





CUSTOMIZED SOLUTIONS

## **INSTALLATION** COLUMN

Room installation and automation in an attractive housing.

"The installation column is a visually appealing distributor that offers sufficient space to accommodate both present and future technical fixtures."

**TOBIAS HENNEMANN** Product Manager Distribution Boxes

# **INSTALLATION** COLUMN

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### **INSTALLATION TECHNOLOGY** FOR THE SCHOOL OF TOMORROW.

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 lighting installation and automation, for room automation, and for power distribution.

It is important to move with the times. This is particularly true in the area of education. If schools want to implement technological advancements or to optimize energy usage, they do not necessarily have to make changes to the building's structure. Our installation column is the link for the electrical installation and the solution to all your modern room automation needs. It acts as a central storage space in every classroom, linking the floor with the ceiling.

Thanks to industrially prefabricated components, all that is left to do is to plug the column together on site.

#### SOLUTIONS FOR:

- + SCHOOLS
- + UNIVERSITIES
- + LIBRARIES
- + PUBLIC BUILDINGS
- + OFFICES



#### SMART AUTOMATION

We create the connection between the durable electrical installation and the ever-improving automation.



#### SUSTAINABLE PROCESS QUALITY

Our high degree of industrial prefabrication and our internal testing guarantee optimum quality, ensuring that you will meet the demands placed on you.



#### QUICKER ASSEMBLY

We think holistically and deliver like that too! Innovative components from plug to column – we are a one-stop shop. This provides for a short assembly time and optimizes the construction processes.



#### COMPLETELY PLUGGED

Our installation connector system gesis® ensures a quick, simple and safe installation. The column can be completely integrated into the pluggable electrical installation via a flange plate on the distribution panel!

### wieland

### GESIS® INSTALLATION COLUMN

In future, all the room and digital functions per room or classroom will be realized with just one column as an access point. It will be possible to achieve efficient room temperature control, air and CO<sub>2</sub> measurement, and air filtering as desired. Decentralization saves space and additional installation work. This, combined with our pluggable installation, enables quick and error-free installation – choose the gesis<sup>®</sup> system from the global market leader in pluggable electrical installations.



#### LIGHTING

The lighting can be controlled by the switching unit housed in the front.



#### SWITCHES, SOCKETS

Both the column's sockets and the infrastructure cabling, such as the parapet duct or various switching elements in the room, are centrally and securely integrated via the column.

#### MULTIMEDIA

A quick and stable internet connection is realized by means of fiber-optic to copper converter solutions or switches. Other multimedia connections can also be integrated, e.g. SAT-TV, USB, HDMI.



#### SUNSHADE

The protection from the sun can be operated via the control panel on the column, or automated with room automation.

#### HEATING, AIR CONDITIONING, VENTILATION

Energy-efficient room climate at the touch of a button – adapted to individual needs.

#### ALARM SYSTEMS

Integrated alarm systems can help assess emergency situations correctly, saving and protecting lives.

### GESIS® INSTALLATION COLUMNS AT A GLANCE









USH BA

BASIC SURFACE

COMFORT

Installation type	Flush mounted (fully or partially recessed)	Surface mounted	Surface mounted
Operating concept			
Elements placed on the front and in the phone compartment accessible to	User	User	User
Open doors, e.g. to access the operation of the protective/switching devices	Instructed person (caretaker)	Instructed person (caretaker)	Instructed persor (caretaker)
Open doors and remove the covers, e.g. to access the operation of the protective/switching devices and the installation level	Specialist	Specialist	Specialist
Swing the entire column up and open the installation level	-	-	Specialist
Equipment			
3 combinable column heights	•	•	•
Dimensions (W x D x H): 450 x 215 x H* mm	•	•	•
Room height compensation	-	Integrated	Integrated
Distributor with 18 division units (DU) per row**	5-row	5-row	5 to 7-row
Distribution panel with flange plate for pluggable installation	•	•	•
Optional lockable door in lower section, e.g. media connections, additional sockets, etc.	-	-	•
Standard colors: white pearl or white matt	•	•	•
Customizable decor	-	-	•

\*Height according to variant, see page 10, 11

\*\*max. 5 rows for operable protection/switching devices

### WHICH COLUMN IS REQUIRED?



### GESIS® INSTALLATION COLUMN BASIC





#### BASIC SURFACE MOUNTED

#### VARIOUS HEIGHTS

- 2580 mm (max. 2870 mm with base/ceiling connection)
- 2830 mm (max. 3120 mm with base/ceiling connection)
- 3080 mm (max. 3460 mm with base/ceiling connection)

#### FRONT COVER TOP + BOTTOM

- Individually machined cutouts
- Fixtures on site
  - Simple, tool-free unhooking possible

#### DOOR IN MIDDLE SECTION

- Phone panel with door or fixed front cover in middle section for flush intercom stations, for example
- High-quality hinges
- Left-hand/right-hand hinge possible

• Cylinder lock lockable, profile cylinder on site

#### DISTRIBUTION PANEL

- Max. 5-row, 18 DU per row
- Cover for touch protection
- Pluggable connectable
- Configuration by Wieland Electric

#### CABLE STRAIN RELIEF

- C-rail below distribution panel, top and bottom cable entry
- Hammer head profile at top and bottom of distribution panel

#### BASIC FLUSH MOUNTED

#### TECHNICAL SPECIFICATIONS SAME AS BASIC SURFACE MOUNTED

- Available for the installation column in the heights: 2580 mm, 2830 mm, 3080 mm.
- Mounting by screwing into masonry or laying in foam
- Protective/mounting batten with reference marker



### GESIS® INSTALLATION COLUMN COMFORT



SWIVELING FRONT

#### COMFORT SURFACE MOUNTED

#### VARIOUS HEIGHTS

- 2580 mm (max. 2870 mm with base/ceiling connection)
- 2830 mm (max. 3120 mm with base/ceiling connection)
- 3080 mm (max. 3460 mm with base/ceiling connection)

#### SWIVELING

- Swiveling body for easier and faster mounting
- Front-accessible switches, sockets, and media connections
- Internal taps only with access authorization (tool)
- Swivel direction selectable

#### FRONT COVER TOP

- Individually machined cutouts
- Fixtures on site

#### DOORS IN MIDDLE + LOWER SECTION OF COLUMN

- Phone panel with door or fixed front cover in middle section for flush intercom stations, for example
- High-quality adjustable furniture hinges
- Left-hand/right-hand hinge possible
- Cylinder lock lockable, profile cylinder on site
- Access to "internal" user level

#### DISTRIBUTION PANEL

- Max. 7-row (5 rows accessible via door, 2 rows concealed, 18 DU per row)
- Cover for touch protection
- Pluggable connectable
- Configuration by Wieland Electric

#### **CABLE STRAIN RELIEF**

- C-rail below distribution panel, top and bottom cable entry
- Hammer head profile at top and bottom of distribution panel

### SETUP OF THE GESIS® INSTALLATION COLUMN BASIC



#### **UPPER PART**

- Removable front with installation option
- Door element lockable at the top
- Door element below (phone compartment) alternatively as
  - push-to-open
  - Removable front with installation option

#### LOWER PART

• Removable front with installation option

#### FIXTURES

- Distribution panel 5-row, 18 DU each
- Distribution panel is mounted with cover (touch protection)
- Distribution panel on request with flange plate for pluggable connection
- Optional gesis<sup>®</sup> FLEX room automation
- Other, e.g. switches, sockets, IT components, integrated
- Cable strain relief
- Pluggable connection possible by means of gesis® installation connector system

#### **BASIC COLUMN**

- Cutouts in the removable panels
- Wired and individually tested distributor (protective switching devices, automation, etc.)
- Built-in or supplied room automation
- Installation space for other applications



### **INTEGRATION OPTIONS** FLUSH MOUNTED **+** SURFACE MOUNTED



#### **FLUSH MOUNTED**

- Assembled dimension approx. 19 mm (protruding from the wall)
- Matching installation box for column height, inserted into the wall on site
- Cable entry from below and above
- Plaster cover for correct diagonal dimension
- Independent of the room height
- Side or rear wall mounting in the installation box



#### SURFACE MOUNTED

- No structural measures necessary
- Room height adjustment with base and ceiling connection
- Both height-adjustable
- Base adjustable in steps with fine adjustment for exact vertical mounting
- Rear-wall screws into masonry

### SETUP OF THE GESIS® INSTALLATION COLUMN COMFORT



#### BODY

#### UPPER PART

- Removable front
  with installation option
- Door element lockable at the top
- Door element below (phone compartment) alternatively as
  - push-to-open
  - Removable front with installation option

#### LOWER PART

• Removable front with installation option

#### FIXTURES

- Distribution panel 5 to 7-row, 18 DU each
- Distribution panel is mounted with cover (touch protection)
- Distribution panel on request with flange plate for pluggable connection
- Optional gesis<sup>®</sup> FLEX room automation
- Space for e.g. switches, sockets, IT components (to be integrated on site)
- Cable strain relief
- Pluggable connection possible by means of gesis® installation connector system

#### COMFORT COLUMN

- Cutouts in the removable panels
- Wired and individually tested distributor (protective switching devices, automation, etc.)
- Built-in or supplied room automation
- Installation space for other applications



### **INTEGRATION OPTIONS** SURFACE MOUNTED + SWIVELING



#### SURFACE MOUNTED

- No structural measures required
- Ceiling compensation infinitely variable
- Base adjustable in steps with fine adjustment for exact vertical mounting
- Rear wall made of galvanized sheet steel powder-coated





#### SWIVELING

The entire body can be swiveled to facilitate quick and effective installation of fixtures or even laying of cables; the swivel direction is freely selectable.

### **BENEFITS OF DECENTRALIZED** INSTALLATIONS

Cabling based on "smart installation concepts" creates clear installation structures. This, combined with pluggability, leads to a quickly and safely installable system. The consistent three-phase wiring up to just before the consumer also reduces the voltage drop, which increases the energy efficiency.

#### INSTALL SMARTLY – EXPLOIT POTENTIAL

With our gesis<sup>®</sup> installation system, we have revolutionized electrical installation. High-quality and durable components boast impressive 70% time and 30% cost savings! gesis<sup>®</sup> 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 the consumer. Project-specific installation distributors and columns for decentralized data and power distribution, which at the same time provide installation space for protective, switching, and automation devices, complete our installation system.

The simple installation structure that results from the decentralized arrangement, saves costs and energy and is future-proof.





### YOUR BENEFITS

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



#### DECENTRALIZED INSTALLATION

- Creates simple, future-proof structures
- Vertical supply per floor
  - Only the main fuses and the bus system devices remain in the distribution unit
- Horizontal supply
  - Energy and bus signals are looped through
- Smaller utility rooms increase net floor area
- Room automation is placed directly in the room
- Protective/switching devices on site





#### DECENTRALIZED SMART INSTALLATION





# **ROOM AUTOMATION** WITH THE **GESIS®** PLUG & PLAY INSTALLATION.

New energy concepts for public buildings are in demand. Anyone who wants to make energy-efficient and digital educational buildings a reality must adopt the right course now.

In the case of new buildings and retrofit measures, developers are quite rightly demanding that planners and operators significantly increase the energy efficiency of buildings with the aim of saving costs and resources. The transition to smart buildings requires flexible, communications-capable systems and products. Public buildings in particular, such as schools, hospitals, or administration buildings, have to be renovated and brought up to date technologically on a regular basis.

Short timescales and tight completion schedules are often a problem for electrical installers on site.

With our gesis<sup>®</sup> installation column, building owners and operators can rely on well-prepared, quick, safe, documented, and, above all, error-free installation and room automation according to the plug & play principle – easy to handle and maintain, and flexible to accommodate future changes to the building.

### STUDY BY BIBERACH UNIVERSITY OF APPLIED SCIENCES ON THE TOPIC OF ENERGY SAVING

A scientific study in three rooms with different automation levels was conducted at Biberach University of Applied Sciences during the lecture period. Considerable savings potential was identified in the process. Savings of more than 30% in electrical energy consumption and even more than 50% in heating energy consumption are possible! And all this in the existing structure without any structural changes. The study "Energy efficiency with building automation" was carried out from 2009 to 2011 by Professor Dr.-Ing. Martin Becker and his team.



### **GESIS®** COMPONENTS

#### CONNECTORS

Connectors are the basic element of the pluggable electrical installation. In systems, they are used to make initial connections or to connect cables that cannot be introduced into the building in a pre-assembled manner, e.g. where cables are drawn into pipes. Wherever possible, they should be replaced by cable assemblies. Our systems are installation connector systems approved according to DIN EN 61535.

#### **CABLE ASSEMBLIES**

Cable assemblies enable extremely quick and error-free installation. They are available in different pole counts, cross-sections, cable types, and lengths, and with different connectors. Wieland manufactures the cable assemblies industrially. So you receive individually tested quality on the construction site.

#### DISTRIBUTION OPTIONS, E.G. FOR LIGHTING CIRCUITS WITH DALI FUNCTIONALITY

Connectors and cables would only allow individual strings. Our diverse distribution elements, which we call T, h, H, HH distributors for short, referring to the number and arrangement of the inputs/outputs, enable an effective extension of the string structure to a tree or star structure.

#### SIGNAL APPLICATION

Low-voltage connectors are used for safe bus cabling and the distribution of signals inside buildings in parallel to the distribution of energy, such as with a KNX presence detector.

#### DECENTRALIZED ROOM AUTOMATION

The gesis® FLEX series is KNX-based and modular. The function of a unit is determined by the type and number of extensions attached to a base module. DALI, EnOcean, and SMI Gateways enable cross-system communication.















### THE PROCESS FOR YOU AS THE **PLANNER**

What does a building installation using our products mean for you?



#### BASIC CONSIDERATION



#### A few fundamental questions should be clarified first.

- What functions are to be integrated?
- What electronics will be used?
- Which room units will be controlled?
- What construction space is available or will be needed?
- Will the plant installation be pluggable?

#### CONSULTATION



#### The goal is to specify the installation column, define the tender text and make a cost estimation.

- Define electronics and fixtures
- Define connection type
- Column size/material
- Optimize column variants and quantity structures
- accessories, such as connectors or cable assemblies

#### INVITING TENDERS



### You invite tenders for the installation column and accessories.

- You receive a cost estimate from us
- We draw up the tender texts together (neutrally as well)
- You tender the installation column and accessories
- We handle the queries from installers

#### EXECUTION



#### The contractor orders the necessary components.

- Wieland project manager is appointed
- Installation and wiring plans are created
- Final approval of the installation columns by the contractor's signature
- The installation columns are manufactured and individually tested in accordance with the applicable standards and guidelines
- Handover of documents and plans to the contractor



#### **Contact our experts**

Your Wieland Service Partners worldwide: https://www.wieland-electric.com/en/contacts/contact/

### THE PROCESS FOR YOU AS THE **CONTRACTOR**

What will change in the installation and in the process?







### **APPLICATION** EXAMPLES

Numerous schools and educational establishments have been successfully planned and implemented in the last 10 years. Get in touch with us.

#### Office building

- Model: Flush mounted BASIC
- Phone compartment
- Controls and sockets
- Clock

#### Administration building

- Model: Flush mounted BASIC
- Phone compartment
- Controls and sockets
- Clock



#### Classroom

- Model: Surface mounted BASIC
- Emergency call station
- Controls and sockets
- Clock



### Lecture hall

- Model: Surface mounted Comfort
- Media connections
- Controls and sockets
- Clock





All brochures from Wieland Electric are available for download on our website.

#### https://www.wieland-electric.com/en/support/downloads

Interesting for you

#### GESIS® CATALOG Pluggable electrical installation Part No. 0670.1



GESIS® ELECTRONIC Decentralized building automation with plug&play Part No. 0700.1





Part No. 0702.1

**GESIS® DISTRIBUTION BOXES** 

From idea to implementation

and delivery to construction site



**Wieland on YouTube** See our solutions in motion

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



**Technical consultation** Building Solutions

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.

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





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