

Remote and pluggable room automation

You want your installation to be efficient, flexible, future-focused and affordable? Then you will not get around a remote and pluggable electrical installation system.

The inputs and outputs required for room automation are installed remotely, that is directly in the room. Unnecessary cable material is thus avoided, clear structures are created and the system remains flexible. In the construction phase the **gesis[®]RAN** room boxes are already delivered ready for operation and can be installed quickly. As no two buildings are alike and as there are innumerable combinations of inputs and outputs for the various room functions, the room boxes are customized and ideally planned with some extra unused space. Necessary changes are made during operation on site and without influencing the function of the other offices.

The pluggable electrical installation system replaces traditional connection technologies and considerably reduces the installation time during construction and in the case of modifications. Time-consuming and inflexible cable layout, stripping of the sheaths, etc., are no longer required at all. The entire cable network is pre-assembled in the factory. Various cable lengths, cross sections and pole configurations, distribution components, and pluggable consumer devices such as luminaires are available as standardized products providing consistent high quality.

Modular device concept for KNX or LON connection

The **gesis[®]RM** device concept was designed especially for remote room automation. This concept does not anticipate the type and number of inputs and outputs of the automation components. A base module can manage a maximum of four extension modules. The system provides binary inputs for potential-free contacts or

radio sensors as well as outputs for lighting, sunblind and heating/cooling control. As the base module is available alternatively with KNX or LON interface, you can even select the building system of your choice. Both systems are standardized internationally and are used extensively in many countries.

The module series was extended by a DALI module for lighting control and two semi-conductor switches used to activate electrical valves for heating/cooling circuits.



Base devices:

- ❑ KNX / EIB bus interface
83.020.0400.3 / gesis EIB RM2-BAS
 - Enables the management of four extension modules
 - Any combinations of extension modules possible
 - KNX TP1 connection
- ❑ LON bus interface 83.020.0300.3 / gesis LON RM2-BAS
 - Enables the management of four extension modules
 - Any combinations of extension modules possible
 - TP/FT-10 transceiver
- ❑ Power supply 83.020.401.0 / gesis RM-PS
 - Supplies power to the base module and extension modules



Electrical Connections

Head office:
Wieland Electric GmbH
Brennerstraße 10-14
D-96052 Bamberg

Sales and Marketing Center:
Wieland Electric GmbH
Benzstraße 9
D-96052 Bamberg

Phone +49 (951) 93 24-0
Fax +49 (951) 93 24-198
www.wieland-electric.com
www.gesis.com
info@wieland-electric.com

AT Wieland

Components and system components for the control cabinet

- DIN rail terminal blocks
 - with screw connection
 - with spring clamp connection
 - with IDC connection
- Safety
 - Safety relays
 - Modular safety systems
- Fieldbus components
- Interface
 - Power supplies
 - Overvoltage protection
 - Measuring and monitoring relays
 - Time and switching relays
 - Coupling relays/solid state relays
 - Analog modules
 - Passive interfaces

Components and system components for field applications

- Remote automation
 - Remote power distribution
 - Remote fieldbus interface
 - Industrial multipole connectors
 - Modular multipole connectors
 - High-density multipole connectors
 - High-current multipole connectors
 - Multipole connectors for hazardous areas
 - Bushings for control cabinets
 - D-Sub connectors
 - Round connectors
- Empty housings and appliance connectors/terminal strips

AT Schleicher

- PLC systems and CNC based control systems
- Operator panels
- Application engineering & system solutions
- Customized products

BIT Wieland

- Building installation systems
 - Mains connectors IP20/IP65...IP68
 - Bus connectors
 - Combined connectors
 - Low-voltage connectors
 - Flexible flat cable systems
 - Distribution systems
 - Switching devices for EIB/KNX, LON, radio control
 - DIN rail terminal blocks for electrical installations
 - Overvoltage protection

PCB connectors Wieland

- PC board connectors
- PC board connectors
 - with screw connection
 - with spring clamp connection
 - with TOP connection



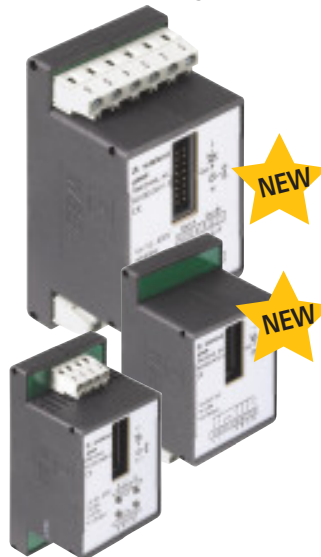
Extension modules for lighting control:

- ❑ DALI 2-channel 83.020.0410.0 / gesis RM-0/2DA
 - Two separate DALI channels
 - Max. eight DALI EBs per channel
 - DALI power supply integrated
 - DALI EBs are operated in parallel (broadcast)
 - Manual operation at the module
- ❑ Switching output 4-fold 83.020.0403.0 / gesis RM-0/4
 - Four potential-free relay outputs, 230 V; 16 A each
- ❑ Switching/dimming output 2-channel (relay/1-10V) 83.020.0405.0 / gesis RM-0/2SD
 - Two outputs with 230 V; 16 A each / 1 – 10 V; passive 50 mA
- ❑ Universal dimmer 2-fold 83.020.0409.0 / gesis RM-0/2D
 - Two outputs 0 – 230 V with 250 VA each



Extension modules for sunblind control

- ❑ Sunblind output 2-fold AC 83.020.0404.0 / gesis RM-0/2W
 - Two separate sunblind outputs
 - 230 V motors for two directions of rotation
 - Direct approach to positions and slat angles
 - Protection on the module
- ❑ Sunblind output 2-fold DC 83.020.0407.0 / gesis RM-0/2W DC
 - Two separate sunblind outputs
 - Activation of 24 V motors with pole inversion
 - Direct approach to positions and slat angles
 - Protection on the module



Extension modules for heating/cooling control:

- ❑ Semiconductor switch 4-fold AC voltage output 83.020.0411.0 / gesis RM-0/4HL AC
 - 12 to 230 V AC
 - 0.5 A per output
 - Four separate outputs
- ❑ Semiconductor switch 4-fold DC voltage output 83.020.0412.0 / gesis RM-0/4HL DC
 - 24 V DC
 - 0.5 A per output
 - Four separate outputs
- ❑ Semiconductor switch 4-fold AC/DC universal output 83.020.0406.0 / gesis RM-0/4HL
 - 24 to 230 V AC or DC
 - 0.5 A per output
 - Four separate outputs



Extension modules with inputs:

- ❑ Binary input 8-fold 83.020.0402.0 / gesis RM-8/0 (12)
 - Eight inputs that can be evaluated separately
 - 12 V scanning voltage generated by the module
 - Function parameterization in the base module
- ❑ Radio input 2 x 8-fold 83.020.0408.0 / gesis RM-16/0 (RC)
 - 16 inputs that can be evaluated separately
 - Antenna required (order separately)
 - Function parameterization in the base module
- ❑ Antenna for radio input 83.020.0503.0 / gesis RM AntSMA
 - SMA connector matching the radio input
 - 2.5 m connection cable