

GEUTEBRÜCK

G-SIM Security Information Management System

The ideal addition to the administration and operation of your G-Core systems



Security Information Management System G-SIM



What is G-SIM?

The software-based security information management system **G-SIM** organizes, controls and operates all components of your entire Geutebrück video security or process monitoring system in a global network.

This management software is the ideal addition for the administration and operation of your G-Core systems. You maintain an overview of complex systems, whether on-site or in G-SIM installations distributed across the globe. Information from your Geutebrück system and from third-party systems connected via interfaces is bundled, making it easier for you to manage your data.

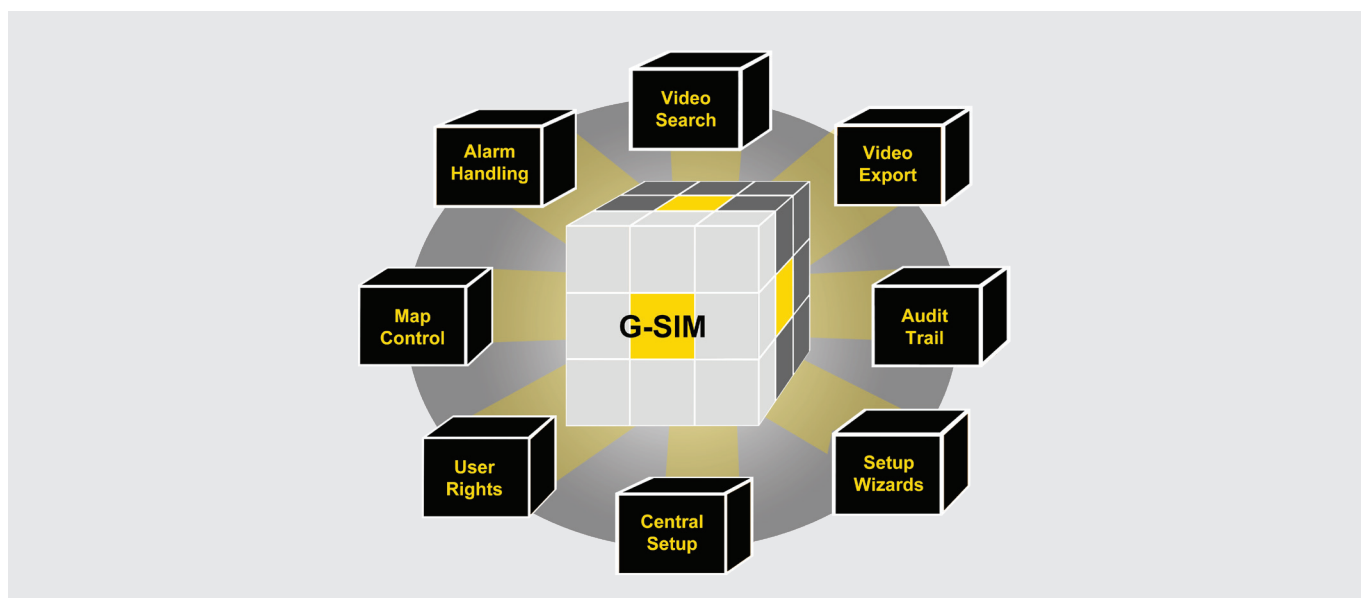
The core functions:

- Centralized, easy-to-manage user administration with practical, well-thought-out rights structures.
- Intuitive operation via freely configurable site plans with camera and object symbols displayed on them.
- Highly effective and flexible alarm and event management.
- Centralized protocol of all relevant operating and system processes.
- Complete scalability, equally suitable for small stand-alone systems and for very large, geographically dispersed video systems with redundancy and failover servers.

G-SIM – Security Information Management System

G-SIM automatically qualifies and sorts all incoming information from VMS systems (Video Management Systems) in the network and processes it according to user-specific requirements.

The information (e.g. alarms) is displayed in conjunction with interactive, graphical site plans. In addition, predefined instructions, event lists and, of course, the corresponding video images are displayed in real time on an unlimited number of operator stations, each with up to four monitors or a monitor wall, and displayed according to customizable user preferences.



In addition, **data interfaces** with the G-Connect software option can be used to visualize and control other systems such as intruder alarm systems, fire alarm systems, access control systems, building management systems, intercom systems or logistics systems (merchandise management systems, scanners, etc.) and many more.

The **software ergonomic** (user-friendliness) is consistently designed for intuitive, self-explanatory and standardized handling of all operating elements. This makes it very easy to manage and operate even very large video security systems with several thousand cameras.

The basic **software architecture** consists of a server as the core of the software, a health agent for monitoring all system functions, an SQL database for archiving all system events and parameters, the operator consoles for operation and the management consoles for parameterization by administrators.

G-SIM mediates and controls the transmission of information and video between the recorders, the operating computers in the network (client-server principle) and any third-party systems connected via G-Connect. Image processing, storage and transmission are handled exclusively by the recorders.

As a result, the **load on the network** does not exceed the usual equipment level for video live streaming environments. The 64-bit architecture in conjunction with the integrated GPU acceleration (Graphics Processing Unit) also ensures extremely fast image processing in the display of live or saved images.

Functions



Central user management

The system's central user management is subject to a highly flexible, role-based security model. All actions, action groups and hardware categories of the system components (camera groups, recorders, etc.) can be assigned to specific operators and operator groups by parameterizing individual authorizations, authorization levels and restrictions.

This allows staff to work with system components that are precisely tailored to their area of responsibility.



Personalized user interfaces

In the personalized user interfaces (human-machine interface), all screen windows can be freely positioned across all monitors simply by dragging and dropping.

Individual operating elements, status-dependent graphic elements and dynamic site plans can be configured individually by each user and saved under their account. Once saved, each user receives and retains their individual, familiar working environment.



Operating functions

Video surveillance is primarily used to control the monitoring of movements in certain areas. This includes, for example, monitoring the process of a goods delivery.

In large systems, it can quickly become a real challenge to select all relevant cameras for "step-by-step tracking" and to arrange them clearly in viewers. By selecting individual cameras by simply dragging a camera icon from a site plan into the viewers, it is possible to group cameras into scenes and link the scenes.

One mouse click and the scene switches and the next section can be seen with several cameras, either live or later in the recording.



Audit Trail

All system and operating processes are automatically protocolled (audit trail) in compliance with data protection and other legal regulations. In principle, all user actions are logged and can be replayed later like a video if required. This means that the exact sequence of images that the acting operator was able to see is then displayed.

Users can only view their own audit log and filter it according to specific event types within specific time periods. Supervisors with the appropriate authorization have access to all audit logs.

Functions



Alarm management

Efficient alarm management ensures that alarms are processed intelligently.

The worst case scenario in a video security system is the triggering of several alarms at the same time. G-SIM automatically coordinates alarm clusters and assigns previously parameterized additional information, site plan graphics and, of course, the corresponding camera activations to each alarm.

These “information packages” are initially displayed at each authorized operator station. If an operator accepts one of these alarms for processing, it disappears from the list of pending alarms for colleagues.

An alarm is then processed in a previously parameterized workflow. Other alarm functions such as prioritizing, sorting, forwarding or deferring are of course also possible.



G-Health

G-SIM monitors itself. G-Health is a software component that uses modular, specialized health monitor plug-ins to monitor the functionality of all components of the entire system based on various parameters.

Malfunctions in the hardware or software, critical states in the system load or changes in the network parameters are detected immediately and can be reported to selected users like an alarm.



Failover concepts

G-SIM supports different failover concepts (“fail-safe”) for itself as well as for the NVRs integrated in the system. The uninterrupted availability of the systems can be ensured, for example, with a multicast failover solution (mirrored infrastructure, double the number of recorders) or with the “NVR+1” failover solution (control of a stand-by device).



Event analysis

An important function of G-SIM is the subsequent event analysis. All events (alarms, failure messages, interface messages, etc.) can be subsequently reconstructed in detail across all recorders. Helpful search tools are available for this purpose, which filter according to process data (metadata), events, date or time.

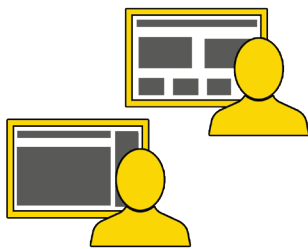
Additional export functions enable the forwarding of selected events for further analysis as well as external archiving of the video data via an integrated archive management system for the preservation of evidence.

The operator console

(OpCon)



The operator console (**OpCon**) is the main user interface of G-SIM for individual control, viewing and monitoring of video streams, site plans and all connected resources. It is activated by the administrator for each individual user and location with the appropriate access rights.



The unique, configurable and flexible user interface, which allows maps, videos, lists or information to be displayed on virtually any part of the screen, can be displayed on up to four screens.

Each screen layout can be saved and recalled at a later time.

The user interface is highly intuitive and implicitly “knows” what the user intends when dragging and dropping an element.

The individually customizable operator template allows each user to adapt their working environment to their personal needs for their workflows in order to work safely, quickly and efficiently with their G-SIM system.

The big advantage of the system is instant access to live video from all connected cameras without having to worry about where and how to find them. Hyperlinked, customizable maps (site plans, maps from Open Street Maps or Google Street Maps) allow direct selection of cameras and provide maximum flexibility and ease of use, allowing multiple views of site networks and cameras in different locations.

These site plans also allow direct access to camera functions or information and also display all pending camera-related alarms.

Playback of recorded footage or PTZ control of selected cameras is also possible for users with the appropriate access rights. In addition, cyclical camera sequences (guard tours) can be created, which enable the controlled display of several cameras from different locations in one display window (viewer).

The operator console

(OpCon)

G-SIM has extensive functions for displaying and processing alarms.

In principle, alarms can be linked to all integrated system components. Contacts, external messages or, for example, a video content analysis can trigger alarms linked to camera images.

Other system components such as NVRs, networks, servers, storage devices etc. can generate failure or fault messages as alarms in order to monitor the overall status of the system and the video network.

Adjustable display procedures can be set for each alarm type and activated for the corresponding authorized users.

The options for actual alarm processing by the operator are also extremely versatile. Alarms can be subject to different handling procedures that specify a strict, complete processing of the entire alarm process up to acknowledgement and final completion. Starting with acceptance for processing by an operator, prioritization through to specified forwarding to other operators.

This intelligent alarm handling with automated alarm workflows and instructions for action provides the user with optimum support in the processing of alarms.

Separately adjustable user rights management enables clearly definable rights for the respective personnel groups and thus individualizes the user interface to the required and desired requirements.

Thanks to the clear presentation and ease of use, site monitoring is possible with minimal personnel effort.

Authorized users can assign tasks to other users or user groups, which can be tracked, transferred and managed via the user interface. Tasks can also be linked to locations, location groups or cameras to provide instant access to live camera signals or recorded footage.

For non-task-related communication, simple messaging is provided for instant collaboration between users and user groups.

All user and system events are recorded in the audit log, which can be queried, viewed and printed.

By combining image and process data, G-SIM can also be used for process monitoring. This saves you time and enables you to find errors within your processes more quickly.

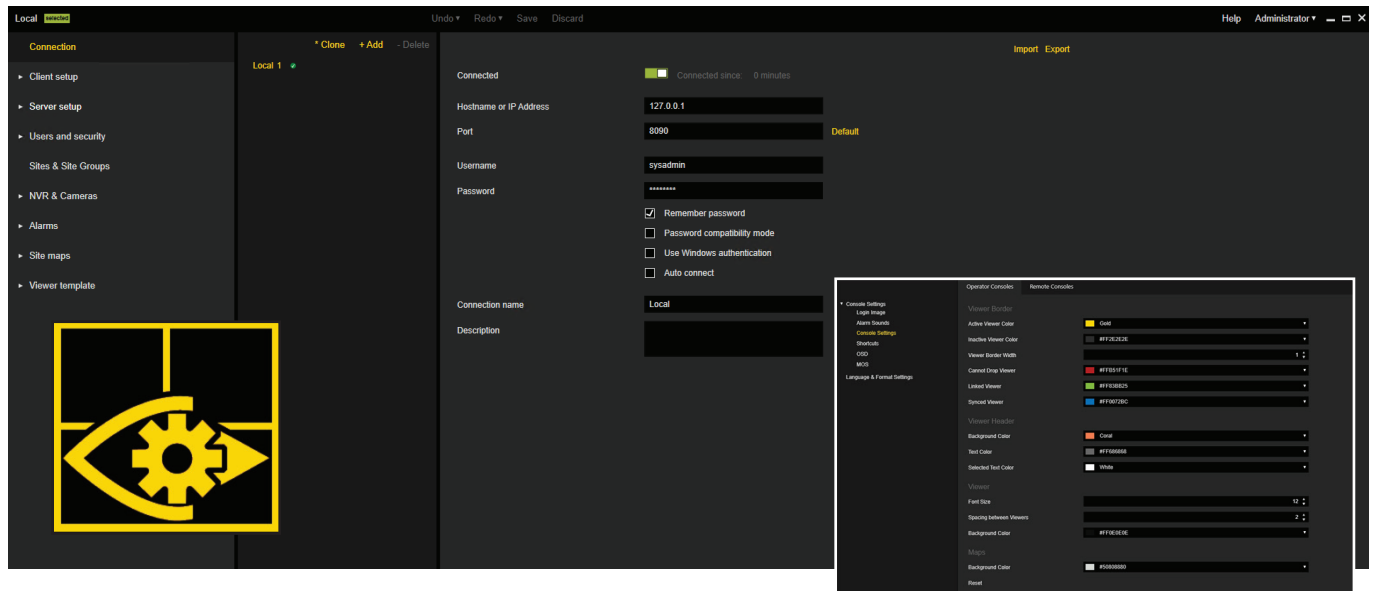
Regardless of whether G-SIM is used for video monitoring or process visualization - your data is always secure. If a G-Core system fails, G-SIM can control the activation of a failover server to keep downtime to a minimum.

Access to sensitive data can also be restricted by sharing images on a four-eyes principle to ensure that your data is always optimally protected.

Your security standards can also be maintained by using your own certificates for SSL encryption in the integrated certificate management.

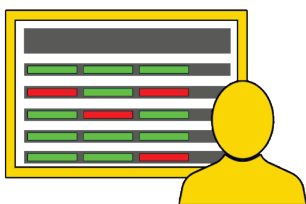
The management console

(ManCon)



The management console (**ManCon**) is used to manage all resources, functions, users and their authorizations in real time. Immediate plausibility checks, multiple administrator access and simultaneous connections to several G-SIM servers support the efficient configuration of the system.

The parameterization of an entire system with many cameras, events, messages, connections, etc. can be quite time-consuming under certain circumstances. **Not so with G-SIM.**



The management console focuses on your user experience and is structured with the latest technology, including plausibility checks.

This enables cost-saving, easy and efficient simultaneous work with multiple users, even on very large systems, thanks to simplified user interfaces and active detection of configuration errors.

Here are some of the many benefits:

- Lean menu structures and clearly designed user interfaces combined with high performance for faster loading of setups enable pleasantly smooth operation of the configuration.
- Many operating functions are standardized and offer additional time savings during parameterization with drag & drop and clone operations as well as shortcuts for the most important operations.
- Several server connections can be kept active at the same time, for example to be able to switch between your test system and your productive system simply via a drop-down field.
- Several administrators can parameterize the setup of a server at the same time, whereby the individual admins can see who is currently editing which object in a dialog. This also speeds up the parameterization of extensive projects considerably.

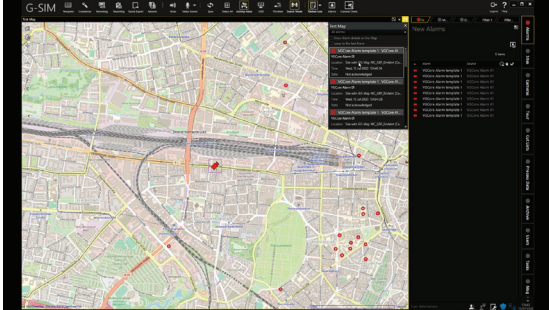
The management console

(ManCon)

- Every change in the setup can be undone using the built-in undo/redo framework until the setup is saved.
- When creating new objects (e.g. users or NVRs), the ManCon checks whether all mandatory fields have been configured without gaps. If a value is missing, this is highlighted. The check also takes place during an update or import of a setup and guides the administrator to incorrect configurations so that they can be corrected.
- Registered administrators are automatically informed about changes, warnings and errors during their work with the ManCon.

Customizable G-SIM features	
Cameras	unlimited
Recorder	unlimited
Operator stations (licenses)	unlimited
Remote consoles (licenses)	unlimited
Logical locations	unlimited
Simple alarm management	✓
Site maps	✓
4 eyes principle	✓
Certificate management	✓
Extended alarm management	✓
Messaging/Tasks	✓
Linked Layouts	✓
Audit	✓
Alarm report manager	✓
SNMP Plugin	✓
Windows authentication	✓
GIS Map	✓
Multi Administrator Access	✓
WebBrowser Integration	optional
VMS Failover (G-Core)	optional
Server Failover	optional
G-SIM Global	optional
Active Directory	optional
MultiTenancy	optional
CamCheckService	optional
Video Track and Trace (VTT)	optional

GIS Map



Georeferenced maps, integrated in the G-SIM full version

A particular highlight is the integrated function for using georeferenced maps to display the respective location of cameras and other objects.

Detailed map material from Open Street Maps and Google Street Maps is supported.

You simply add the static geocoordinates of your cameras and all other objects in the setup and GIS Map automatically shows the exact location on the map with clear symbols.

The orientation of the cameras or map objects can be set manually.

Users can define an area of the map material in which they can move around or the entire map material can be released for use.

GIS Map provides user-friendly, fast and precise orientation, especially for video systems with many geographically distributed locations such as industrial and commercial branches, bank branches, railroad lines and stations or city surveillance.

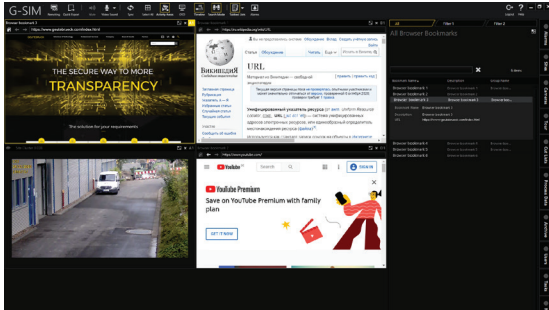
The defined, geo-referenced maps with overlaid symbols can be used in G-SIM for operation and alarms.

If required, the relevant alarm information can also be displayed on the map in a pop-up window.

The benefits:

- Geographically accurate display of static camera and object locations for perfect orientation of security personnel.
- Time-saving, automatic parameterization of object locations in the maps.
- Automatic grouping (clustering) of closely spaced object symbols on a map area for a clearer display of many objects on a map.
- Compliance with legal requirements in certain countries.

Option: WebBrowser Integration



The WebBrowser integration option is extremely practical, allowing you to display and operate additional external information sources in the G-SIM user interface.

This opens up endless possibilities for you to display and operate web-based content directly in your G-SIM user interface.

This allows you to easily integrate the web-based control interfaces of third-party systems such as your access control system, building management system, intruder alarm system or

industrial systems. Or - you can give your security personnel access to websites such as weather channels, news services or web video streams.

The relevant websites that can be called up are predefined as bookmarks in the setup and made accessible to specific users or user groups.

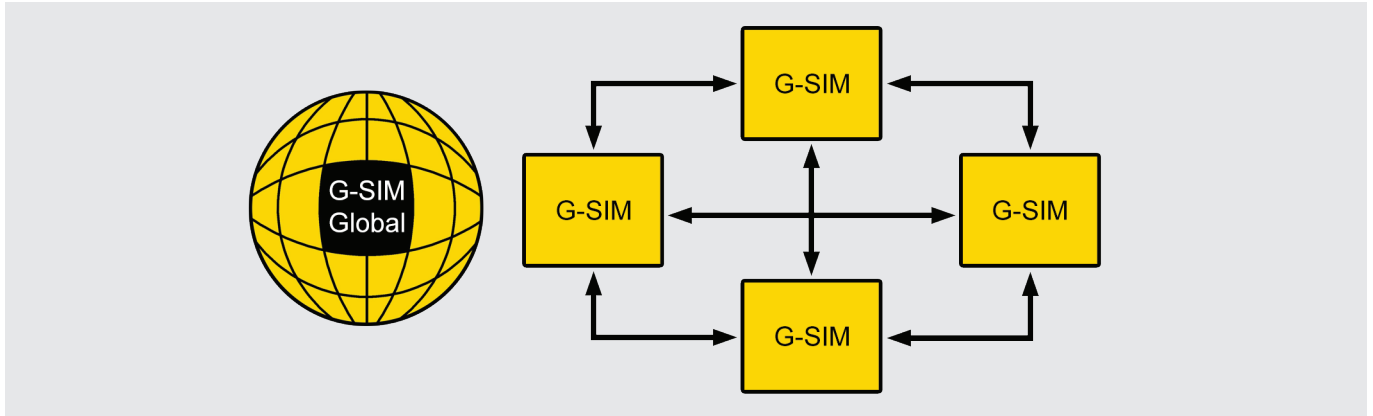
Overview of the functions:

- Convenient access to the bookmarks via the “Browser” operating tab.
- All bookmarks are provided with a name, description and a group name.
- Sorting and filters to quickly find a bookmark.
- A bookmark-linked website is simply dragged and dropped onto an activated viewer in the Operator or Remote Console and called up.
- Individual settings for each bookmark define the display of the browser window and other navigation options on the displayed website.
- Security and audit functions (user audit) for the browser function are defined globally in the system settings.
- Browser sandbox - the navigation options can be restricted so that a user only sees relevant pages and access to unwanted pages is prevented.

The benefits:

- **Fast functional expansion of the video management system with other management systems.**
Most systems offer configurable views or control interfaces on a web basis. These can be integrated into G-SIM without much configuration effort, e.g. to provide functions that cannot be controlled via G-SIM.
- **Common presentation of information in a standardized interface.**
Applications running in parallel do not require overlapping windows, but are displayed embedded in G-SIM; this is also possible on the monitor wall.
- **Software access control is integrated into the G-SIM user administration.**
The access rights to the web browser pages are included in the central user administration and do not need to be configured separately.
- **Browser Sandbox**
The navigation options are restricted so that users only see relevant websites.
- **The user audit also ensures full transparency for the browser functions.**

Option: G-SIM/Global



Set up your own global video security system – with G-SIM/Global

Monitoring your branches, sites and subsidiaries from a central control center saves considerable costs for personnel and the establishment and operation of local guard rooms.

A few of your highly trained employees monitor security centrally and can act much more effectively in the event of an incident.

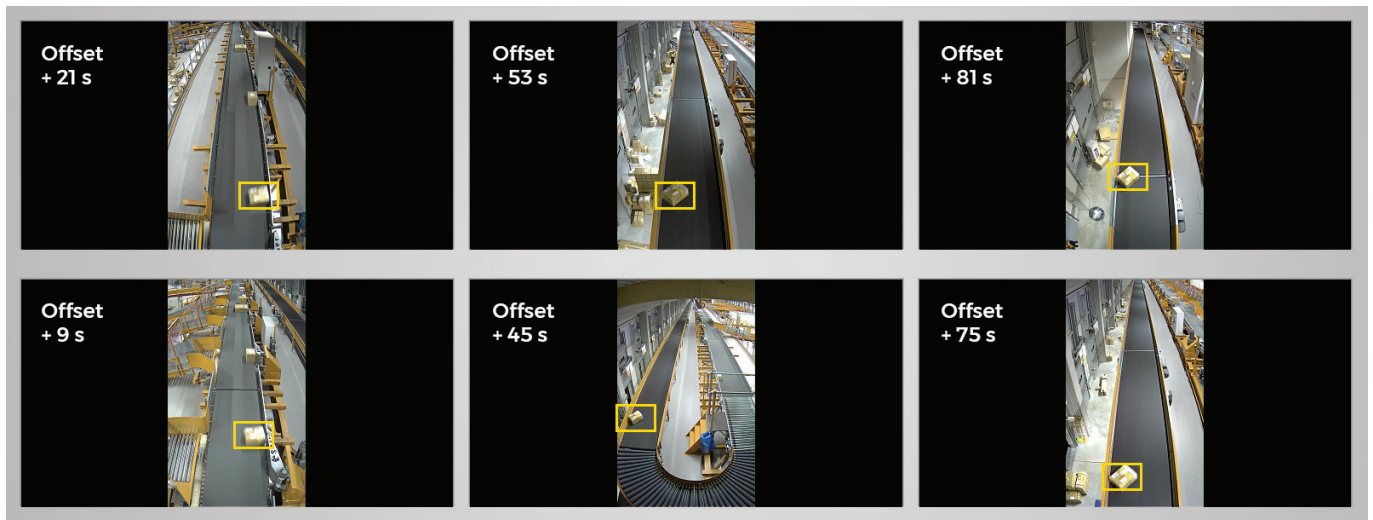
With the G-SIM/Global software option, you can connect several independent G-SIM servers at geographically distributed locations to form your global security network.

G-SIM/Global is the right solution for all industries that need to secure a large number of locations as effectively as possible. This includes transport companies of all kinds, industry, institutes and businesses with many branches, energy suppliers and their networks, critical infrastructure companies, but also logistics companies that operate their supply chain process monitoring centrally and decentrally.

The benefits:

- You have access to all functions of up to 30 local G-SIM systems via your global network, such as live streaming, database recordings, maps, cameras, tours and alarms.
- If required, you can access any other system from any local system, e.g. to set up stand-in scenarios.
- You export video data from any location for central evaluation and as evidence.
- You manage alarms from all connected servers. This allows you to configure whether an alarm should be sent to the global network or not.
- The search for process data can be applied to all connected servers.
- Last but not least - Benefit from the synchronization of the setup data of all local systems to gain network-wide access to the configuration of all resources and user permissions and restrictions.

Option: G-SIM/VTT



Video Track and Trace – Find lost parcels faster

Fast and efficient clarification of misrouting in the area of conveyor technology.

This option makes your parcel research more efficient, saving you time and money.

With **VTT**, you can track the path of a parcel at a glance by connecting individual viewers. This means that a constantly moving object, e.g. a parcel on a conveyor belt, can be tracked at any time within a process on the “linked layout”. This saves tedious rewinding and fast-forwarding.

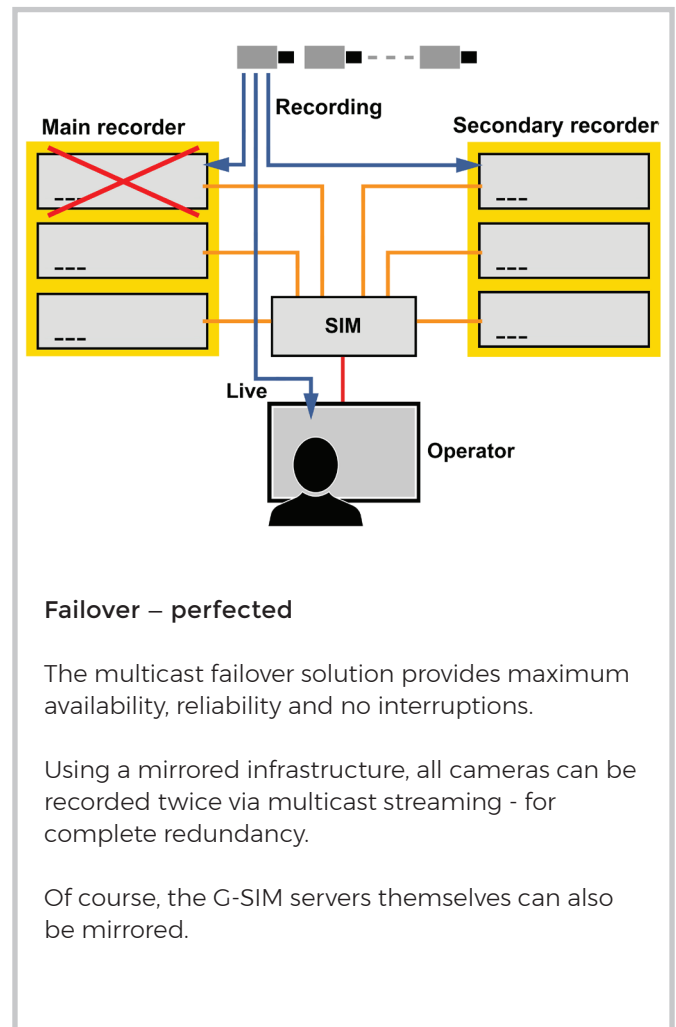
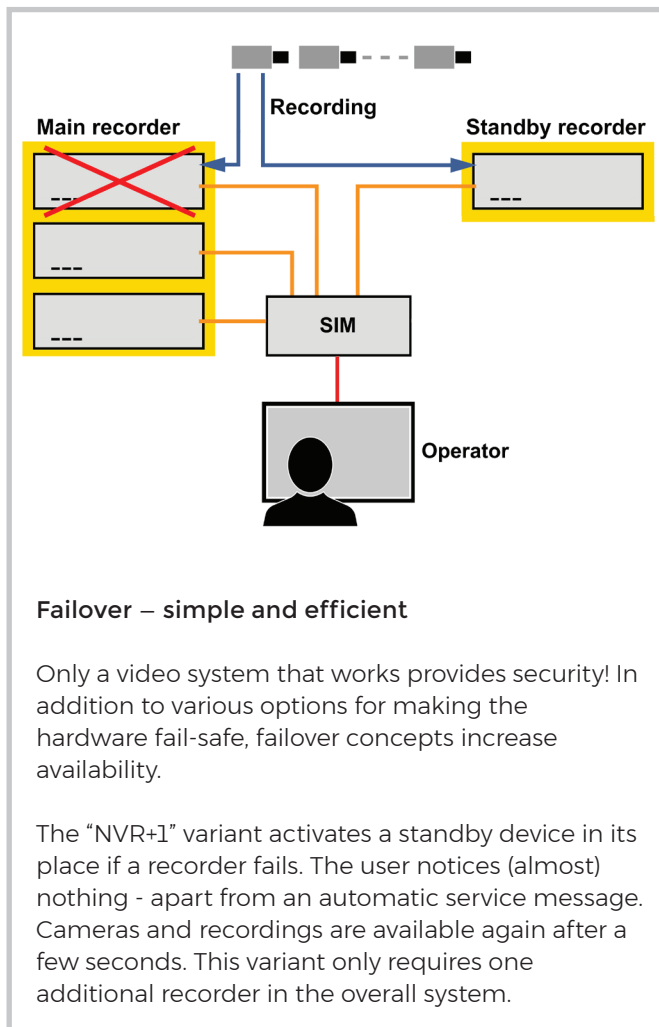
Thanks to a time offset within the images, which is optimally matched to the speed of the conveyor line, you can find the relevant package in just a few minutes with minimal effort.

Even parcels lost on multiple branched conveyor belt routes can be found quickly.

The benefits:

- Parallel, time-delayed display of video images from all camera locations along the conveyor belt that a parcel passes during transportation.
- Direct comparison of the parcel status along the conveyor belt.
- Immediate detection of whether a parcel has been lost en route.

Option: G-SIM/FailoverCam



The G-SIM/FailoverCam option activates the failover function of a G-Core camera channel. If a G-Core server fails, the camera channels are taken over by a failover server for which this option is enabled. This minimizes possible downtimes by restoring the system immediately.

Note:

The G-Core/Failover option (3.06760) is also required for this functionality. A G-SIM/FailoverCam option is required for each individual camera channel of all G-Core servers at this location.

The benefits:

- High reliability thanks to the automatic function takeover of a G-Core camera channel.
- Minimization of possible downtimes.
- Simple installation and parameterization.

Further G-SIM options

G-SIM/ServerFailover

The G-SIM/ServerFailover option activates the failover function of the G-SIM server.

Once the function has been activated, an independently operating G-SIM system can temporarily take over the functionality of another G-SIM system if it fails. This includes, for example, rights, connections and functions. This minimizes possible downtimes by restoring the system immediately.

The benefits:

- High reliability thanks to the automatic function takeover of another G-SIM server in the network
- Minimization of possible downtimes.
- The use of several G-SIM servers with adjustable prioritization is possible.

G-SIM/ActiveDirectory

The G-SIM/ActiveDirectory option enables the connection between the user groups from Windows with the user groups from G-SIM. This makes it easier to manage users, groups and rights in G-SIM.

The user rights of the groups in G-SIM can be defined in each case. Windows authentication is activated and a G-SIM password is no longer required.

The benefits:

- Automatic authentication of users via the Windows password.
- Simple linking of Windows Active Directory user groups with G-SIM user groups.
- Different rights can be defined for different Active Directory and G-SIM groups.
- G-SIM groups can be linked to one or more Active Directory groups (group matching).
- Automatic synchronization of users and user groups.

G-SIM/CamCheck

The G-SIM/CamCheck option alerts you immediately if the live images from a camera are manipulated compared to a reference image stored at, e.g. by rotating the camera. The function works permanently in the background and orients itself to fixed edges in the image regardless of movements and alerts as soon as these edges are moved.

The benefits:

- Protection against mechanical manipulation of the camera.
- Adjustable, automatic control of follow-up actions such as the activation of neighboring cameras.

G-SIM/MultiTenancy

Option for activating the client capability in G-SIM. The activation hides resources of other user groups at the level of G-SIM user groups. This makes it possible to implement multiple, independent users on one G-SIM system.

Function overview Summary

Function	Description
Scalability	G-SIM enables access to cameras, recorders, users, remote consoles and site connections.
Administration	Management console for managing all resources, functions, users and their authorizations in real time, intelligent configuration help through immediate plausibility check during input. Cost-saving system configuration through Multi Administrator Access and simultaneous connections to several G-SIM servers. All changes made are logged.
User interface	Operator console, configured with the appropriate authorizations for the respective user or location. Remote Console for remotely controllable output consoles, such as monitor walls.
Site plans	The site plans provide an overview of all cameras - on graphical site plans or georeferenced maps. The camera recording the alarm is immediately visible in the site plan and the corresponding video image is displayed by dragging it into the viewer. This also works the other way round: by dragging the video image into the site plan, the position on the site is immediately visible.
Process data search	The process data search makes it possible to find the desired data in no time at all. Frequently used search fields can be fixed so that, for example, license plates or barcodes can be searched for without unnecessary clicks.
Alarm Management	Every incoming alarm can be checked quickly and easily. Users can accept, edit or delegate and block the alarm. This enables a quick response.
Alarm Presentation	G-SIM supports two different ways of displaying alarms. The classic tab view and a "Viewergroup" mode.
Messaging / Tasks	Orders can be sent to users. These users can then accept or reject the order. The system notifies the client.
Linked Layouts	Viewer templates with different displayed camera channels can be created. You can switch between these viewer templates at the click of a mouse.
Video Track and Trace	Parcels lost on conveyor belts can be found quickly, even on conveyor belt sections that have several branches. The simultaneous image display of the respective position of the parcel on the conveyor belt enables parcels to be located quickly.
WebBrowser Integration	Embedded web browser windows are displayed in the user console. Websites of external systems, which can be added via bookmarks, enable the functions to be expanded quickly. This also includes authorization control through G-SIM user management and auditing.
4 eyes principle	The protection of personal rights begins with the login. Access to personal image material is only possible with the joint login of two defined users. The administrator can define separate rights for the joint login in advance.
Active Directory	Synchronization with the Windows Active Directory. Connecting the user groups from Windows with the user groups from G-SIM makes it easier to manage users, groups and rights in G-SIM and enables single sign-on with Windows users.
Audit	Use of the system and changes to settings are logged in a central database and can be called up in the user interface.
G-SIM Global	With the G-SIM/Global software option, several independent G-SIM installations at geographically distributed locations are connected to form a global security network. If required, any local system can access any other system, e.g. to set up substitution scenarios or search for process data.

G-SIM — Security Information Management System

Function	Description
IT Security	All communication between G-SIM servers and clients is protected by SSL encryption; you can also use your own certificates. G-SIM thus adapts to company or customer-specific security standards.
Multi Tenancy	MultiTenancy allows multiple independent users to be set up on a G-SIM system with individual access to G-SIM resources.
Server Failover	If a G-SIM server fails, its functionality — e.g. rights, connections and functions - is taken over by a second server - the failover server - thus minimizing downtime.
VMS Failover	If a G-Core server fails, its camera channels are taken over by a G-Core failover server and displayed transparently in G-SIM.

Software components

Designation	SKU	QR Code
Security Information Management G-SIM to the Online Shop	3.06145	
G-SIM/WebBrowser-Integration to the Online Shop	8.34375	
G-SIM/Global to the Online Shop	8.34382	
G-SIM/MultiTenancy to the Online Shop	8.34395	
G-SIM/VTT to the Online Shop	8.34405	

Designation	SKU	QR Code
G-SIM/CamCheck to the Online Shop	8.34400	
G-SIM/ActiveDirectory to the Online Shop	8.34370	
G-SIM/FailoverCam to the Online Shop	8.34346	
G-SIM/ServerFailover to the Online Shop	8.34315	



Talk to us.

We are happy to support you in planning and setting up your system

