gesis® FLEX

SMART AUTOMATION

Modular, pluggable solutions for decentralized room automation.
As an experienced and reliable partner, we can help you satisfy your building requirements with safety, efficiency, and pluggability. For over 40 years, we have been offering smart solutions with our connector systems for building and room automation, power supply and lighting installations.

When planning and implementing efficient buildings, important factors for the future operation must be taken into account, like economic efficiency and adaptability of the property. Our modular and very flexible gesis® system and its automation components gesis® FLEX enables versatile applications within buildings.

Room lighting, air conditioning and blind control are regulated as it is needed and energy and operating costs are reduced significantly. Even extensions, room conversions and changes can be implemented easily and effortlessly.

**ECONOMIC PLANNING**
The gesis® connector system ensures that schedules and project flows can be calculated accurately and guarantees standardized quality in planning and execution.

**SUSTAINABLE PROCESS & QUALITY**
geois® is the standardized interface for all building installation and automation jobs. The mechanical coding reliably prevents mismating.

**QUICKER ASSEMBLY**
Pluggable components minimize assembly times thanks to a well-conceived interface technology and a diversified connection technology with prefabricated cable sets.

**THE SYSTEM FOR:**
+ HOSPITALS
+ RETIREMENT AND NURSING HOMES
+ ADMINISTRATION BUILDINGS
+ HOTELS
+ SCHOOLS
+ FUNCTIONAL BUILDINGS
COST REDUCTION THROUGH DECENTRALIZED INSTALLATION.

Cabling based on smart installation concepts creates clear installation structures. In combination with pluggability, this leads to a system that can be installed fast and safely. Consistent three-phase cabling up to just before the consumer also reduces the voltage drop, which increases energy efficiency.

SMART INSTALLATION – EXPLOIT POTENTIAL

With our gesis® installation system, we have revolutionized electrical installation. High-quality and durable components assure impressive 70 % time and 30 % cost savings! gesis® has been conceived in the style of a modular system: all the product groups complement each other and enable smart and cost-effective electrical installation, from distribution to consumer.

PLAN EFFICIENTLY + COST-EFFECTIVELY

Smart building automation can sustainably reduce the energy needs of a building. Our highly flexible system, which is founded on the basic idea of a bus-based system, offers a highly economical platform for your construction projects with its pluggable installation components. The initial investment in automation technology pays for itself in just a few years of operation. Any later changes of use throughout the lifecycle of the building can be implemented easily.

Our decentralized and pluggable products demonstrate their full added value in terms of speed and lasting cost effectiveness especially with projects involving a large number of identical rooms.

gesis® connectors
safe + fast + flexible
SYSTEM COMPARISON.

BENEFITS OF DECENTRALIZED INSTALLATION

• Creates simple, future-proof structures
• Horizontal main supply as standard
• Vertical main supply with two lines per floor
• Only the main fuses and the bus system devices remain in the main distribution unit
• Smaller utility rooms increase net floor area
• Loopthrough of energy and bus signals
• Room automation is placed directly in the room
INSTALLATION IDEAL FOR:
+ ceilings
+ walls
+ floors
GESIS® FLEX
THE DESIGN MAKES ALL THE DIFFERENCE.

COMPACT
• Flat design
• Ideal for floor, wall, ceiling
• Easy integration into new and renovated buildings

VERSATILE
• 15 different extension modules available
• EnOcean and SMI Gateway
• Fan coil control

MODULAR
• Only required functions are installed
• Only one physical address
• 6 extension modules per base module, optional assignment

EASY TO ENGINEER
• Modular planning
• Standardized functions
• Standard modules – no project-specific products
• No wiring plans required

EASY TO INSTALL
• Optimum installation in false floor or on/under cable duct
• All cables from one side
• Quick mounting accessories
• Plugging instead of wiring

EASILY COMMISSIONED
• Integrated manual operation
• Pre-function test without bus connection
• Exchange of extension modules does not require re-programming

PLUGGABLE
• 100 % pluggable modular system
• Pluggable input/output cables
• Quick and error-free installation

DECENTRALIZED
• Significantly reduced cable lengths
• Full functionality during bus failure
• Smaller sub-distribution/utility rooms

FUTURE-PROOF
• Standardized systems
• Easily extendable due to pluggability
• Rail-mounted devices can be integrated
APPLICATION

FUNCTIONAL BUILDINGS

APPLICATION
Compact, modular and pluggable electrical installation and room automation for offices, meeting rooms, laboratory and testing facilities, canteens

SOLUTIONS
• Decentralized, modular room automation with gesis® FLEX
• Daylight-dependent lighting control
• Local and centralized sunshade control
• Installation solutions for floor/wall/ceiling

BENEFITS
• Clear and neatly arranged room functions
• Fast, easy, error-free planning and installation
• Very flat design for mounting in low installation spaces
• Simple adjustments for change of use
• Flexibility secures long-term value of the property

OFFICE ROOM AUTOMATION
• Need-oriented lighting control
• Sunblind control with local fuse
• Integration of conventional buttons
APPLICATION

EDUCATION/CONFERENCE

Compact, modular and pluggable electrical installation and room automation for classrooms, staff rooms and administrative offices, sports halls and gyms, break rooms and common rooms.

SOLUTIONS

- Decentralized, modular room automation with gesis® FLEX
- Presence monitoring for lighting control and energy optimization
- Room temperature control
- Sunshade control

BENEFITS

- Fast, easy, error-free planning and installation
- Sustainable reduction in energy consumption
- Decentralized room automation, ideal for renovation
- Simple configuration
- High functionality for building automation

CLASSROOMS ROOM AUTOMATION

- DALI lighting control
- SMI Sunshade control
- Semiconductor output for heating valve control
- Integration of conventional buttons

gies® FLEX
APPLICATION

MEDICAL/CARE SECTOR

APPLICATION
Compact, modular and pluggable electrical installation and room automation for patient rooms, administrative offices, examination rooms/outpatient department, catering area/kitchen, break rooms

SOLUTIONS
• Decentralized, modular room automation with gesis® FLEX
• Color-coded and mechanically coded connector systems
• Pre-assembled, waste-free electrical installation
• Occupancy-dependent room temperature control
• Sunshade control

BENEFITS
• Safe, clean, and clear installation
• High availability of room automation
• Standardized room installation (patient rooms)
• Easy renovation due to decentralized room automation
• Automation functions can be easily implemented

PATIENT ROOM AUTOMATION
• Light control
• Ventilation control (for wet areas)
• Shading control with local fuse
• Integration of conventional buttons
APPLICATION

HOTEL

Compact, modular and pluggable electrical installation and room automation for hotel rooms, operational areas (kitchen, restaurant), administrative areas, conference rooms, event areas, foyers

SOLUTIONS
• Decentralized, modular room automation with gesis® FLEX
• Pre-assembled, waste-free electrical installation
• Convenient lighting control
• Need-oriented room temperature control
• Battery-free radio technology with EnOcean

BENEFITS
• Convenient room automation provides a pleasant atmosphere
• Efficient installation thanks to standardized spaces
• Simple implementation of trends due to room-based solution
• Clean, room-by-room renovation without business interruption
• Reliable window position monitoring using radio technology

HOTELS ROOM AUTOMATION
• DALI lighting control
• SMI Sunshade control
• Semiconductor output for heating valve control
• Integration of conventional buttons
**GESIS® FLEX MODULAR**

One base module manages up to six extension modules, they can be combined freely.

**KNX base module and feed in 230/400 V AC, 16 A**

1-phase
- *gesis®* KNX FLEX-BAS SP 83.020.0601.0
- *gesis®* KNX FLEX-BAS SP Z 83.020.0601.1

3-phase
- *gesis®* KNX FLEX-BAS 83.020.0600.0
- *gesis®* KNX FLEX-BAS Z 83.020.0600.1

**Intermediate feed 230/400 V AC, 16 A**

1-phase
- *gesis®* FLEX-MS SP 83.020.0611.0
- *gesis®* FLEX-MS SP Z 83.020.0611.1

3-phase
- *gesis®* FLEX-MS 83.020.0610.0
- *gesis®* FLEX-MS Z 83.020.0610.1

**Binary input extension module**

8-fold, 12 V DC
- *gesis®* FLEX-8/0 83.020.0622.0
- *gesis®* FLEX-8/0 Z 83.020.0622.1

**Switching output extension module 230/400 V AC, 16 A**

4-fold, Standard
- *gesis®* FLEX-0/4 83.020.0623.0
- *gesis®* FLEX-0/4 Z 83.020.0623.1

4-fold, C-load, 140 μF
- *gesis®* FLEX-0/4P 83.020.0626.0
- *gesis®* FLEX-0/4P Z 83.020.0626.1

3-fold, Emergency lighting function
- *gesis®* FLEX-0/3 EL 83.020.0636.0
- *gesis®* FLEX-0/3 EL Z 83.020.0636.1

**DALI output extension module**

4x16-fold (only DALI signal)
- *gesis®* FLEX-0/4DA 83.020.0630.0
- *gesis®* FLEX-0/4DA Z 83.020.0630.1

3x (DALI-2 16-fold + main)
- *gesis®* FLEX-0/3DA AC 83.020.0641.0
- *gesis®* FLEX-0/3DA ACZ 83.020.0641.1

**Y-conductor for DALI application**

PVC cable 0.5 m 99.404.9999.8

halogen-free cable 0.5 m 99.405.9999.8

**Shutter output extension module 230 V**

2-fold, 230 V AC, 8 A
- *gesis®* FLEX-0/2W 83.020.0624.0
- *gesis®* FLEX-0/2W Z 83.020.0624.1

Each output with 3.15 AT fuse
- *gesis®* FLEX-0/2W F 83.020.0634.0
- *gesis®* FLEX-0/2W F Z 83.020.0634.1

**Shutter output extension module 24 V**

2-fold, 24 V DC, 3 A
- *gesis®* FLEX-0/2W DC 83.020.0627.0
- *gesis®* FLEX-0/2W DC Z 83.020.0627.1

Input with 6.3 AT fuse
- *gesis®* FLEX-0/2W DC F 83.020.0637.0
- *gesis®* FLEX-0/2W DC F Z 83.020.0637.1

**Semiconductor outputs extension 230 V**

4-fold, 230 V AC, 0.5 A
- *gesis®* FLEX-0/4HL AC 83.020.0631.0
- *gesis®* FLEX-0/4HL AC Z 83.020.0631.1

Each output with 0.5 AT fuse
- *gesis®* FLEX-0/4HL AC F 83.020.0632.0
- *gesis®* FLEX-0/4HL AC F Z 83.020.0632.1

**Semiconductor outputs extension module**

4-fold, 24 V DC, 0.5 A, with electronic short-circuit and overload detection
- *gesis®* FLEX-0/4HL DC 83.020.0633.0
- *gesis®* FLEX-0/4HL DC Z 83.020.0633.1

*) with connector set
**GESIS® FLEX STAND-ALONE**

Standalone modules

**EnOcean Gateway**  
- gesis® KNX FLEX-ENO32  B  83.020.0628.2  
- gesis® KNX FLEX-ENO32 BZ  83.020.0628.3

**Further functions in a gesis® FLEX REG**

- DIN rail system housing  
  - Power supply units:  
    - Power pack 24 V DC, 2,5 A: 91.257.0500.2  
    - RCD/MCB: 91.257.1000.2  

**SMI gateway for shutter control**  
- gesis® KNX FLEX-SMI8  83.020.0635.0  
- gesis® KNX FLEX-SMI8 Z  83.020.0635.1

**Fan coil actuators**

- Fan coil base module  
  - gesis® KNX FLEX-FC  83.020.0638.0  
  - gesis® KNX FLEX-FC Z  83.020.0638.1

- Fan coil extension module  
  - gesis® FLEX-FC EMS  83.020.0639.0  
  - gesis® FLEX-FC EM Z  83.020.0639.1

**GESIS® FLEX ADD-ON**

System-compatible empty housings for rail-mounted devices and feed modules

**Empty DIN rail system housing for 4 module width**

- without cable glands  
  - gesis® FLEX-REG4  83.020.0660.0

- with cable glands for cable diameter  
  - 1 x 5-9 mm: gesis® FLEX-REG4 V  83.020.0661.0  
  - 2 x 7-13 mm: gesis® FLEX-REG4 Z  83.020.0662.0

**GESIS® FLEX ACCESSORIES**

**Power pack 24 V DC/30 W**  
- gesis® FLEX-PS 24/30  83.020.0640.0

**System extensions**

- Main:  
  - Main extension: 0.5 m: 91.257.0500.2  
  - Main extension: 1.0 m: 91.257.1000.2

- Internal Bus:  
  - Bus extension: 0.5 m: 99.400.9999.8  
  - Bus extension: 1.0 m: 99.401.9999.8

**Quick mounting frame**

- 40 cm: Z5.524.1410.0  
- 50 cm: Z5.524.1510.0  
- 60 cm: Z5.524.1610.0  
- 70 cm: Z5.524.1710.0  
- 80 cm: Z5.524.1810.0  
- 90 cm: Z5.524.1910.0  
- 100 cm: Z5.524.2010.0

**Side covers**

- as a set: 99.061.9999.9

*) with connector set
GESIS® PLAN
THE CONCEPTUAL DESIGN TOOL.
Intuitive + flexible + license-free.

Our conceptual planning tool gesis® PLAN for architects and electrical planners makes planning pluggable electrical installations even more easy. The planning tool uses CAD building data to generate installation drafts, as well as parts and price lists. gesis®PLAN also independently checks the current load of cables and detects errors. The planner can locate them immediately in the detailed 3D views.

+ Import of DWG, DXF, JPG, PNG
+ Free cable routing
+ Safe contact checks
+ Parts lists and price lists
+ Animation of the drawing

Request gesis® PLAN free of charge:
gesisplan@wieland-electric.com
INFO TO GO.

OUR WIELAND BROCHURE SERVICE
To make your workflow easier, we provide all of our product catalogs and industry brochures for you in the download area of our website.

https://www.wieland-electric.com/en/download

Further information and a product overview is available here:

GESIS® CATALOG
Pluggable electrical installation
Art. No. 0670.1

GESIS® ELECTRONIC
Decentralized building automation via plug & play
Art. No. 0700.1

GESIS® NRG
Examples of Applications for the flexible busbar
Art. No. 0663.1

WIELAND ON YOUTUBE
FIND OUT MORE ABOUT OUR PRODUCTS

https://www.youtube.com/user/WielandElectric

TECHNICAL CONSULTATION
BUILDING AND INSTALLATION TECHNOLOGY

Phone: +49 951 9324-996
E-mail: BIT.TS@wieland-electric.com

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