

gesis® FLEX

# SMART **AUTOMATION**

Modular, pluggable solutions  
for decentralized room automation.



# GESIS<sup>®</sup> FLEX

## FLEXIBLE + COST-EFFECTIVE ROOM AUTOMATION

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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<sup>®</sup> system and its automation components gesis<sup>®</sup> 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.

### THE SYSTEM FOR:

- + HOSPITALS
- + RETIREMENT AND NURSING HOMES
- + ADMINISTRATION BUILDINGS
- + HOTELS
- + SCHOOLS
- + FUNCTIONAL BUILDINGS



### ECONOMIC PLANNING

The gesis<sup>®</sup> connector system ensures that schedules and project flows can be calculated accurately and guarantees standardized quality in planning and execution.



### SUSTAINABLE PROCESS & QUALITY

gesis<sup>®</sup> is the standardized interface for all building installation and automation jobs. The mechanical coding reliably prevents mismatching.



### QUICKER ASSEMBLY

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



# 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.

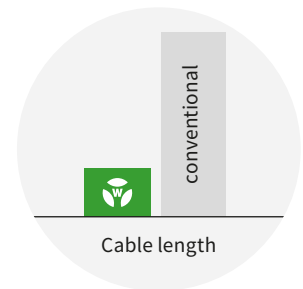
## SMART INSTALLATION – EXPLOIT POTENTIAL

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.

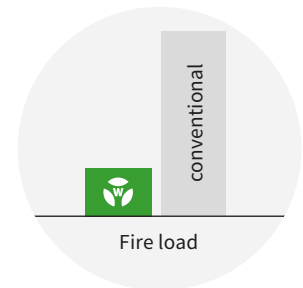
## PLAN EFFICIENTLY + COST-EFFECTIVELY

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.

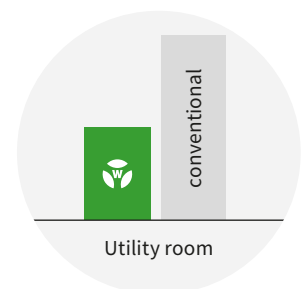
Our decentralized and pluggable products demonstrate their full added value in terms of speed and lasting cost effectiveness especially with projects involving a large number of identical rooms.



Cable length with Wieland: roughly 30% of conventional



Fire load therefore roughly 30%



Utility room reduced to 50% – alright!



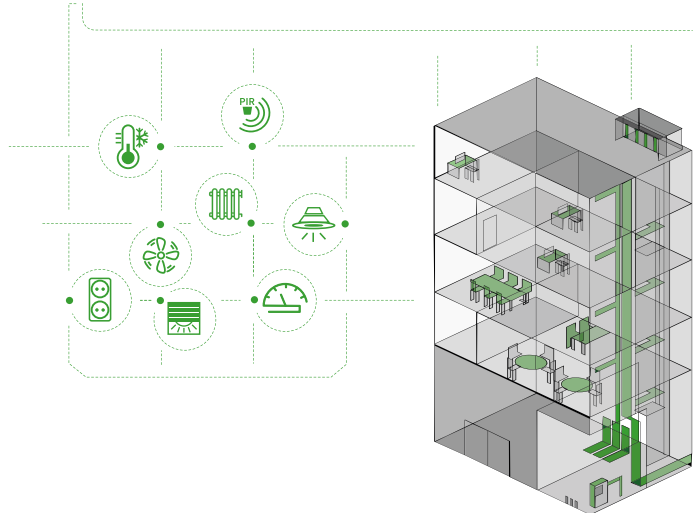
gesis® connectors  
safe + fast + flexible



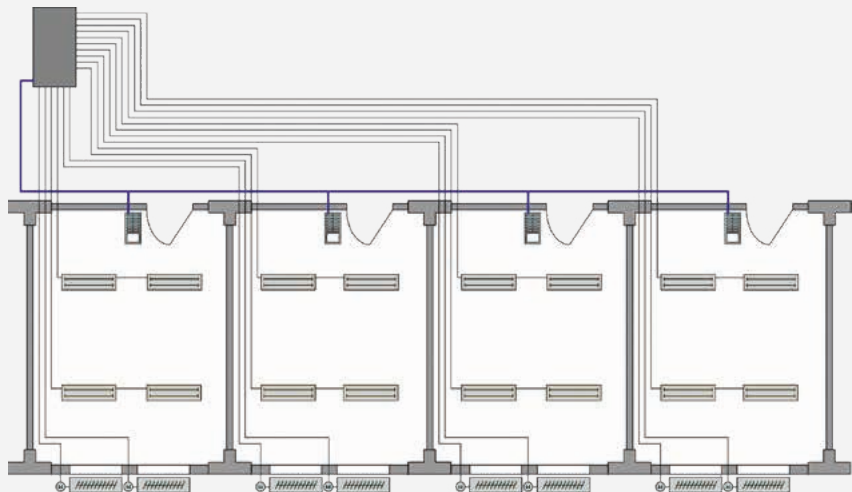
# SYSTEM COMPARISON.

## BENEFITS OF DECENTRALIZED INSTALLATION

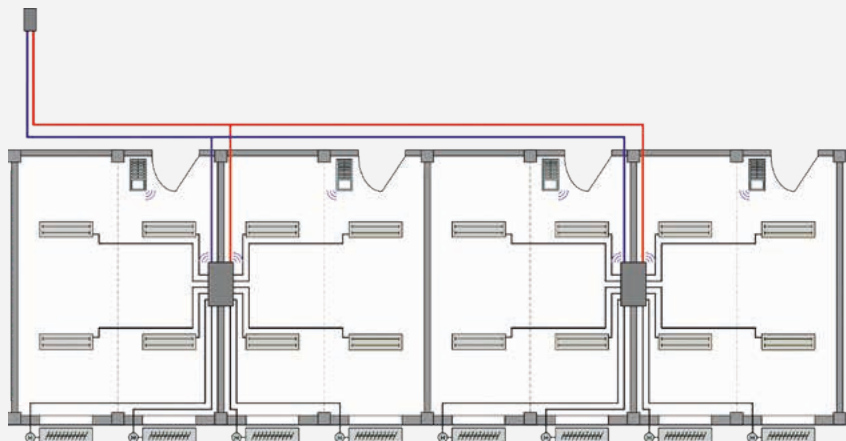
- Creates simple, future-proof structures
- Horizontal main supply as standard
- Vertical main supply with two lines per floor
- Only the main fuses and the bus system devices remain in the main distribution unit
- Smaller utility rooms increase net floor area
- Loophrough of energy and bus signals
- Room automation is placed directly in the room

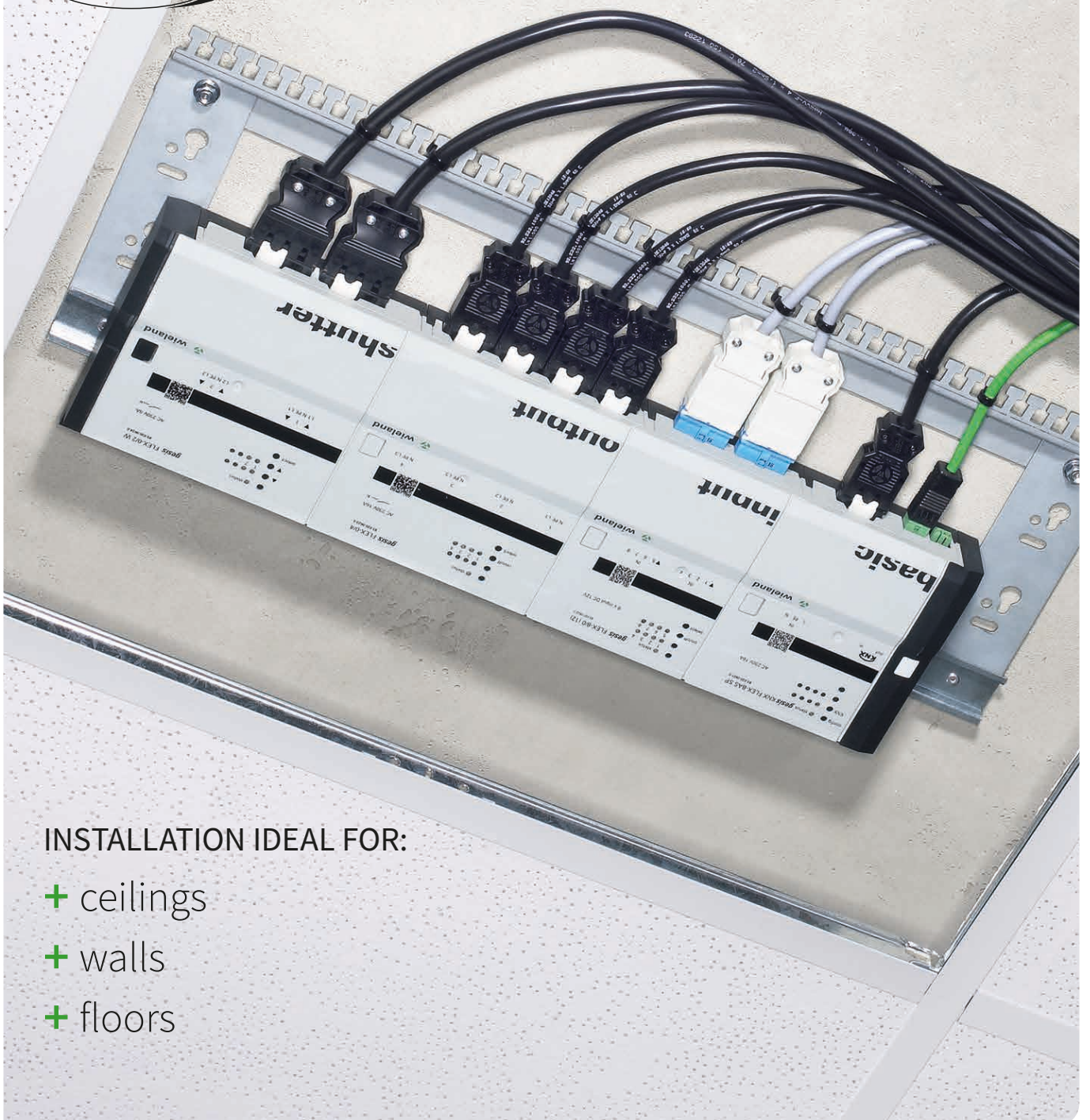


## CONVENTIONAL CENTRALIZED INSTALLATION



## DECENTRALIZED SMART INSTALLATION





INSTALLATION IDEAL FOR:

- + ceilings
- + walls
- + floors

# GESIS® FLEX

## THE DESIGN MAKES ALL THE DIFFERENCE.

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### COMPACT

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

### VERSATILE

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

### MODULAR

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

### EASY TO ENGINEER

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

### EASY TO INSTALL

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

### EASILY COMMISSIONED

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

### PLUGGABLE

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

### DECENTRALIZED

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

### FUTURE-PROOF

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- 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



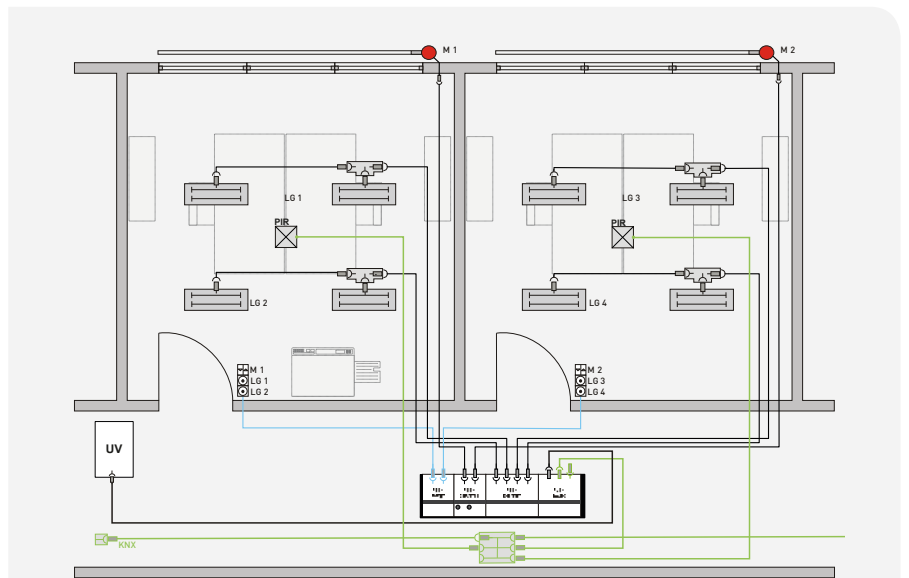
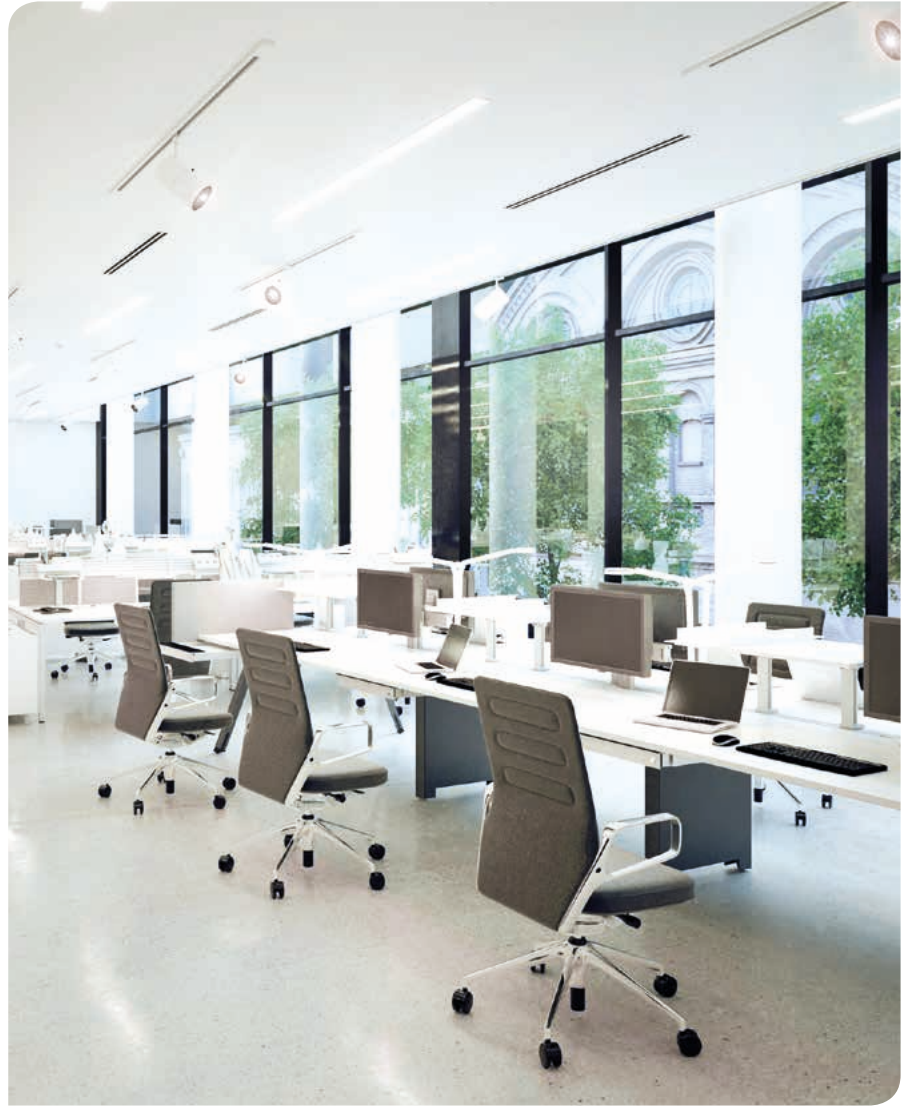
## SOLUTIONS

- 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



## APPLICATION

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



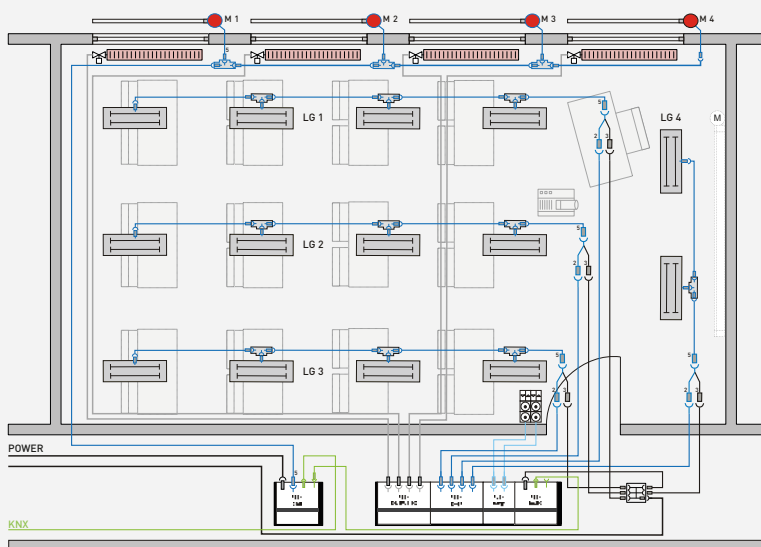
## SOLUTIONS

- 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





## 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



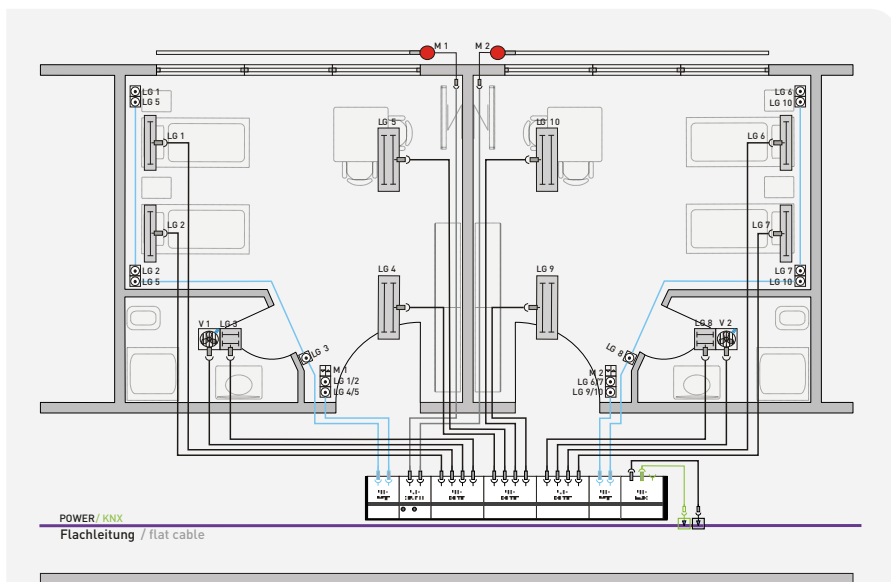
## SOLUTIONS

- 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



## APPLICATION

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



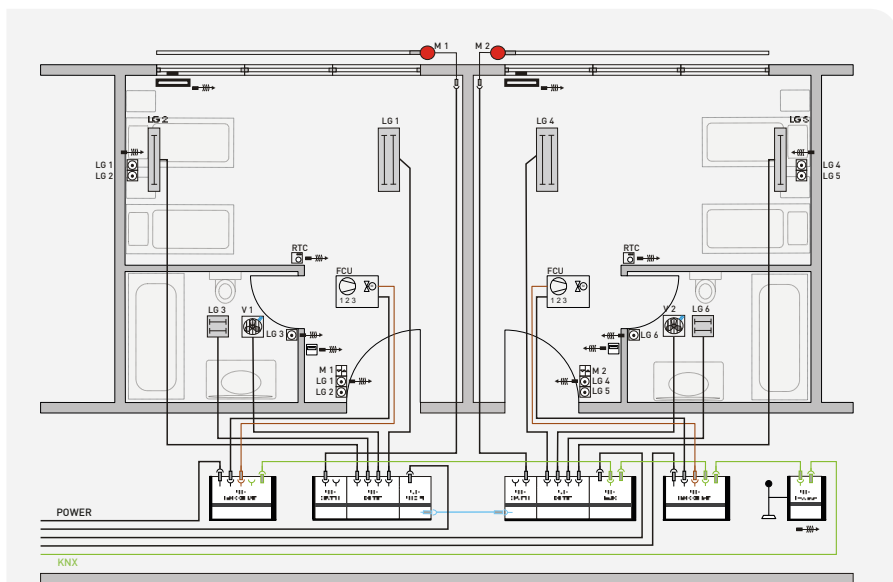
## SOLUTIONS

- 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



<b>1-phase</b>		
<b>gesis® KNX FLEX-BAS SP</b>		83.020.0601.0
<b>gesis® KNX FLEX-BAS SP Z</b>		83.020.0601.1 <sup>*)</sup>
<b>3-phase</b>		
<b>gesis® KNX FLEX-BAS</b>		83.020.0600.0
<b>gesis® KNX FLEX-BAS Z</b>		83.020.0600.1 <sup>*)</sup>

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



<b>1-phase</b>		
<b>gesis® FLEX-MS SP</b>		83.020.0611.0
<b>gesis® FLEX-MS SP Z</b>		83.020.0611.1 <sup>*)</sup>
<b>3-phase</b>		
<b>gesis® FLEX-MS</b>		83.020.0610.0
<b>gesis® FLEX-MS Z</b>		83.020.0610.1 <sup>*)</sup>

### Binary input extension module



<b>8-fold, 12 V DC</b>		
<b>gesis® FLEX-8/0</b>		83.020.0622.0
<b>gesis® FLEX-8/0 Z</b>		83.020.0622.1 <sup>*)</sup>

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



<b>4-fold, Standard</b>		
<b>gesis® FLEX-0/4</b>		83.020.0623.0
<b>gesis® FLEX-0/4 Z</b>		83.020.0623.1 <sup>*)</sup>
<b>4-fold, C-load, 140 µF</b>		
<b>gesis® FLEX-0/4P</b>		83.020.0626.0
<b>gesis® FLEX-0/4P Z</b>		83.020.0626.1 <sup>*)</sup>
<b>3-fold, emergency lighting function</b>		
<b>gesis® FLEX-0/3 EL</b>		83.020.0636.0
<b>gesis® FLEX-0/3 EL Z</b>		83.020.0636.1 <sup>*)</sup>

### DALI output extension module



<b>4x16-fold (only DALI signal)</b>		
<b>gesis® FLEX-0/4DA</b>		83.020.0630.0
<b>gesis® FLEX-0/4DA Z</b>		83.020.0630.1 <sup>*)</sup>
<b>3x (DALI-2 16-fold + main)</b>		
<b>gesis® FLEX-0/3DA AC</b>		83.020.0641.0
<b>gesis® FLEX-0/3DA ACZ</b>		83.020.0641.1 <sup>*)</sup>

### Y-conductor for DALI application



<b>PVC cable</b>		
0.5 m		99.404.9999.8
<b>halogen-free cable</b>		
0.5 m		99.405.9999.8

### Shutter output extension module 230 V



<b>2-fold, 230 V AC, 8 A</b>		
<b>gesis® FLEX-0/2W</b>		83.020.0624.0
<b>gesis® FLEX-0/2W Z</b>		83.020.0624.1 <sup>*)</sup>
<b>each output with 3.15 AT fuse</b>		
<b>gesis® FLEX-0/2W F</b>		83.020.0634.0
<b>gesis® FLEX-0/2W F Z</b>		83.020.0634.1 <sup>*)</sup>

### Shutter output extension module 24 V



<b>2-fold, 24 V DC, 3 A</b>		
<b>gesis® FLEX-0/2W DC</b>		83.020.0627.0
<b>gesis® FLEX-0/2W DC Z</b>		83.020.0627.1 <sup>*)</sup>
<b>input with 6.3 AT fuse</b>		
<b>gesis® FLEX-0/2W DC F</b>		83.020.0637.0
<b>gesis® FLEX-0/2W DC F Z</b>		83.020.0637.1 <sup>*)</sup>

### Semiconductor outputs extension 230 V



<b>4-fold, 230 V AC, 0.5 A</b>		
<b>gesis® FLEX-0/4HL AC</b>		83.020.0631.0
<b>gesis® FLEX-0/4HL AC Z</b>		83.020.0631.1 <sup>*)</sup>
<b>each output with 0.5 AT fuse</b>		
<b>gesis® FLEX-0/4HL AC F</b>		83.020.0632.0
<b>gesis® FLEX-0/4HL AC F Z</b>		83.020.0632.1 <sup>*)</sup>

### Semiconductor outputs extension module



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

## GESIS® FLEX STAND-ALONE

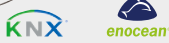


Standalone modules

### EnOcean Gateway NEW



**gesis® KNX FLEX-ENO32 B** 83.020.0628.2  
**gesis® KNX FLEX-ENO32 BZ** 83.020.0628.3<sup>\*)</sup>  
 Extended EnOcean Equipment Profiles



### Fan coil actuators



**Fan coil base module**  
**gesis® KNX FLEX-FC** 83.020.0638.0  
**gesis® KNX FLEX-FC Z** 83.020.0638.1<sup>\*)</sup>  
**Fan coil extension module**  
**gesis® FLEX-FC EMS** 83.020.0639.0  
**gesis® FLEX-FC EM Z** 83.020.0639.1<sup>\*)</sup>



### SMI gateway for shutter control



**gesis® KNX FLEX-SMI8** 83.020.0635.0  
**gesis® KNX FLEX-SMI8 Z** 83.020.0635.1<sup>\*)</sup>

### Further functions in a gesis® FLEX REG



**DIN rail system housing**  
**Power supply units**  
 Power pack 24 VDC, 2,5 A G0.000.0667.2  
**Cable protection**  
 RCD/MCB G0.000.0667.3  
 1P+N 6 kA B 16 A 30 mA

## 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; 2 x 7-13 mm  
**gesis® FLEX-REG4 V** 83.020.0661.0

### Empty DIN rail system housing for 4 module width with hinged lid



**without cable glands**  
**gesis® FLEX-REG4 D** 83.020.0662.0  
**with cable glands for cable diameter**  
 1 x 5-9 mm; 2 x 7-13 mm  
**gesis® FLEX-REG4 DV** 83.020.0663.0

## GESIS® FLEX ACCESSORIES

### Power pack 24 V DC/30 W



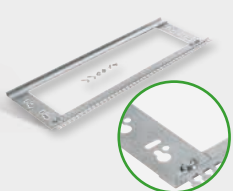
**gesis® FLEX-PS 24/30** 83.020.0640.0  
**gesis® FLEX-PS 24/30 Z** 83.020.0640.1<sup>\*)</sup>

### 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

<sup>\*)</sup> with connector set



# GESIS® PLAN THE CONCEPTUAL DESIGN TOOL.

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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

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Request gesis® PLAN free of charge:  
[gesisplan@wieland-electric.com](mailto: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>



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# ONLY ONE TIP AWAY.

**OUR WIELAND E-SHOP**  
EVERY PRODUCT - ANY TIME

In our online store you will find all the information about our products, prices, and technical data.

Order easily and conveniently online, and check availability.

<https://eshop.wieland-electric.com>

Scan QR code – view products in the E-SHOP.





# wieland

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