeTec distribution partner

See Tec
network-based video surveillance

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