




INNOVATIVE POWER AND SIGNAL DISTRIBUTION

FOCUS **BUILDING**

Solutions for pluggable building installation
+ decentralized room automation.

A man with brown hair and a goatee, wearing a dark grey suit jacket over a white shirt, is smiling and looking towards the camera. He is holding a green cable with a black connector in his right hand. The background is a bright, out-of-focus office setting with a window.

“We offer **solutions** that impress.
That’s how we’ve become **world
market leader.**”

DIPL.-ING. (FH) THOMAS NIEBORG
Product Manager | Software and Tools

FOCUS BUILDING

- 04** Pluggable decentralized building installation
- 06** Savings potential with decentralized installation
- 08** System overview + components
- 10** Installation areas + installation levels
- 12** BUILDING TYPE Offices + administration buildings
- 14** BUILDING TYPE Hotels
- 16** BUILDING TYPE Hospitals
- 18** BUILDING TYPE Retail/shops
- 20** BUILDING TYPE Retail/electronics + furniture stores + DIY stores
- 22** BUILDING TYPE Parking garages + warehouses + logistics + production
- 24** BUILDING TYPE Schools
- 26** Application solution: Infrastructure cabling
- 27** Application solution: Floor box supply
- 28** Application solution: Cable Tray supply
- 29** Application solution: Lighting cabling (switched)
- 30** Application solution: Lighting cabling (regulated)
- 31** Application solution: Lighting cabling (switched centrally, 1/3 circuit)
- 32** Application solution: Decentralized room automation
- 33** Application solution: Window blinds
- 34** Servicing & services
- 35** General information + contacts



SMART SOLUTIONS FOR BUILDING PLANNERS + ARCHITECTS.

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, whether for lighting installation and automation, room automation, power supplies, and more.

Short timelines and tight completion schedules are the norm for on-site electrical installers. That is why a quick, safe, and above all faultless electrical installation is necessary.

Additionally, changes during the construction phase or ongoing operation require products that can offer a high degree of flexibility. Our modular gesis® system meets all these requirements and is impressively easy to use.



ECONOMIC PLANNING

gesis® ensures that schedules and project flows can be calculated accurately and guarantees standardized quality in planning and execution.



SUSTAINABLE PROCESS & QUALITY

gesis® 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.

THE SYSTEM FOR:

- + OFFICES
- + HOTELS
- + HOSPITALS
- + SCHOOLS
- + RETAIL SHOPS, MARKETS, FURNITURE STORES
- + PARKING GARAGES
- + PRODUCTION FACILITIES
- + STORAGE AREAS
- + HALLS
- + ADMINISTRATION BUILDINGS
- + DATA CENTER

TAKE ADVANTAGE OF TIME AND COST SAVINGS WITH **DECENTRALIZED + PLUGGABLE** INSTALLATION.

Cabling based on smart installation concepts creates clean installation structures. In combination with pluggability, this leads to a system that can be installed quickly and safely. Additionally, voltage drop is reduced and energy efficiency is increased through consistent three-phase cabling up to the load.

INSTALL SMARTLY – UNLIMITED POTENTIAL

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

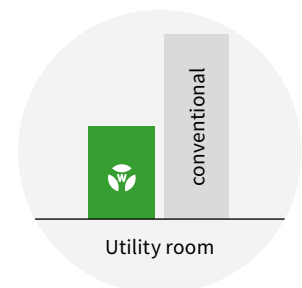
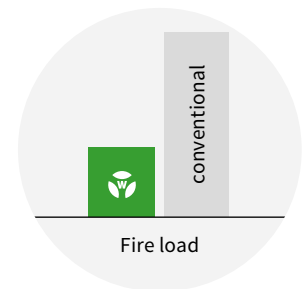
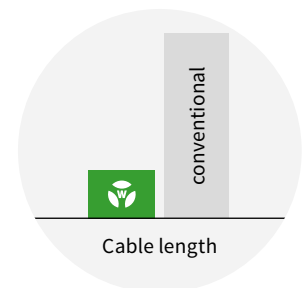


By opting for a gesis® flat cable system you can benefit from all the advantages of a smart electrical installation. You can install branches at any point and at any time, quickly and safely, without having to cut the cable! Contacts are made by means of insulation-piercing connection technology. Five systems are available to you with different cross sections, regardless of whether you want to distribute power or signals.

Property-specific system distributor for decentralized power supply and building automation complete our installation system.

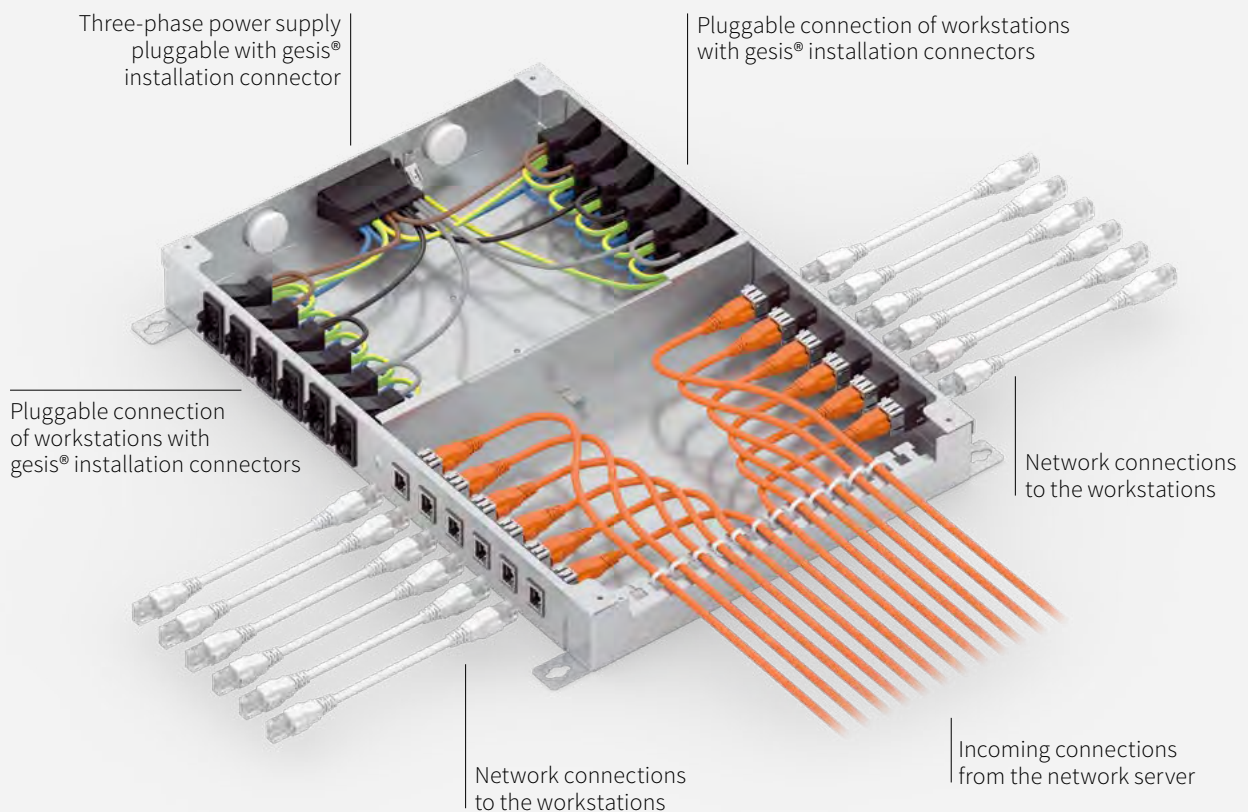
YOUR BENEFITS

- + More usable space
- + 30 % lower installation costs
- + Power available wherever and whenever easily – quickly – safely



SAVINGS POTENTIAL WITH **DECENTRALIZED** INSTALLATION.

Desk sharing, flexible working, co-working... the office of the future must be adaptable to all of these. With our Consolidation Points, we offer you decentralized hubs for switching from a permanent to a customizable installation. By installing Wieland Consolidation Points, you are optimally prepared for future adaptations to your workstations. Thanks to their pluggable design, you can change the office concept at any time without having to touch the basic installation.



FEATURES

- + Quick and flexible installation thanks to cable assemblies
- + Combination of energy and data in one distributor possible
- + Pluggable outlets from the distributor to the consumer/workstation

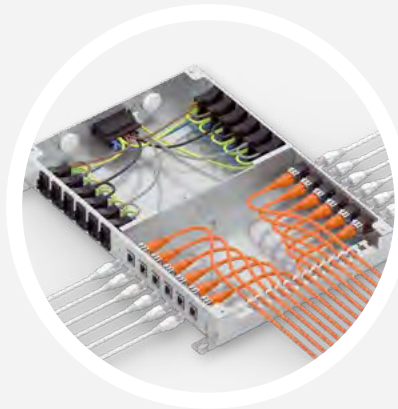


SYSTEM **OVERVIEW** DECENTRALIZED ELECTRICAL **INSTALLATION**

gesis[®] + **RST**[®] SYSTEM PRODUCTS

FEATURES OF PLUGGABILITY:

- Quick installation
- Safe installation
- Structured cabling
- Low error rate
- World market leading quality and preassembly
- Flexible modular system
- Reusable
- Extendable



DISTRIBUTION BOX CPO

The consolidation point is the decentralized distribution point for flexible installations and distributes power, data and signals.



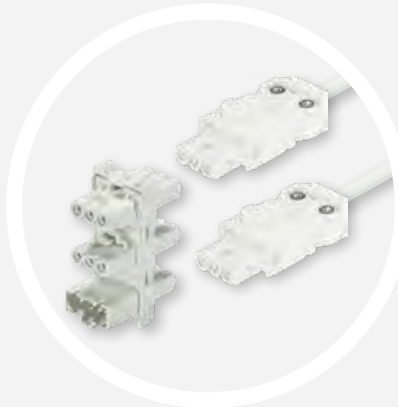
gesis[®] NRG

Flexible busbar for efficient infrastructure cabling.



gesis[®] CLASSIC

Pluggable electrical installation for floor boxes, lighting, etc.



gesis[®] MINI

Size-optimized version for limited space.



RST[®] CLASSIC/**RST**[®] MINI

The connector systems in IP6X under wet conditions, e.g. outdoors.

SYSTEM OVERVIEW

DECENTRALIZED ROOM AUTOMATION

gesis® RAN

SYSTEM FEATURES:

- Universally applicable components
- Individual assembly
- Flexible when changes in use occur
- Closures and fastenings according to customer requirements
- Fit for the future
- Decentralized installation of room automation devices
- Plug & Play installation



DISTRIBUTION BOX MSR

This distribution box contains all MSR technology components for one floor area.



DISTRIBUTION BOX RAU

The distribution box controls light, blinds and temperature of a room unit with I/Os and can be supplemented with power supplies.



DISTRIBUTION BOX INS

This distribution box variant is primarily used in school buildings. The installation column links electrical installation and room automation.

GESIS® SMART EFFICIENT VERSATILE

In 2018, Wieland Electric was crowned as the world market leader in pluggable installation solutions for functional buildings by the magazine Wirtschaftswoche.

Our gesis® modular system offers optimized pluggable solutions for all applications, from building infrastructure to luminaire connection and through to energy-efficient building automation.

We are already thinking about the functionality and future viability of our components so that gesis® remains the system with pluggable added value in the future as well.

**We bring energy
into every space!**



DESIGN PLUS

powered by: **light+building**





THE SYSTEM IS USED FOR

- ▶ Infrastructure cabling
- ▶ Floor box supply
- ▶ Cable tray
- ▶ Lighting, switched, controlled and regulated, also with DALI
- ▶ Decentralized room automation e. g. KNX
- ▶ Window Blinds using KNX-controlled outputs or SMI
- ▶ Cabling in lightweight/modular walls
- ▶ Installation column



OFFICES + ADMINISTRATION BUILDINGS



FLOOR BOX CABLING

The different versions of the gesis®NRG flat cables supply floor boxes with and without decentralized fuse protection.

LIGHTING (REGULATED)

Comprehensive mains and DALI signal coverage for offices means that changes and extensions can be realized without any effort.

DECENTRALIZED ROOM AUTOMATION

Lighting, shading, and room temperature ensure an optimal working atmosphere. Intelligent room automation devices are essential for this and are flexibly and securely integrated via our plug-in system distributors.



REQUIREMENTS

- Flexible office layout.
- Quick restructuring without any installation effort.
- High user comfort.
- Clear interfaces up to inside the desk.



SOLUTIONS

- Industrially prefabricated components.
- Flexible flat cable systems for easy extendability.
- Fast, flexible room automation using system distributors.
- Easy to plug together on site.



ADVANTAGES

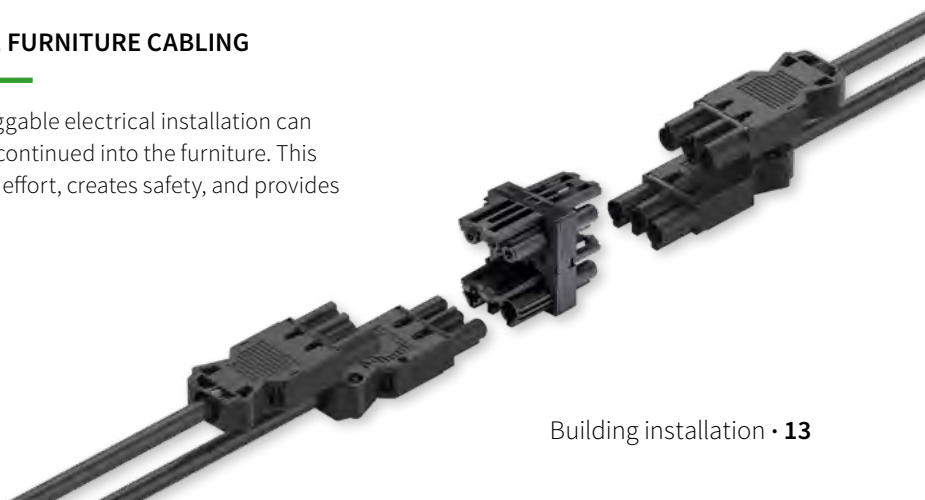
- Fast, easy, and safe installation.
- Standardized interfaces for easy replacement.
- High functional reliability and error prevention due to coded plug system.

WINDOW BLINDS

Decentralized control and automation of window blinds drives offers huge savings potential with regard to the cables to be laid.

OFFICE FURNITURE CABLING

The pluggable electrical installation can also be continued into the furniture. This reduces effort, creates safety, and provides clarity.





HOTELS



INFRASTRUCTURE CABLING

Hotel rooms are supplied via gesis®NRG, the flexible busbar with a high core cross section, which ensures clear structures in the installation level of the corridor area.

WINDOW BLINDS

Decentralized control and automation of window blinds drives offers huge savings potential with regard to the cables to be laid.

DECENTRALIZED ROOM AUTOMATION

Lighting, shading, and room climate are crucial for maximum comfort in the room. Our system distributors integrate the intelligent room automation devices into the pluggable, decentralized electrical installation – for a flexible and secure solution.



REQUIREMENTS

- Fast, easy, and safe installation.
- Easy to maintain.
- Quick replacement of faulty components.
- Brief (non-existent) downtime for rooms.



SOLUTIONS

- Industrially prefabricated components.
- Directly pluggable to end device.
- Set solutions for simple logistics.
- Easy to plug together on site.



ADVANTAGES

- Fast, easy, and safe installation.
- High functional reliability and error prevention due to coded plug system.
- Minimal downtime.

OPTIMIZED SOLUTION

LIGHTING (REGULATED)

Thanks to the pluggable design of the entire lighting system, any component can be replaced quickly, easily, and safely in the event of a fault.





HOSPITALS



INFRASTRUCTURE CABLING

Patient room are supplied via gesis®NRG, the flexible busbar with a high core cross section, which ensures streamline structures in the installation level of the corridor area.

CABLE TRAY

The space-saving use of gesis®NRG flat cables inside cable trays allows for a pluggable installation throughout and maximum flexibility.

LIGHTING (SWITCHED)

Thanks to the pluggable design of the entire lighting system, any component can be replaced quickly, easily, and safely in the event of a fault.



REQUIREMENTS

- Fast, easy, and safe installation.
- Easy to maintain.
- Quick replacement of faulty components.
- Brief (non-existent) downtime for rooms.



SOLUTIONS

- Industrially prefabricated components.
- Directly pluggable end consumers.
- Set solutions for simple logistics.
- Easy to plug together on site.



ADVANTAGES

- Fast, easy, and safe installation.
- High functional reliability and error prevention due to coded plug system.
- Minimal downtime.

DECENTRALIZED ROOM AUTOMATION

As the necessary room automation components are decentralized and pluggable in the system distributor, installation space can be saved in the local sub-distribution boards and more net floor space is available.





RETAIL SHOPS



LIGHTING (CONTROLLED CENTRALLY)

The pluggable design of the entire lighting system and its supply via a flexible busbar results in streamline structures that are easy to maintain.

LIGHTING (REGULATED)

Installations are equipped for future requirements and changes thanks to the 7-pole flat cable design with 3-phase mains and DALI signal.



REQUIREMENTS

- Structured, flexible infrastructure.
- Safe and quick installation.
- Changes without any effort.
- Future-proof installation.



SOLUTIONS

- Industrially prefabricated components.
- Directly pluggable luminaires.
- Optimized site logistics.
- Easy to plug together on site.



ADVANTAGES

- Fast, easy, and safe installation.
- Clear structures as a basis for easy extendability.
- Replacement of faulty components by trained persons.





RETAIL FURNITURE STORES + ELECTRONICS + DIY STORES



INFRASTRUCTURE CABLING

The 5-pole flat cable gesis®NRG can distribute over 34 kW. gesis®RAN system distributors with protective devices and pre-assembled connecting cables ensure comprehensive, safe, and flexible power availability.

LIGHTING (CONTROLLED CENTRALLY)

The pluggable design of the entire lighting system and its supply via a flexible busbar results in streamline structures that are easy to maintain.



REQUIREMENTS

- High energy demands in the space.
- Changing energy priorities.
- Safe installation.
- Remodeling under own responsibility.



SOLUTIONS

- Industrially prefabricated components.
- Decentralized system distribution units for installing safety devices.
- Completely pluggable design up to the end device.
- Easy to plug together on site.



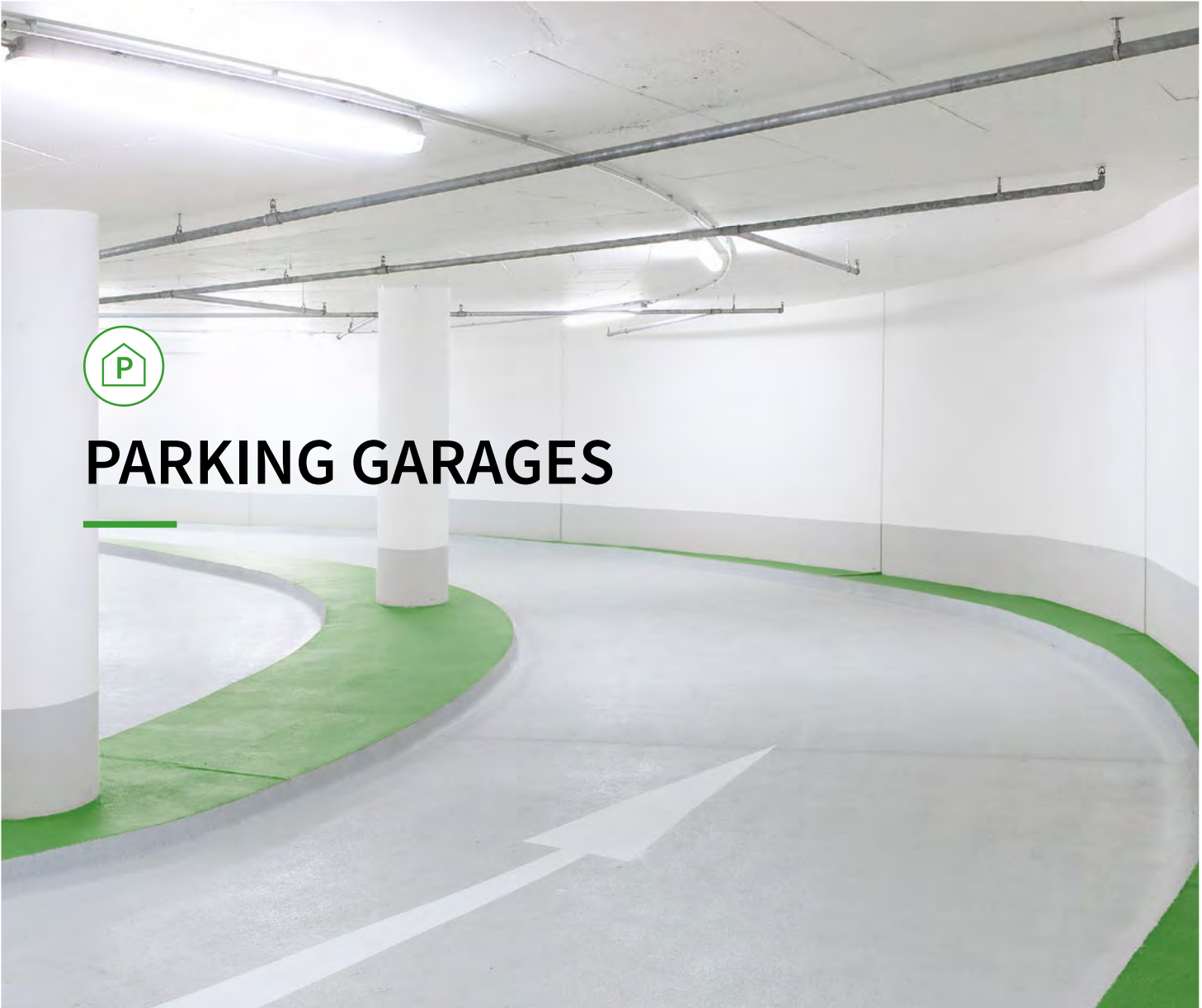
ADVANTAGES

- Fast, easy, and safe installation.
- Abundant availability of power.
- Smaller changes can be made by instructed persons.





PARKING GARAGES



OPTIMIZED SOLUTION

PARKING GARAGE LIGHTING (REGULATED)

Installations are equipped for future requirements and changes thanks to the 7-pole flat cable design with 3-phase mains and DALI signal.



OPTIMIZED SOLUTION

PARKING GARAGE LIGHTING (SWITCHED)

The pluggable design of the entire lighting system means that luminaires do not need to be opened on site anymore. This minimizes the complexity and time required for electrical installation.





WAREHOUSES + LOGISTICS + PRODUCTION



REQUIREMENTS

- High degree IP rating.
- Easy luminaire replacement.
- No opening of luminaires on site.



SOLUTIONS

- Industrially prefabricated components.
- Directly pluggable luminaires.
- Optimized site logistics.
- Easy to plug together on site.
- Coordinated production dimensions.



ADVANTAGES

- Fast, easy, and safe installation.
- Luminaires do not have to be opened on site.
- Safe function with manufacturer's guarantee.
- Replacement of faulty components by trained persons.





SCHOOLS



DECENTRALIZED ROOM AUTOMATION

The installation column offers sufficient installation space for decentralized room automation. All protection/switching and room automation devices are installed in the column and can be plugged in. The column also offers sufficient flexibility for future adaptations.

WINDOW BLINDS

Decentralized control and automation of window blinds drives offers huge savings potential with regard to the cables to be laid.



REQUIREMENTS

- Upgraded technology.
- Optimized energy use.
- Protection against unauthorized access.



SOLUTIONS

- Industrially prefabricated components.
- Installation column as central assembly area.
- Installation column as link between floor and ceiling.
- Easy to plug together on site.



ADVANTAGES

- Fast, easy, and safe installation.
- Installation column arrives on site fully pre-wired.
- Utility rooms can be reduced in size.
- Technological modernization without interfering with the structure of the building.

INSTALLATION COLUMN

- “Autonomous” installation technology for every classroom.
- Can be maintained independently of other rooms.
- Facilitates energy related and digital revitalization.
- Available in many different surface designs

INFRASTRUCTURE CABLING

Structured power distribution in floor or ceiling

APPLICATION IN THESE BUILDING TYPES:



The gesis®NRG flat cable 5G10 is particularly suitable for bringing energy into hotel, hospital, retail, and office spaces. It can be loaded with up to 50 A as a 3-phase system. The required safety devices for the output adapter and the connection cable are realized in a system distribution unit. Wieland also delivers the system distribution units with a connection cable already connected and a pre-assembled flat cable adapter. The rest of the installation can then proceed in an entirely pluggable fashion.



ENERGY

Power can be made available everywhere and in streamline structures.



INSTALLATION

There is no need for any laborious cutting, baring, stripping, or clamping of the cables.



OPTION

In the corresponding design with decentralized fuse protection, the gesis®NRG flat cable 5G10 can also be used to supply floor boxes.

FLOOR BOX SUPPLY

Three-phase power supply up to just before the socket

APPLICATION IN THESE
BUILDING TYPES:



The gesis®NRG flat cables 5G2.5/4 are the ideal solution for structured supply to floor boxes. Three-phase power supply up to just before the floor boxes ensures reduced energy consumption. The availability of several cable colors makes it easier to distinguish between networks (NN/IT or general/emergency). The 3-pole, pluggable taps with free phase selection enable flexible load sharing. Floor boxes from various system partners are available as pluggable models straight from the factory. These can also be supplied with decentralized safety devices (MCB, RCBO) on request.



ENERGY

Three-phase power supply to the field reduces the voltage drop and saves energy.



INSTALLATION

There is no need for any laborious cutting, baring, stripping, or clamping of the cables.



OPTION

Using floor boxes from our system partners means that the entire floor installation can be made pluggable.

CABLE TRAY SUPPLY

(NORMAL AND SAFE SUPPLY)

Three-phase power supply up to just before the socket

APPLICATION IN THESE
BUILDING TYPES:



The gesis®NRG flat cables 5G2.5/4 can also be used in cable trays thanks to the tap which is routed parallel to the cable. Three-phase power supply up to just before the socket ensures reduced energy consumption. The availability of several cable colors makes it easier to distinguish between networks (NN/IT or general/emergency). The 3-pole, pluggable taps with free phase selection enable flexible load sharing.



ENERGY

Three-phase power supply to the field reduces the voltage drop and saves energy.



INSTALLATION

There is no need for any laborious cutting, baring, stripping, or clamping of the cables.



OPTION

Using cable tray sockets from our system partners means that the entire cable tray installation can be made pluggable.

LIGHTING CABLING

(SWITCHED)

Pluggable from the power supply to the luminaire

APPLICATION IN THESE
BUILDING TYPES:



With gesis®CLASSIC the entire lighting system can be made pluggable. Where necessary, switches or buttons can also be plugged in using switch modules. This allows a flexible choice of connection technology for the luminaires.



SAFETY

With directly pluggable luminaires there is no need to open them for electrification. This means that the industrial manufacturing standard can also be maintained on site.



INSTALLATION

Thanks to the completely pluggable design of the installation, there is no need for any cutting, baring, stripping, or clamping of the cables. This speeds up the installation process enormously.



OPTION

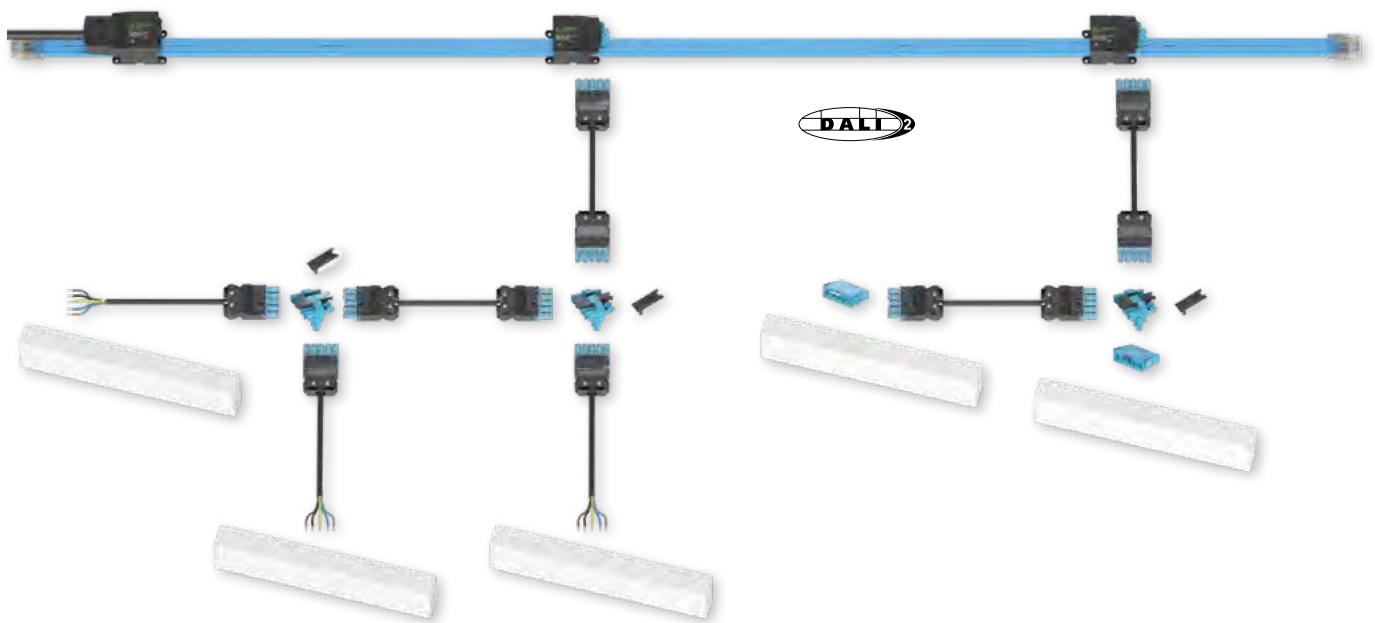
Switches and buttons for local operation can be integrated via switch modules.

LIGHTING CABLING

(REGULATED, DALI OR 1-10 V)

Power and DALI for the area

APPLICATION IN THESE BUILDING TYPES:



For example, gesis® NRG in combination with gesis® CLASSIC makes it extremely easy to supply DALI luminaires. The connection technology for the luminaires can be flexibly selected. For large-area applications with high loads and large dimensions, a 7-pole gesis® NRG flat cable is available for combining three-phase current and DALI signals.



SAFETY

With directly pluggable luminaires there is no need to open them for electrification. This means that the industrial manufacturing standard can also be maintained on site.



INSTALLATION

Thanks to the completely pluggable design of the installation, there is no need for any cutting, baring, stripping, or clamping of the cables. This makes the installation process easy, quick, and safe.



OPTION

For large-area applications with high loads and long cable lengths, a 7-pole gesis® NRG flat cable is also available.

LIGHTING CABLING

(SWITCHED CENTRALLY, 1/3 CIRCUIT)

Automated light for the area

APPLICATION IN THESE
BUILDING TYPES:



With gesis®NRG in combination with gesis®CLASSIC, it is extremely simple to supply luminaires in large, centrally controlled areas. This allows a flexible choice of connection technology for the luminaires. The usual 1/3 circuit in retail areas can be configured and adapted easily and quickly with the help of the free phase selection of the output adapters of the flat cable.



SAFETY

With directly pluggable luminaires there is no need to open them for electrification. This means that the industrial manufacturing standard can also be maintained on site.



INSTALLATION

Thanks to the completely pluggable design of the installation, there is no need for any cutting, baring, stripping, or clamping of the cables. This makes the installation process easy, quick, and safe.



OPTION

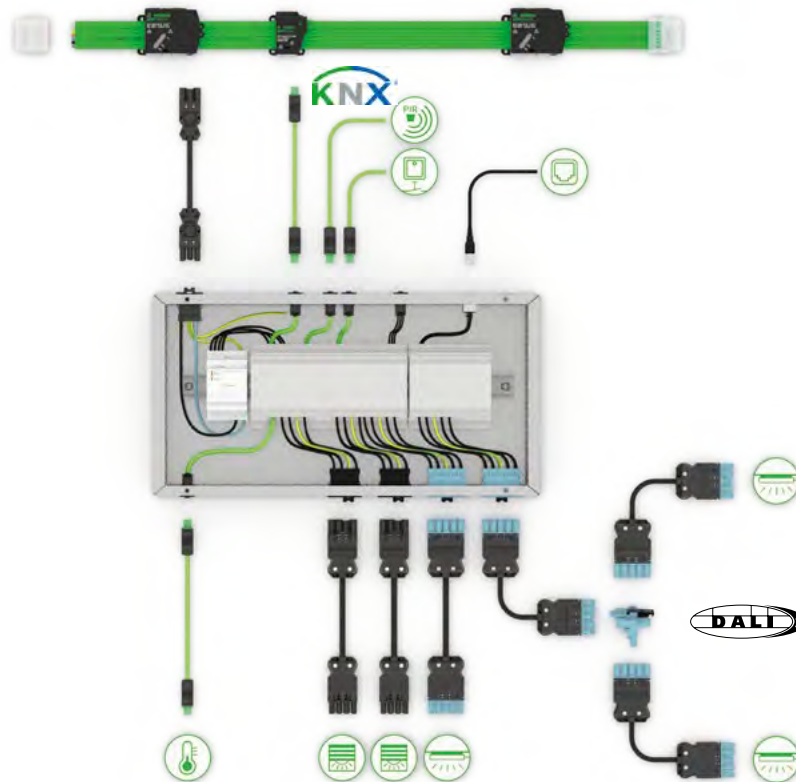
The individual luminaires can be assigned to the luminaire groups via the phase selection of the flat cable tap.

DECENTRALIZED ROOM AUTOMATION

(KNX)

Decentralized control/automation reduces the space required in technical rooms

APPLICATION IN THESE BUILDING TYPES:



With the decentralized, pre-assembled MSR system distributors, room automation can be installed directly on-site, saving installation space in the technical rooms. The system distributors accommodate building automation components and offer pluggable interfaces to the field level for quick and error-free installation. Ideally, this system is supplied via a 7-pin gesis® NRG flat cable, which provides both three-phase current and the KNX network.



RESOURCES

The decentralized installation of the room automation saves space in the technical rooms and ensures clear structures and simple planning.



INSTALLATION

Upon request, we can assemble the required sensors and loads using our gesis® installation connector system. Installation is simple, fast, and secure.



OPTION

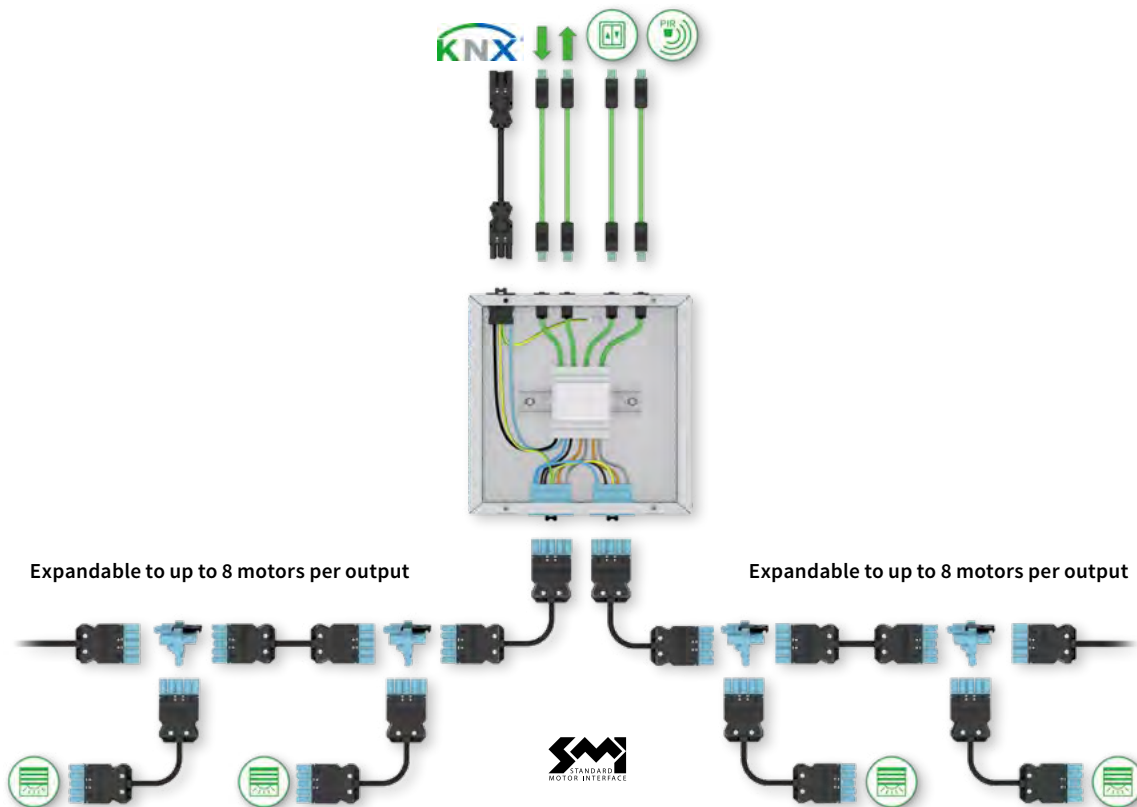
Use of a 7-pole flat cable to supply the modules leads to a clear installation structure.

WINDOW BLINDS

(KNX, RELAIS + SMI)

Decentralized control/automation saves cable material

APPLICATION IN THESE BUILDING TYPES:



The RAU system distributor enables decentralized and flexible integration of sun protection systems. By integrating intelligent room automation devices, sun protection is precisely controlled, energy consumption is optimized, and comfort is increased. The plug-in design facilitates installation and adaptation to individual requirements – ideal for efficient, smart building automation.



RESOURCES

The decentralized installation of the sun protection actuators saves a lot of cabling.



INSTALLATION

Thanks to the fully pluggable installation, time-consuming tasks such as cutting, stripping, and clamping cables are eliminated. This ensures quick, easy, and safe installation.



OPTION

The room automation devices are located in each room and can be individually equipped, thus enabling future-proof adaptation or expansion at any time.

OUR SERVICES + SERVICING PACKAGES

With an extensive range of services and servicing packages, Wieland Electric is a highly capable partner, assisting its customers worldwide with the conception, planning, and implementation of smart electrical installations.

WE ARE WITH YOU ALL THE WAY

- From the first idea through to concept development.
- From the luminaire plan to the cabling concept.
- From the concept to the quantity survey and tendering material and through to the logistics to suit your needs.
- From the configuration and optimization of the system distribution units to their industrial production and through to extensive documentation.

OUR SERVICES

- + CONCEPTION
- + PLANNING
SUPPORT
- + IMPLEMENTATION
- + PROJECT PLANNING
- + OPTIMIZATION
- + REALIZATION
- + PRODUCTION



APPLICATION EXAMPLES

On our website you will find application examples for pluggable installation technology in buildings.

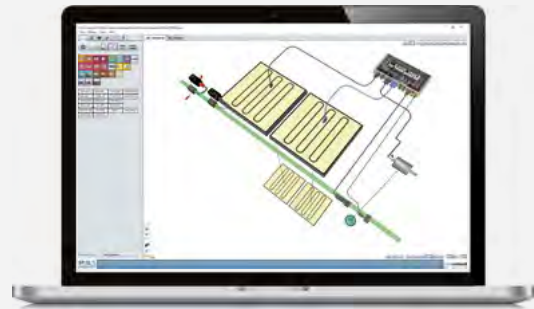
**Scan QR code –
watch application examples.**



HELLO BUILDING
Online

GESIS® PLAN

THE CONCEPTION TOOL



Architects and electrical planners cannot perform their jobs without software planning tools, especially when reliable information regarding project scope, scheduling, and cost estimates is required.

Wieland Electric offers the gesis®PLAN software for conception pluggable electrical installations with gesis®. This conception 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.

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



Wieland on YouTube
See our solutions
in motion

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



Technical consultation
Building Solutions

Phone: +49 951 9324-996

Email: building@wieland-electric.com

Worldwide: <https://wie.li/contactinternational>



ONLY ONE TAP AWAY

Our Wieland E-Shop
Over 25,000 products - anytime

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

HEADQUARTERS

Wieland Electric GmbH
Brennerstraße 10 – 14
96052 Bamberg · Germany

Phone +49 951 9324-0
Fax +49 951 9324-198
info@wieland-electric.com

0431.1 AC 05/25

Represented in over 70 countries worldwide:

www.wieland-electric.com