



BUILDING MANAGEMENT SYSTEM | GEMOS

Security and cost-effectiveness.
Controlling and monitoring rolled into one system.

Expertise from a single source. Quality for more than 100 years.

The Gretsche-Unitas group and its companies GU, BKS and GU Automatic are devoted to security technology and automation for buildings. Thanks to our years of experience with mechanical, electrical and digital products, you can rely on the fact that your technology will be supported properly and reliably by us for many years to come. We are convinced: even the best products can only perform to their full potential if they function efficiently and harmoniously with one another. That is why GU group offers intelligent system solutions from a single source. For over a century, the Gretsche-Unitas group produces total solutions which focus not just on individual products but on the project as a whole. We assist you in all phases of implementing your individual entrance solutions. Short distances and fast, reliable service make technical and cost-optimised solutions possible, perfectly in tune with your project-specific requirements.



The Gretsche-Unitas group: a traditional family-owned company for more than 100 years



Security has a name: BKS is a part of the GU group and one of the leading companies in the field of locking technology

GEMOS

GEMOS, a non-manufacturer-specific software-based graphic management platform, integrates the technical and organisational management of emergencies. The information and systems that are required to master the current hazardous situation are made available to the operator for guidance.

There are sector-specific solutions for multifunctional sports arenas, prisons, logistics companies and data centres. These solutions contain comprehensive concepts and experience from projects that have already been implemented, consisting of software, hardware and access control systems.

Networked expertise. The powerful physical security information management system.

PSIM – physical security information management systems pool the information and data from different trades and systems of a building in a software, visualise it and provide support by automating the sequence of safety-relevant processes.

GEMOS is a compelling browser-based system that is compatible with a wide range of manufacturers and facilitates cross-trade interaction and a consistent and intuitive display including the free, individual and requirement-based design option. When you use GEMOS, you optimise cost-effectiveness by saving vast amounts of time and costs.

Cyber security – highest security requirements



GEMOS is a state-of-the-art system and uses TLS 1.3 – AES-256 encryption as standard according to BSI (German Federal Office for Information Security) specifications to safeguard communication between system components.

Highest standard in relation to data security



All databases and all licences and therefore also all authorisations of the GEMOS workstations are located on the secure servers and not at the individual workstations (operating elements).

Enterprise/Redundancy – no system downtime



With the GEMOS Enterprise system, the main server communicates continuously with the redundant server so that if the main server breaks down, all data is available to the redundant system without gaps. Of course it goes without saying that with the GEMOS Enterprise solution all data to be transferred to other servers is encrypted synchronised via TLS 1.3 - AES - 256.

Detailed representation of the ground floor plans



Includes the high-performance visualisation, use and control of views, ground floor plans and layouts. Stepless zooming in on ground floor plans resulting in increasing display of detail is therefore an integral part of this solution.

CAD import



Support of the current DWG AutoCAD file formats for the graphic import of drawings without requiring external conversions. Positioning, exchange of properties and import of detectors via the CAD drawing block attributes. Support of CAD layer structures, working with referenced drawings (XRefs). Maintenance by trained operators.

HTML5 video – outstanding video quality



Video images in GEMOS are integrated natively via HTML5/WebRTC. External additional client applications are no longer required. Video streams of the camera systems or live-recordings, e.g. from drones, can be played back in outstanding quality.

GEMOS and Cloud



GEMOS can be operated in different cloud scenarios and supports private cloud, public cloud and hybrid cloud applications. No extra tools are required for operation in the cloud when running the software on the digital workstations of the users.



GEMOS

Browser based – greater flexibility



Installation on separate workstations is not necessary. The web-based operator interface offers additional customised design options. The intuitive operation makes it easier for new operators to initially get to grips with the system.

Platform independent – across-trades



Possible to use operating systems such as Windows or Linux on servers and workstations.

Compatible with wide range of manufacturers – cross-trade



GEMOS facilitates cross-trade interaction and logic operation of security systems. The individual systems no longer need to be controlled separately.

Centralised database structure



All databases are and will remain on the GEMOS servers. No databases (or parts thereof) are located on the workstations. Thus, protection of relational database from unauthorised access. Database and web server are already included.

Extended user authentication

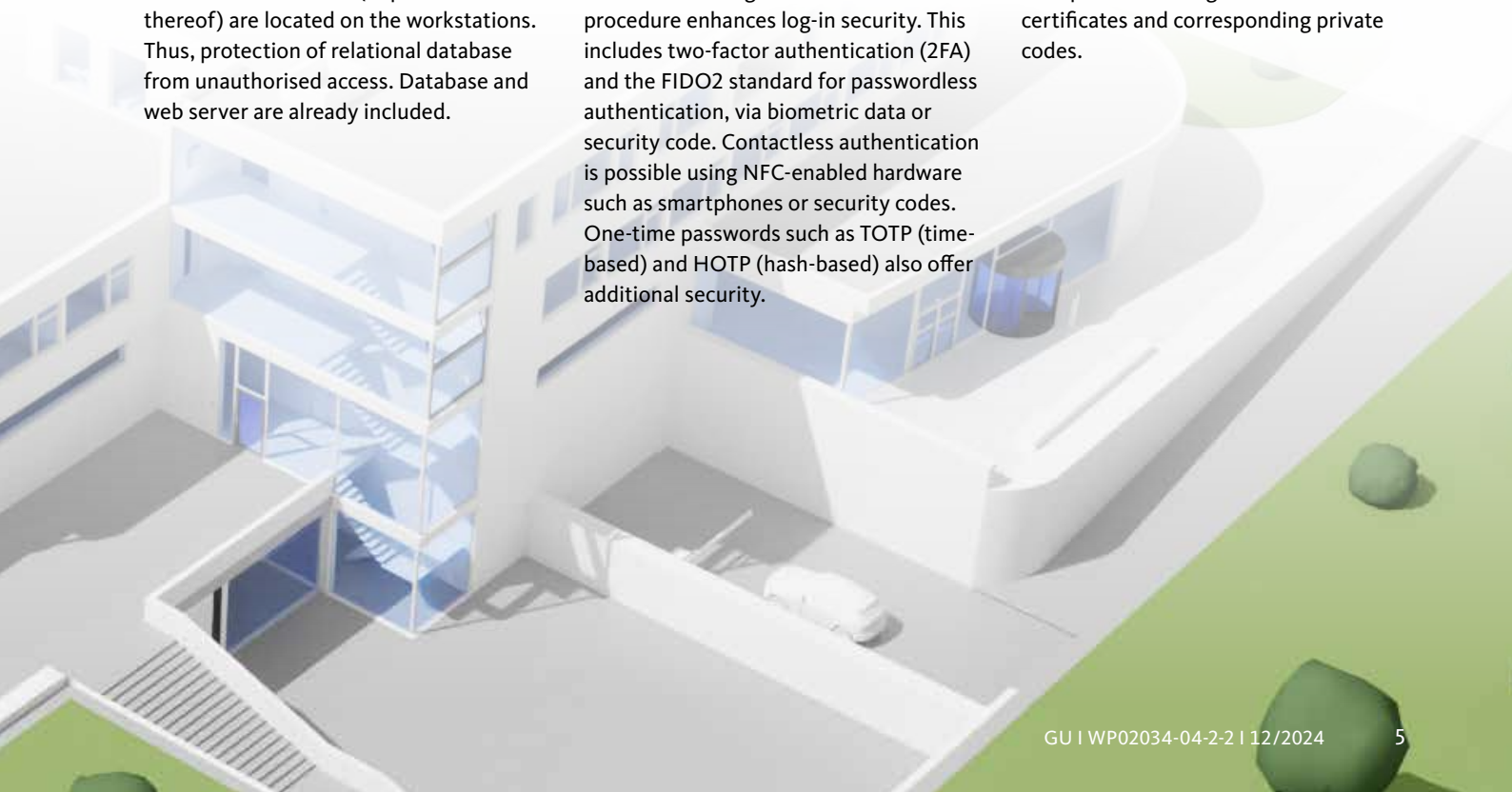


Solutions with two-factor authentication and FIDO2. Multi-stage verification procedure enhances log-in security. This includes two-factor authentication (2FA) and the FIDO2 standard for passwordless authentication, via biometric data or security code. Contactless authentication is possible using NFC-enabled hardware such as smartphones or security codes. One-time passwords such as TOTP (time-based) and HOTP (hash-based) also offer additional security.

Integrated certificate management



An extensive tool for storage and administration of imported or self-generated certificates and corresponding private codes.



For individual and industry-specific solutions.

Every industry has its own particular security requirements – the modular design of GEMOS means that it can offer customised industry-specific solutions for every challenge. GEMOS, a browser-based building management system, also referred to as physical security information management system (PSIM), is compatible with a wide range of manufacturers and supports the technical and organisational implementation of hazard prevention and all kinds of organisational themes.

Prisons

GEMOS satisfies the specific needs and demands of prisons and forensic facilities. Features, such as integration of personal emergency response systems with locating function, are available. Location in the floor plan or guard controls enhance the security of your facility.



Data centres

GEMOS DatacenterControl was specially developed for the requirements of a modern and secure data centre. Various individual subsystems are integrated into a complete system with consistent operation, visualisation and alarm functions.



Industry

The networked trades are clearly laid out which offers an exceptionally high degree of security and huge economic benefits. GEMOS safeguards your industrial premises and central and local building complexes.



Multifunctional arenas

GEMOS provides the ideal platform for all typical requirements thanks to its flexible, software-based system-networking capabilities, pre-defined scenarios for events and custom workstation interfaces.



Dealer

Thanks to specialised retail solutions, GEMOS can efficiently control parking guidance systems, escape routes can be visualised for non-resident visitors or visitor analyses (e.g. temperature screening) can be carried out.



Critical infrastructure

When video systems, detection systems or intrusion detection systems are integrated, business premises are efficiently protected. Risk analyses and corresponding protective measures are prepared in combination with GEMOS perimeter protection.



Centralised location monitoring – control and monitor several locations from one place





GEMOS

Logistics

All processes, from reception to entry, loading procedures, travel routes, exiting and checkout are managed by GEMOS. In addition, the loading process is optimised by visualising the loading bays and assigning truck drivers, e.g. via LEDs.



Hospitals and clinics

GEMOS connects a range of subsystems such as fire detector, call alarm and communication systems as well as personal alarm solutions. This can become a logical clearly laid out alarm and instruction system which serves the entire hospital.



Finances

Security at financial institutions is based on access controls in combination with video systems. To ensure that unauthorised persons are directly apprehended, the visualisation and control is implemented via GEMOS.



Airport

GEMOS turns airports into a transparent, efficient analysis and instruction system. Access points are checked and monitored centrally and in emergencies rescue personnel can quickly pass through while passengers are being evacuated.



Public area

Occupational safety measures for employees and security concepts for visitors are easy to implement in GEMOS. Integrating the various facilities means that a consistent visualisation can be depicted and process plans displayed in emergencies.



Public utilities

With the KVM solution, several computers can be operated from one workstation. Analyses of the boiler statuses are monitored. In emergencies, an instruction plan is displayed which guides employees through the measures.



Critical infrastructure

Data centres

Hospitals and clinics

Finances

Everything in one central user-friendly operator interface.

It is possible to manage numerous media, communication and security systems in a manufacturer-neutral manner with GEMOS. All the technical subsystems are integrated into a central, simple-to-operate interface. With new projects, the Gretschi-Unitas group offers industry and system solutions tailored to individual requirements so you receive a one-stop service.

SECURITY SYSTEMS



Fire alarm system



Intruder detection system



Access control

COMMUNICATIONS SYSTEMS



Personal alarm system



Telecommunication



Radio

BUILDING MANAGEMENT



Heating/air conditioning



Light



Ventilation

ORGANISATION



Administration/
Service contracts



IT



Parking area surveillance

The GEMOS logo is the word "GEMOS" in a blue, sans-serif font.

Video



Call light system



Email



Intercom



Public address system



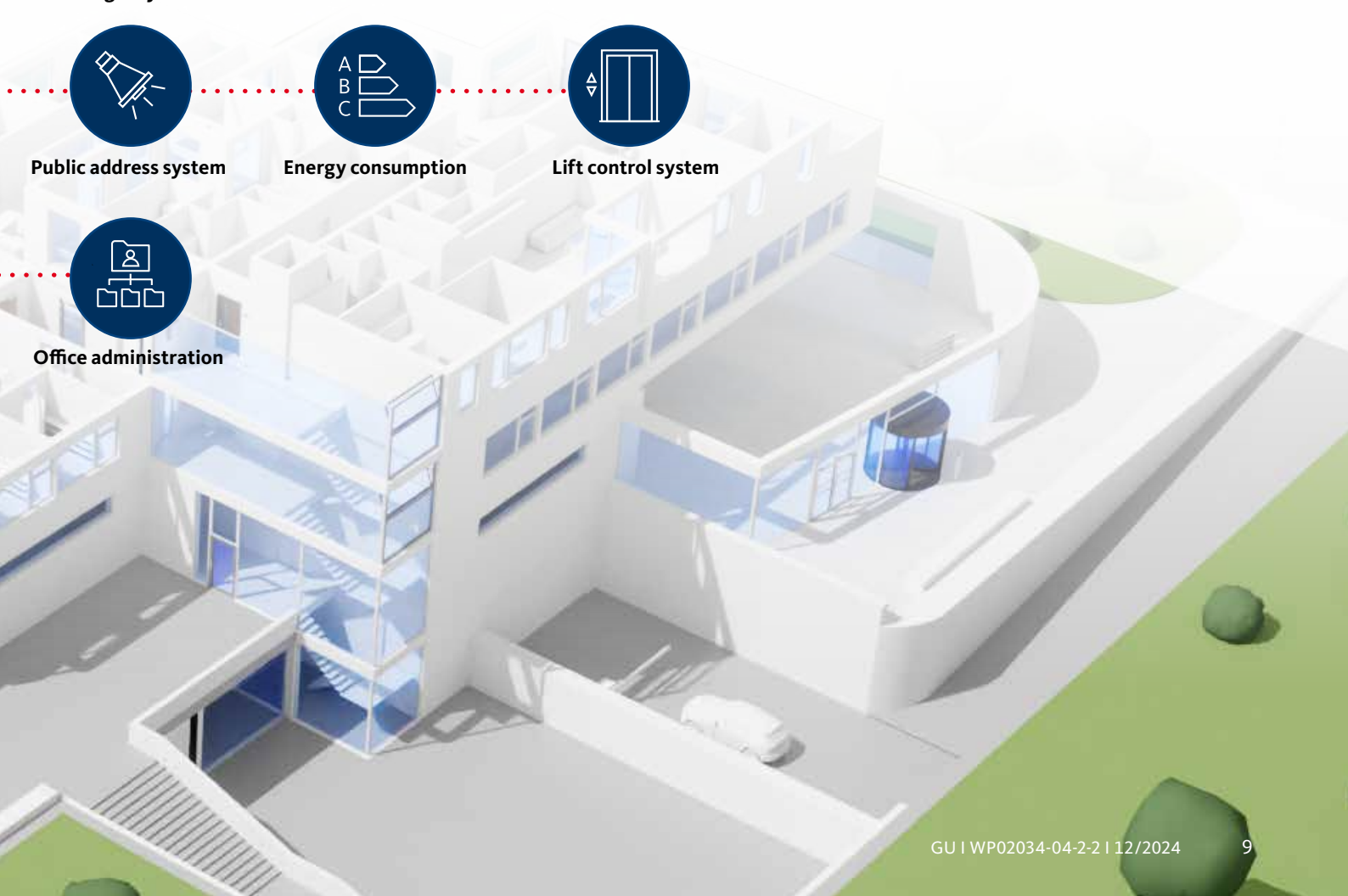
Energy consumption



Lift control system



Office administration



Customised for your security and applications.

GEMOS modules provide solutions for more or less any task and integrate seamlessly into the overall system. During development, we pay close attention to current IT and security technology trends – also always allowing sufficient leeway to accommodate customer-specific requirements. The modular design of GEMOS is also reflected in the modules and not just the interface.

Login check

This prevents multiple logins of a GEMOS operator at a GEMOS system.

Calendar

Serves to create calendar-driven events. The events can be repeated over specific periods, on defined days and several times a day.

Guard patrol

This feature enables the setup of guard patrols (inspection rounds, tours) and monitoring of route times between inspection points. Alarms are triggered when the route times are exceeded or undercut or in the event different routes are taken.

System Analyzer

Expands the operator interface to include a wide range of graphics tools for evaluating and diagnosing logged notifications from GEMOS interfaces.

Administration Fire brigade route maps

Provides a print form that can be used to easily integrate print-outs of fire brigade route maps (PDF files) into action plans.

Phone book synchronisation

The LDAP contacts are synchronised with the GEMOS contacts. Data can only be adopted by GEMOS from LDAP ("Basic" Sync-Level) or fully synchronised between GEMOS and LDAP ("Extended" Sync-Level).

GEMOS

**Mail reader**

All mails are read and noted. The last mail to arrive is read first to ensure that current entries are not lost. The message appears in GEMOS for documentation purposes, irrespective of whether the mail is marked as "read" in the IMAP server.

Multiple user login/station

When logging in at a main GEMOS workstation, all connected auxiliary GEMOS workstations are automatically logged in.

Time control

Serves to provide time-controlled processing of individual measures for defined data points. Several configuration options are available:

- Designation for the time control measure
- Valid for (definition of time)
- Actions (individual or several)
- Priority: 0–9
- Date of validity "from" "to"

Standby manager

Establishes a time-controlled basis for the persons created in GEMOS (GEMOS contacts) regarding defined times when they were present/absent. Enables calls to be controlled via measures plans which can be controlled depending on whether or not the person is present.

> 1000

Installations

> 900

Interfaces

> 70

Modules

Together we can make a difference. First-hand experience and knowledge.

You can make sure your GEMOS system always satisfies the latest security requirements by make use of the software maintenance service. At the GEMOS academy we present a wide range of seminars and training courses.



A software maintenance and service agreement has many benefits.

Our offer:

- Regular updates and upgrades: software always up-to-date with troubleshooting, security updates and new functions.
- Security and compliance: continuous checking and elimination of security gaps, compliance with legal requirements and industry standards.
- Monitoring of costs and planability: fixed outgoings instead of unexpected high costs.
- Access to technical support: qualified support at all times to minimise downtimes.
- Optimisation of software performance: upgrading performance ensures efficient and reliable applications.
- Proactive problem avoidance: potential weaknesses are identified and eliminated early on.
- Long-term value retention of your IT investments: extends the lifetime and performance of the software.

Why opt for a software maintenance and service agreement?

A maintenance and service agreement protects your software, optimises performance, provides financial security and guarantees smooth operation, which maximises the benefits of your IT investments.

We offer practical future-oriented training courses in the area of physical security information management system (PSIM) for specialists and companies.

Our offer:

- Certified training courses: from basic introduction through to specialised advanced training.
- Practice-orientated training courses: state-of-the-art training facilities and laboratories where knowledge acquired can be put into practice.
- Further training tailored to individual requirements: customised programmes for individuals and companies.
- Experienced lecturers: highly qualified experts communicate the latest developments and best practices.

Topics:

- PSIM: fundamentals further training, software knowledge.
- Security technology: fundamentals and state-of-the-art systems.
- Access control systems: installation, maintenance, management.
- IT security: current topics and challenges.

Why GEMOS academy?

- Innovative learning methods: traditional and interactive approaches.
- Flexibility: on-site or online, depending on requirements.
- Network: part of a strong network of security experts.

GEMOS



The GEMOS software is supplied with various licence models and modules, which are tailored to the specific user requirements.

Included in all GEMOS 5 licences:

- Multi-user functionality
- Detector symbol library
- Address management
- Visualisation and printing of PDFs
- Email notification
- CAD direct import
- Alarm processing
- Alarm stack and event evaluation
- Online visualisation of statuses
- Flexible assignment of ground floor plans
- Comprehensive logging and evaluation options
- High-performance list editor
- Macro-based workflow management
- Graphic operator interface with layout editor
- Device and system action management
- Administration of contact persons and authorisation groups
- User assignment
- Assignment of keys to system functions
- Master-search engine, topics editor, multilingual operator interface
- Facility plans
- Event-related layout switching
- Online backup and restoration
- As well as master data configuration



The software can be used to integrate and control various manufacturer-neutral systems and devices within a building complex. Here are a few of the typical interfaces and integrations that GEMOS supports:

Interfaces and integration:

- Video management systems
- Communications systems
- Technical systems
- Alarm receiving systems
- Fire alarm systems
- Perimeter systems
- Intrusion detection systems
- Transmission system
- Access control systems
- Key management systems
- Escape door control systems
- Voice alarm systems
- Standard protocols/interfaces

Networked expertise. Our offerings for maximum efficiency.

The GEMOS family is designed to improve the security and efficiency of buildings and complex infrastructures. Here are the most important features and functions of GEMOS.



The building management system, also referred to as physical security information management system (PSIM), is a browser-based software platform in which various independent security systems or building services (heating, light, etc.) are integrated and can be controlled and monitored via a uniform operator interface. Everything is controlled by one system which guides the operator through an extremely wide range of processes and sequences. This results in a high degree of automation.

Main features of GEMOS:

- Integration and interoperability
- Centralised control and monitoring
- Event management and reporting
- Modularity and scalability
- User-friendliness and flexibility
- Security management

Due to its modular design and flexibility GEMOS can adapt to the specific requirements of a wide range of industries and applications.



GEMOS access is specialised in access control. This module provides comprehensive functions for administering and monitoring access to various areas of a building or building complex.

Main features of GEMOS access:

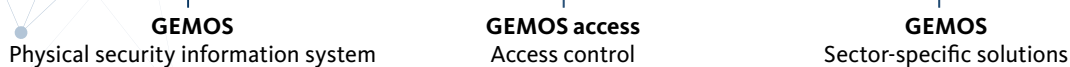
- Centralised administration
- Integration of existing systems
- Realtime monitoring and control
- Time and location-independent access authorisations
- Event logging and reporting
- Security guidelines and alarms
- User-friendly surface
- Scalability and flexibility

This makes GEMOS access suitable for small to large companies and organisations with varying safety requirements and it can also be adapted to different industries, including public authorities, industry, healthcare, education and more.

GEMOS access provides a reliable flexible solution for access management which plays a part in enhancing building security. It also enables access to be efficiently administered and all access points to be comprehensively monitored.

GEMOS

Cross-trade security



GEMOS is versatile and can be used in a multitude of industries and sectors.

Here are some of the main industries

- Industry
- Finance (banking, insurance, stock markets)
- Smart Building (office, administration, commercial complexes)
- Healthcare (hospitals and clinics, nursing homes and rehabilitation centres)
- Data centres (IT and telecommunication)
- Power stations and energy providers
- Retail (retail outlets and wholesalers)
- Public and government institutions
- Education and research (higher education and university campuses, research facilities and institutes)
- Justice (law courts, prisons)
- Logistics (warehouses and logistics centres)
- Transport and traffic (transport and traffic companies, airports, stations, sea ports)
- Event complexes (trade fair, exhibitions halls and conference centres (stadiums, event, leisure parks)
- Hotels
- Critical infrastructures

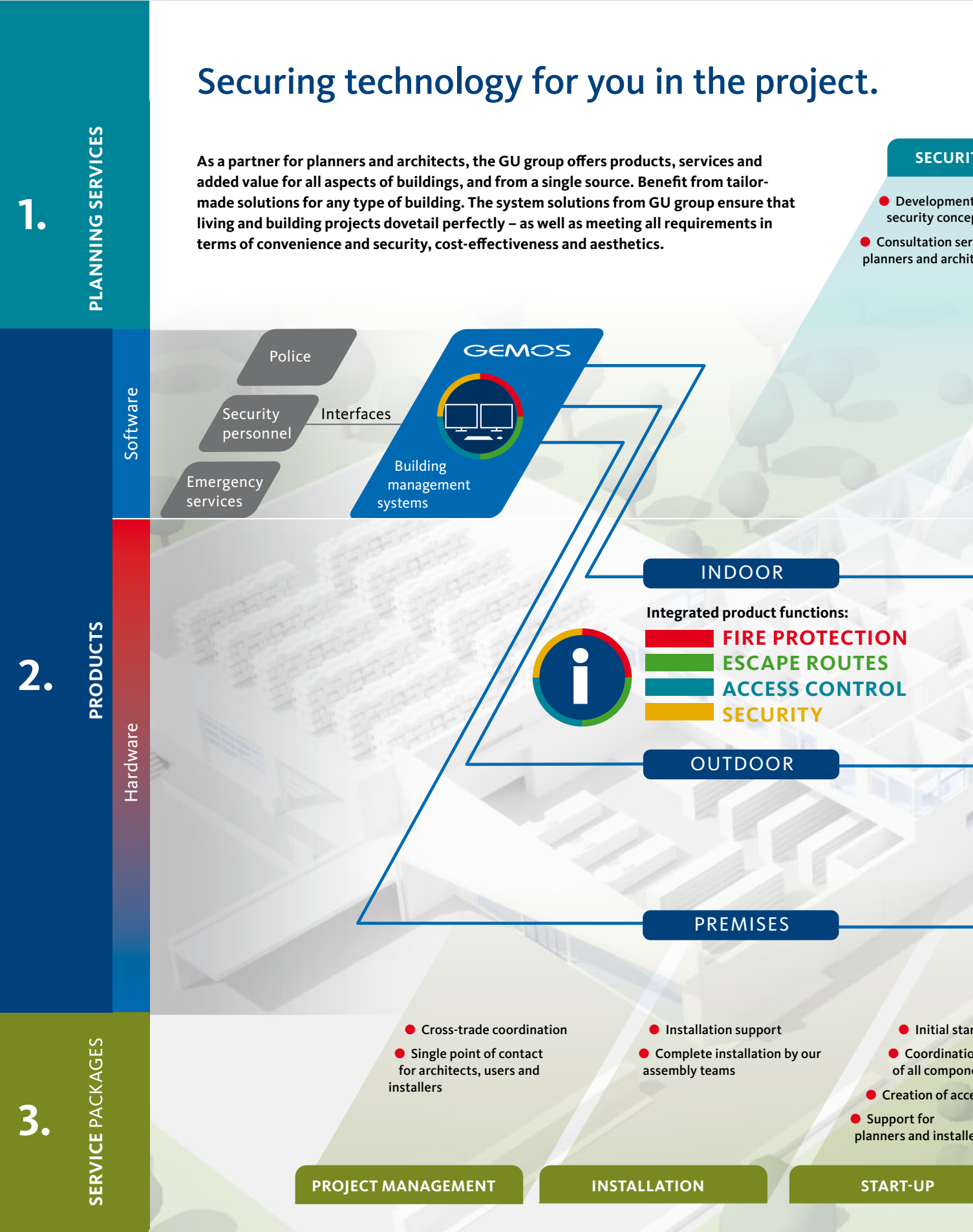
GEMOS supports a multitude of standard protocols in order to facilitate seamless integration and communication with different systems and devices within a building complex. Some of the most important standard protocols supported by GEMOS are:

Supported standard protocols:

- OPC (DA/UA)
- BACnet
- Modbus
- espa (4.4.4/X)
- SNMP (v1/v2)
- EIB/KNX
- DALI
- MQTT
- LON

These protocols enable GEMOS to integrate a wide range of systems and devices, which significantly increases the flexibility and interoperability of the building management software.

Securing technology for you in the project.





This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. In the top right corner, there is a small graphic consisting of three dots connected by thin lines, forming a triangular shape. The dots are colored blue, green, and red.

Exclusion of liability

The information provided in this brochure consists of product descriptions. This is general information based on our experience and tests and therefore does not take any specific application into account. No claims for compensation can be derived from the product descriptions. The information provided is given to the best of our knowledge but is not binding. They must be adapted to the respective building projects, the intended use and the specific requirements on-site. This brochure has been compiled to the best of our knowledge. The Gretsche-Unitas group accepts no liability for any mistakes. The document is subject to modifications during the course of technical developments. The product images shown in this brochure may differ from the actual product.

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