GAMMA building control
A large range of applications for non-residential buildings
Expertise for your construction project

An investment founded on competence. New buildings must satisfy an abundance of requirements: they must be attractively designed, functional and economical in everyday use. They must allow flexible use of space and be adaptable to the wishes of individual tenants. The lighting and indoor atmosphere must merge convenience with energy efficiency, and people and assets must be adequately protected against hazards and damage. Today, all these requirements can be met thanks to GAMMA instabus, the innovative building management system. And thanks to a partner like Siemens with a sound reputation for competent support – and a portfolio of solutions for electrical installation from A to Z.
Security of investment with future-proof design
The technical equipment of a building needs to be enduring and adaptable to future modifications or extensions. A future-proof building management system provides a strong foundation.

Operational efficiency
Make low energy and operating costs a reality with GAMMA instabus, the innovative building management system.

Safety first
The building management system contributes enormously to the protection of people and assets.

Customized convenience
Lighting, shades, ventilation, heating, and cooling – users’ wishes are GAMMA instabus command.

Display and operate without limitations
Whether locally, centrally, or remotely, all functions can be controlled exactly in line with your requirements – even externally by telephone or over the Internet.

Integration with third-party systems
No other supplier offers such a varied spectrum of solutions for connecting GAMMA instabus to other systems in the same building with the help of KNXnet/IP.

Totally Integrated Power
Comprehensive power distribution for residential and non-residential buildings from a single service provider – all the way from medium-voltage transformers to individual lighting.

Highlights
- High security of investment
- Maximum operational efficiency
- Enhanced safety
- Improved convenience
- Control of lighting, shading, and room temperature
- Intelligent integration of all building electrical functions with GAMMA instabus
- Comprehensive energy distribution – from medium voltage to the socket outlet
- A savings potential for all project participants – the building investor, planer, installer and the user/operator

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Make decisions – with confidence

Decide today, and know you have made the right investment for tomorrow. When you invest in a building today, you need to be certain that the technology will still be state-of-the-art tomorrow.

- **Worldwide standards**
  With the future-proof technology embedded in GAMMA instabus, you can be sure of making a safe decision. GAMMA instabus is based on KNX, the open and non-proprietary international standard derived from ISO/IEC 14543. KNX features in compatible products from more than 100 manufacturers worldwide. By interacting with other systems in the same building, it creates unprecedented flexibility not only during the planning phase but also if the room usage changes.

- **Flexibility for the future**
  In office blocks, school buildings, airports, sports arenas, old people’s homes, and sheltered housing, GAMMA instabus demonstrates its superiority whenever a flexible response to changes in room usage or size is essential.

  The basic system can be easily adapted or expanded at any time. Siemens also guarantees to keep spare parts available for many years ahead.

  In short: a decision for GAMMA instabus represents a secure investment in proven technology that is ideally placed to meet the challenges of today and tomorrow.

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**Highlights**

- The use of KNX, an open bus standard, helps to ensure security of investment
- High flexibility during the planning phase and over the entire operational lifespan
- Changes and enhancements are possible at any time
Commerzbank, Frankfurt
Investment protection is a top priority at Commerzbank Frankfurt – and the building management system is no exception.

Airport Duesseldorf
Expandability, flexibility and safety are essential at Duesseldorf Airport. Which is why the airport praises the virtuosity of GAMMA instabus.
Efficiency you can count on

Daily operating costs have a decisive impact on the efficiency of any building. Cost sources include oil, electricity, gas, water, maintenance, and changes in usage.

- **Control over costs**
  An investment in GAMMA instabus pays off quickly – particularly in terms of building operating costs. Energy savings are achieved in many areas: the rooms are only heated, cooled, ventilated, or lit when they are actually in use. As long as the sun is shining, the sun protection is automatically controlled to avoid unnecessary heating and cooling costs. What’s more, it is coordinated with the lighting control in order to reduce lighting costs by maximizing the influx of daylight.

- **Maximum flexibility**
  You also keep a firm grip on maintenance costs: repairs can be controlled by means of failure signals and restricted to work that is actually essential, while options such as remote diagnostics, control, and parameterization cut traveling times as well as the costs they entail.

Significant outlay is necessary if the room usage changes – as it invariably does at some time or other. GAMMA instabus installations offer unbeatable flexibility here: the building functions can be quickly and inexpensively adapted to the new circumstances – often without having to lay any additional cables.

### Highlights

- High energy and cost savings thanks to energy-efficient controls
- Simple and low-cost maintenance is ensured by remote diagnostics, operation, and parameter settings
- Flexible and inexpensive modification of building functions
Technikum, Vienna

At Technikum Vienna, Austria’s leading university of applied sciences, GAMMA instabus is responsible for sun and glare protection. On a sunny day, the weather station automatically activates the sun protection. And if the wind gets up, the exterior blinds are automatically raised to prevent potential damage. Optimum user convenience is allied with efficient air conditioning and lighting.
Your safety is our primary concern

Safety is a critical aspect of any building control system. In addition to increasing the operating reliability of systems and equipment, GAMMA \textit{instabus} also protects people and assets – 24 hours a day.

- \textbf{Safety must be guaranteed}
  GAMMA \textit{instabus} recognizes and reports break-ins, fires, leaks, and power outages.

  GAMMA \textit{instabus} smoke detectors smell out a fire, localize it, and trigger the necessary action before it has a chance to develop into a major blaze. Among other things, it switches off electrical devices, orders the evacuation of elevators, and switches on escape signs and lighting. System or equipment failures and leaks are instantly detected by GAMMA \textit{instabus}. They can then be reported to a local control center or communicated over the Internet any time of the day or night. Stoppages and consequential damage are reduced to a minimum or even eliminated altogether.

- \textbf{Leave nothing to chance}
  Doors and windows that have been accidentally left open are a thing of the past with GAMMA \textit{instabus}, which now detects and reports them by means of window, door, and lock contacts. GAMMA \textit{instabus} also senses any unwanted visitors with the help of glass break and motion detectors, and sounds the alarm accordingly.

- \textbf{Highlights}
  - Early recognition and warning of fires, malfunctions, and system failures
  - Automatic response activation
  - Display of open windows and doors
In the renovated main building of Aargau technical college in Windisch, Switzerland, KNX is used to recognize, visualize and report malfunctions.

Thanks to GAMMA instabus doors and windows are no longer left inadvertently open at Marie Curie Gymnasium, a high school in the eastern German town of Dallgow-Döberitz.
Convenience tailored to your needs

When it comes to technical infrastructure, every building – from offices through hospitals and schools to sports arenas – has its own unique requirements. GAMMA instabus offers the ideal solution for every building – convenience made to measure.

- **Convenience that suits your needs**
  In sunshine or darkness, summer or winter, room users always enjoy optimum lighting and a pleasant temperature.

- **Scene control**
  You can store or call up different switching and dimming states for the room lighting, the position of the sun protection, and the room temperature setpoint at the press of a button. Scene control is especially useful in conference rooms, big halls, and theaters.

- **Partition control**
  In large rooms that can be divided by partitions, such as conference rooms, dining halls, or indoor sports facilities, GAMMA instabus allows the lighting, sun protection, and room temperature to be automatically controlled for just the visible part of the room (which varies according to the position of the partitions).

- **Individual convenience**
  GAMMA instabus creates a harmonious symbiosis between room temperature, sun protection, and lighting. The air conditioning can be either time or presence controlled. The automatically set illuminance, sun protection position, and room temperature can be altered by room users at any time to comply with their individual preferences.

**Highlights**

- Maximum comfort despite minimal energy consumption
- Simple and intuitive operation with a functional design
- Custom convenience and comfort with the flexible control of room functions
Convenience in the VIP lounge at the Siemens Arena Vilnius in Lithuania, courtesy of GAMMA instabus.

NICI AG, Upper Franconia
The creative climate at the gift article manufacturer NICI AG in Altenkunstadt in Germany is properly set in scene by GAMMA instabus. Lighting, shutter/blind- and heating control in every room are perfectly coordinated.

The convenient lighting control is impressively made tangible in dawn and night.

Flexibility in detail: soundproof partition walls transform a large room for 120 people into three smaller meeting rooms.
All functions at your fingertips

In addition to conventional local control – either wire-bound or wireless by infrared and radio – GAMMA instabus also facilitates central control and indication of all functions and operating states plus remote control by telephone or over the Internet.

- **Display and operation**
  Switching, dimming, and control – all GAMMA instabus functions can be operated locally by the user with pushbuttons, displays, touch panels, or hand-held controllers for infrared or radio.

- **At any time and from any place**
  GAMMA instabus allows events and states to be indicated, logged, and archived on a central PC. It goes without saying that all functions can also be centrally controlled.

- **Everything under control**
  Commercial buildings usually stand empty at night. Total control over everything that happens inside is thus all the more important. GAMMA instabus is connected to the telephone network or the Internet, meaning that all relevant events are automatically forwarded either to the occupant’s own maintenance engineer or to an external service company, which can also control the system remotely.

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**Highlights**

- Centralized operation on location, by telephone, or from the Internet
- Display, log, and archive data on a PC or directly on location
- Automatic forwarding of important events
Siemens headquarters, Lithuania
At the Siemens Head Office in Vilnius, every individual lamp or the lighting for the whole area can be switched on and off on a PC.

Mobile access
Controls at the touch of a button – lighting and blinds can be operated at any time from your mobile device.
Combining all benefits

GAMMA instabus conforms with ISO/IEC 14543, the international KNX standard, and can therefore be easily networked using KNXnet/IP with the following building management systems: OPC, Profinet, and BACnet.

- **Complete integration**
  GAMMA instabus can be integrated with building data and communication systems, access control systems, break-in or fire reporting systems, elevator controls, emergency lighting, as well as with master building automation controls.

  Siemens is the leading provider for the integration of GAMMA instabus with other third party systems.

  An inhouse data and communication network can be used on the one hand to connect GAMMA instabus subsystems and on the other to control and indicate functions and states either locally on workstation PCs or centrally via a building control center.

  The integration of GAMMA instabus with other building management systems promotes operating economy and safety. Connecting it to an access control system enables room functions to be adjusted as people enter or leave the room, for instance.

  A building management system based on GAMMA instabus connects perfectly to a higher-level building automation system, giving the latter access to all room functions and the entire electrical installation equipment.

- **Highlights**
  - Flexible integration with existing building systems
  - Leading provider of integration services for third-party systems
  - Safe and efficient operation

The floodlighting at Abuja Stadium in Nigeria is controlled entirely by GAMMA instabus.
**Sazka Arena, Prague**

At the Sazka Arena in Prague GAMMA instabus enables the quick display of control functions thanks to LAN connectivity. GAMMA instabus provides optimal control because of its integration with building-automation systems.
Profit from Totally Integrated Power

Every building has to be supplied with power – at the right time, in the right quantity, and in the right place. We at Siemens have evolved a unique concept to master this challenge: Totally Integrated Power.

- **Solid infrastructure for electrical distribution**
  Totally Integrated Power comprises products and systems for electrical-power distribution in residential and non-residential and buildings – from the medium-voltage transformer station all the way to individual lamps.

  Totally Integrated Power is based on products and systems that are optimally adapted to one another. Communication systems and software modules provide for the optimal integration of electrical systems with building automation. It adds inestimable value for all stakeholders throughout every phase of a project.

  Investors benefit from maximum investment protection and cost transparency. Planners profit from fast, reliable planning, and accurate dimensions.

- **Highlights**
  - Totally Integrated Power covers all phases of electrical distribution
  - Totally Integrated Power products and systems ensure long-term Return on Investment
  - Fast, reliable planning; properly scaled systems; transparent costs
Electricians appreciate the simplicity of configuring, ordering, and installation. And users praise its operating economy and safety.

As a component of Totally Integrated Power, GAMMA instabus plays a key role by combining the individual building subsystems in an efficient overall system.
Countless references document our expertise

- Airport Duesseldorf, Germany
- Commerzbank, Frankfurt, Germany
- T-Mobile Headquarters, Bonn, Germany
- Technikum, Vienna, Austria
- Aagau technical college, Windisch, Switzerland
- Marie Curie Gymnasium, Brandenburg, Germany
- Nici AG, Upper Franconia, Germany
- Siemens Arena, Vilnius
Innovation
Siemens invests a great deal in both manpower and research and development. This results in a steady stream of new insights, technologies and inventions that enable us to offer products and systems of the highest quality, reliability, safety and user friendliness to our customers.

Reliability
With a history of over a hundred years, Siemens is an established, reliable partner. Siemens will continue to provide trouble-free product and system updates and innovations for many years to come, which ensures your investment for the future.

Comfort
Siemens products and solutions ensure comfort in your working and living environments. Today, tomorrow and for decades to come. That’s why numerous customers around the world rely on Siemens.

Protection
Siemens offers all components needed for safe and efficient power distribution, as well as everything for complete plant, personal and device protection – always tailored to the specific requirements of industry, non-residential and residential buildings.
Answers for infrastructure.
Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

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