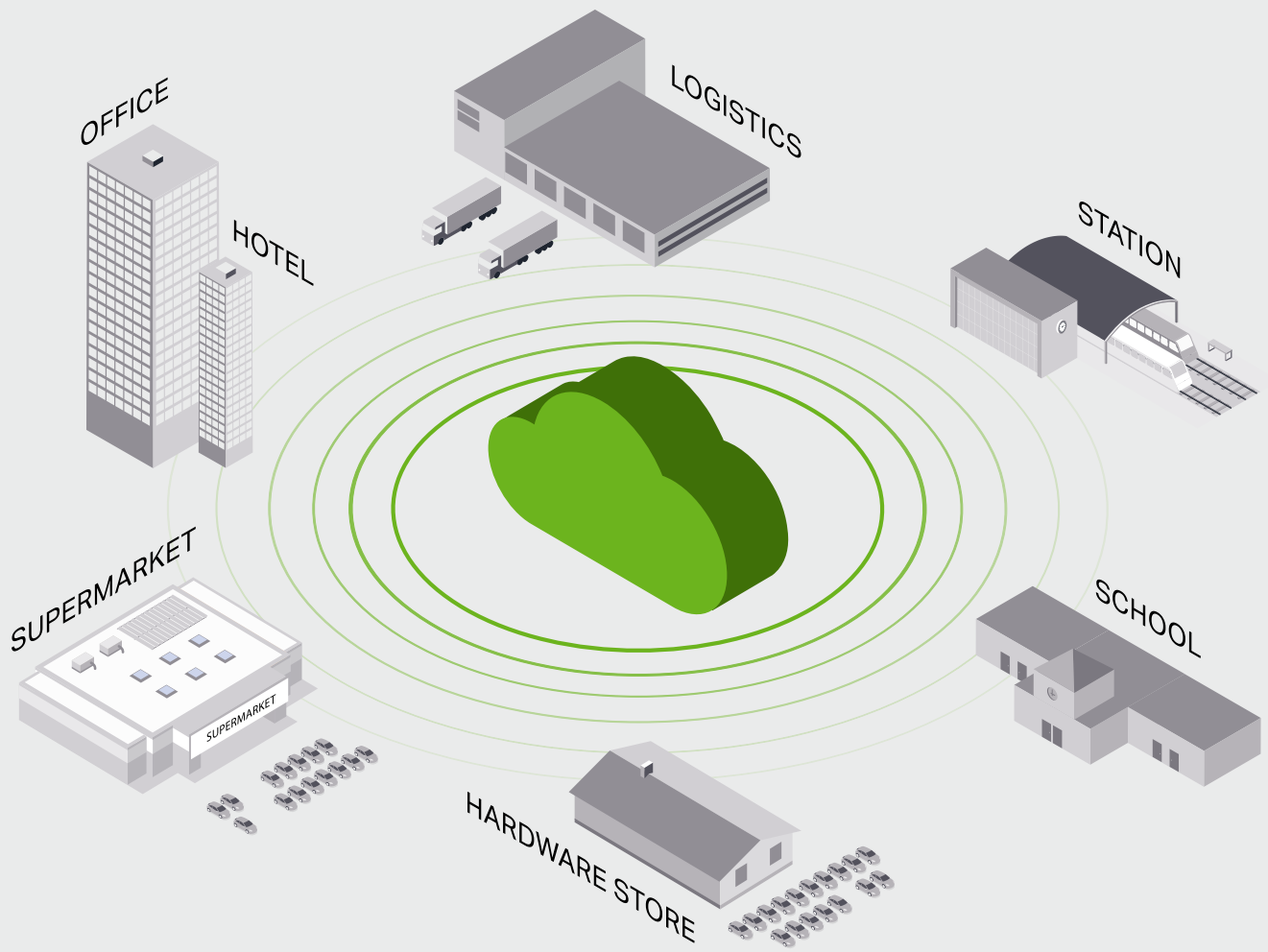
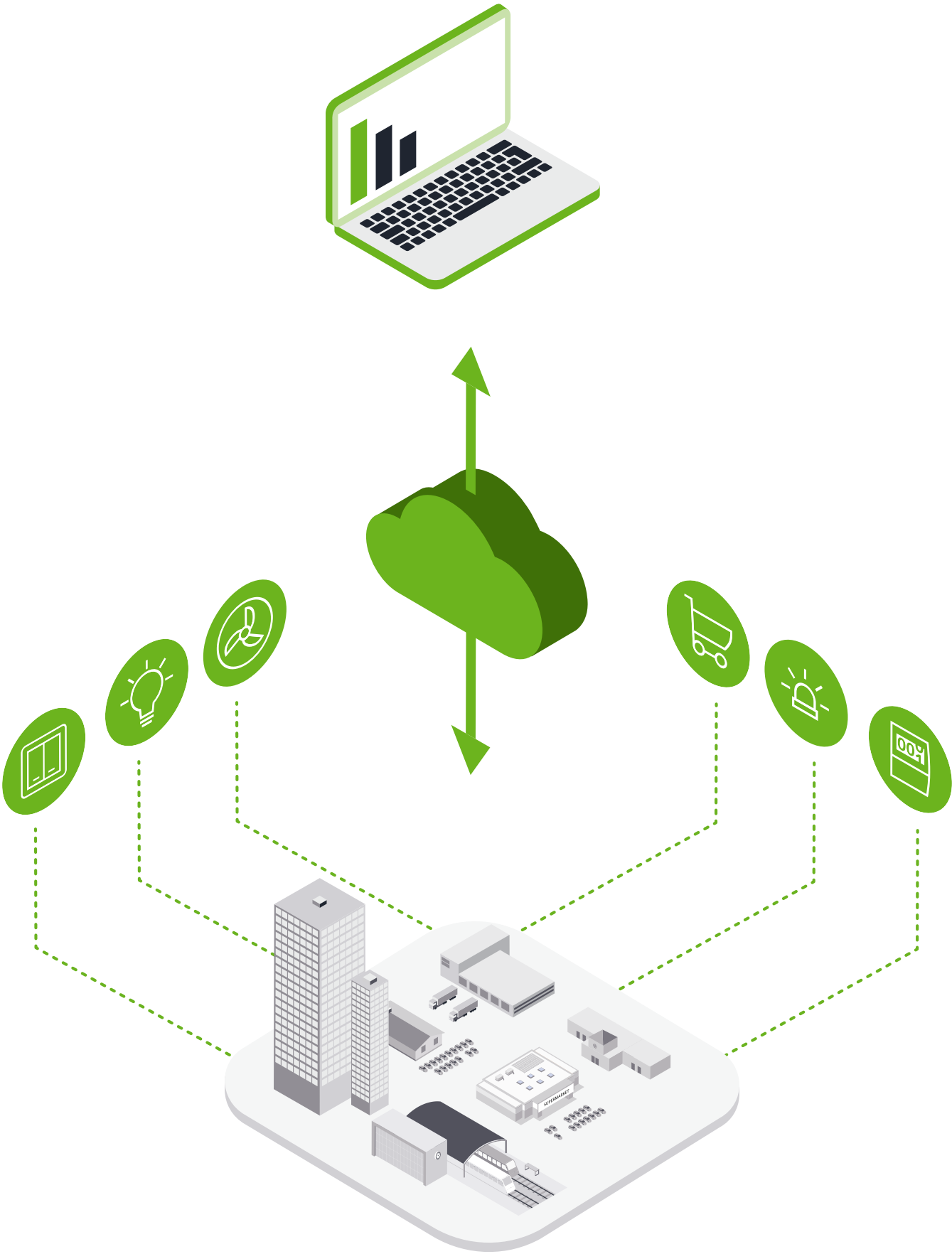




# Building and Property Management

Flexible Automation and Central Management





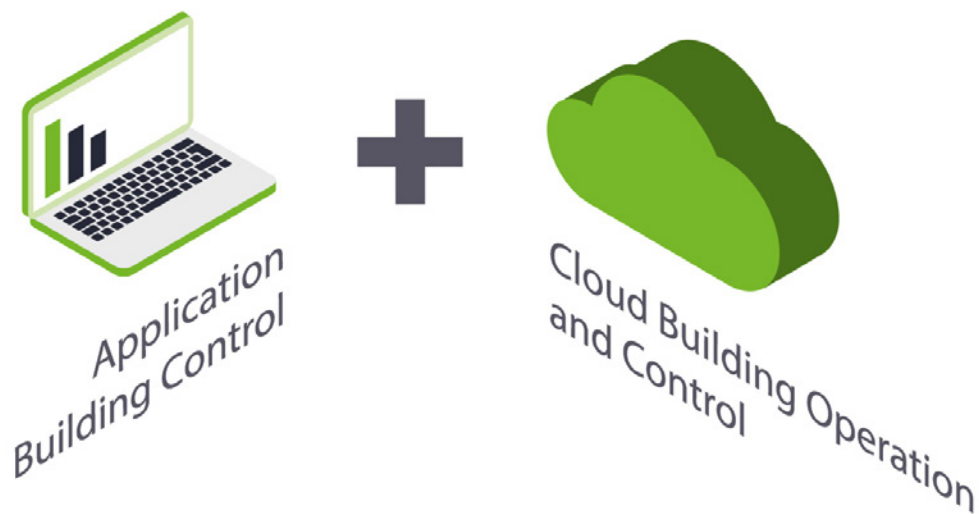
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# Flexible Automation and Central Management of Buildings and Distributed Properties

Modern automation solutions provide a way to combine and concentrate dramatically different technologies. WAGO Application Building Control and WAGO Cloud Building Operation and Control merge every area, includ-

ing monitoring and energy management, into one smart solution that significantly simplifies setting up and operating systems. And best of all, it helps you get a handle on costs.



## Local Controller Application

### Software with Many Functions

WAGO Application Building Control is pre-programmed application software in which all the functions necessary for automating distributed properties (e.g., retail stores) can be easily created.

- Basic functions for the configuration of lighting, shade control, heating, ventilation and air conditioning, timer programs, energy data acquisition, load management and equipment monitoring
- High degree of flexibility and scalability
- Configuration interface: simple configuration – no programming
- Web-based visualization
- Easy on-site operation on any terminal devices through the most common browsers

## Management in the Cloud

### Worldwide Data Access

Connecting to WAGO Cloud Building Operation and Control (BOC) completes the solution, allowing access to all the data from anywhere in the world.

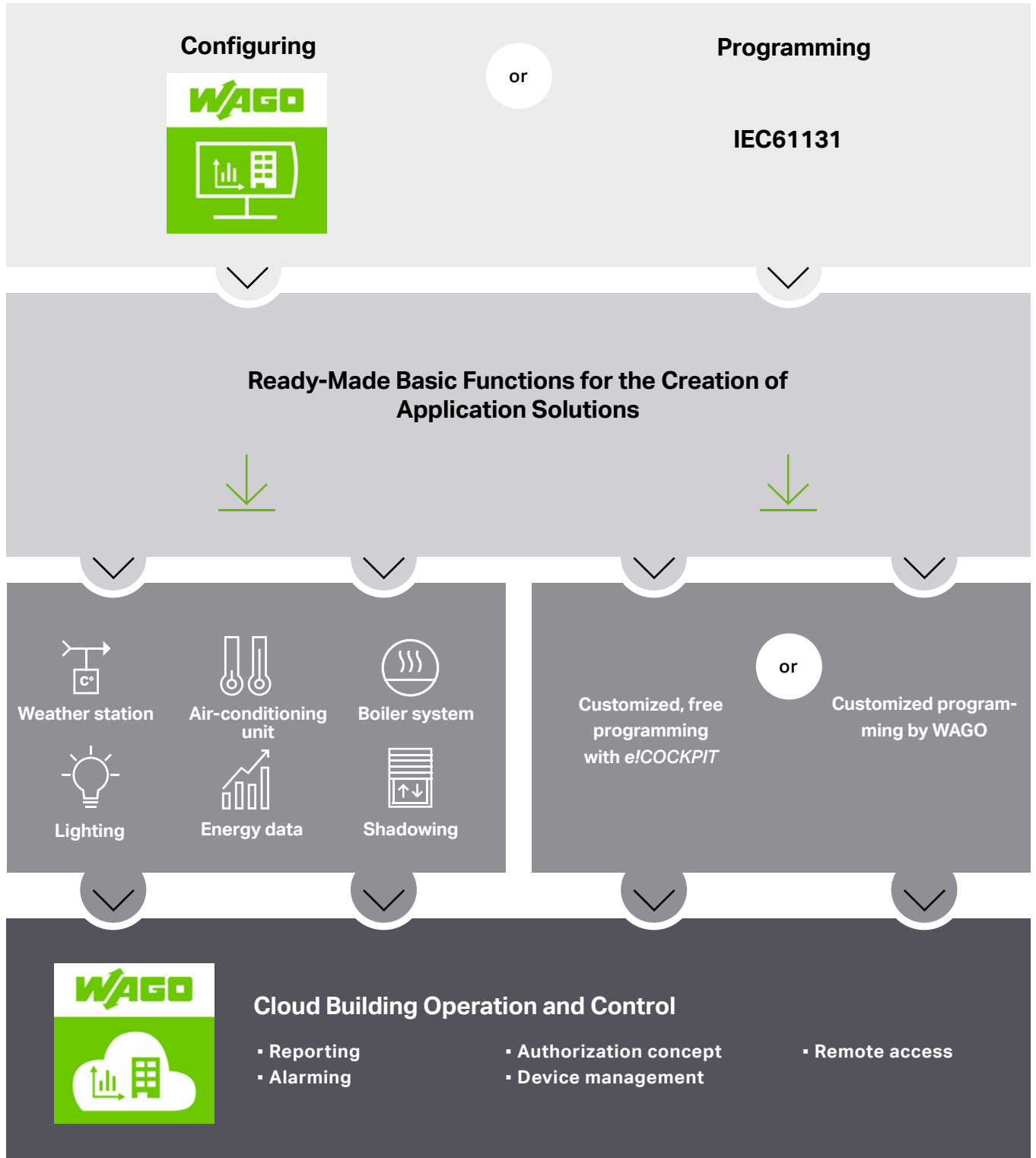
- Remote access
- Operate and monitor properties via tree structure
- Central alarm and fault message management reports irregularities, off-limit conditions or system defects
- Evaluations and reports for analysis of local energy consumption data and comprehensive evaluations
- Import firmware updates or security patches, keep the systems updated and comply with security requirements via device management

## BAFA Subsidies

Energy management per ISO 50001 with the Cloud Building Operation and Control solution

# The Solution for Your Properties

Versatile Solutions for Your Project

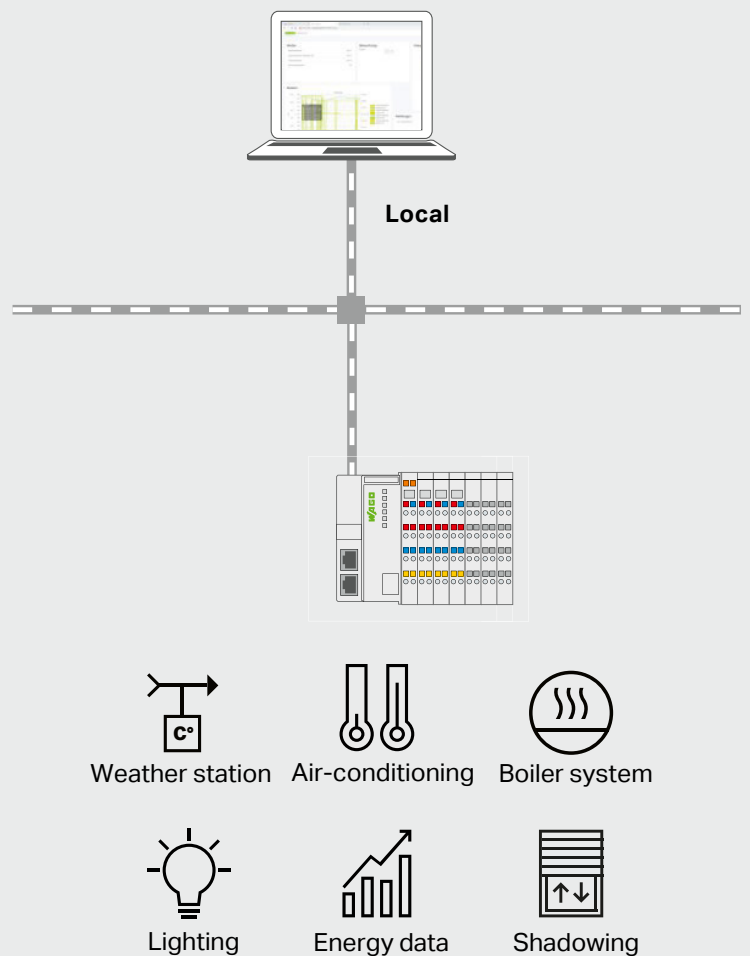


# Overview

## Your Benefits:

- The solution for managing buildings and properties allows direct access to the automation level from a higher level.
- Global and remote access to controller applications and sensors/actuators
- Interface diversity for sensors and actuators
- High solution scalability supports both small and simple as well as large and complex property projects

- **Stand-Alone Solution:** The local installation in the property continues to run regardless of the cloud connection.
- **Easy Cloud Connection:** Connect to the cloud with a few mouse clicks



**Ready-Made Basic Functions for the Creation of Application Solutions**



Remote access

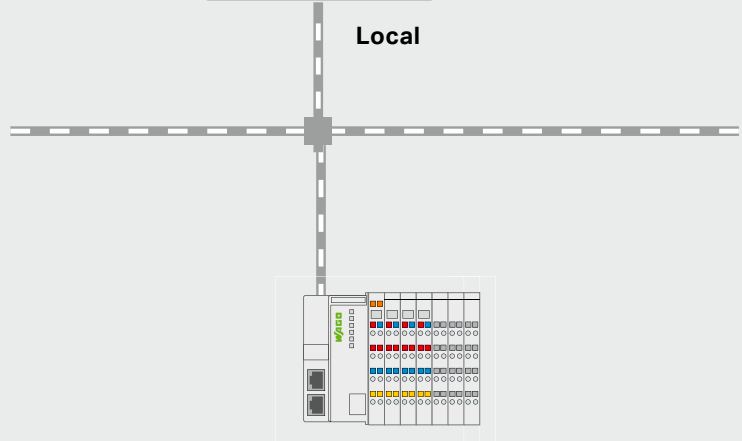


- **Operation and Monitoring:** Clear information visualization and access to connected systems
- **Integration:** Simple system automation integration

- **Customization:** Integrate additional technologies and interfaces
- **Openness:** Connect existing installations



Local



Custom Application Programming

# WAGO Cloud Building Operation and Control

WAGO Cloud Building Operation and Control eases you into cloud-based building management and is the perfect way to get started with managing and monitoring distributed properties using local infrastructure and decentralized systems from a central point – all in a single package from WAGO. Individual building systems like heating, air-conditioning, ventilation, lighting and other electrical systems can easily connect to WAGO Cloud via local automation and an IoT gateway.

The cloud-based visualization provides facilities operators with a comprehensive overview of the information from all their properties at all times, which they can then use for comparisons and well-informed analyses – an important feature for optimizing processes and saving energy. Status and alarm notifications from the distributed properties can also be centrally recorded, which allows for optimally coordinating service and maintenance, for example.

## Your Benefits:

- Easy connection of distributed properties
- Central monitoring of sensor data and alarm limits
- Optimized service and efficient operation



**CLOUD SOLUTION  
FOR DISTRIBUTED  
PROPERTIES**



Go to the demo





## Functions



**Trends & Reporting:** Allows the user to see trends such as energy consumption across all distributed properties at a glance.



**Alarming:** Alarm rules can monitor and record all setpoints as well as building system/equipment states; alarm messages can be sent via email or SMS.



**Management of Service Technicians:** Create, manage and maintain service technicians or groups easily and efficiently through tables.



**Authorization Concept (Security):** Simple assignment of authorizations for groups or individuals, authorizations can be assigned and removed individually.



**Hierarchical Structure:** Map the structure to any level.



**Device Management:** Initiate firmware and application updates from the control center and manage all controllers.



**Remote Access:** Change set points remotely in seconds via remote access.

# WAGO Application Building Control

## Easy and Flexible Building Automation

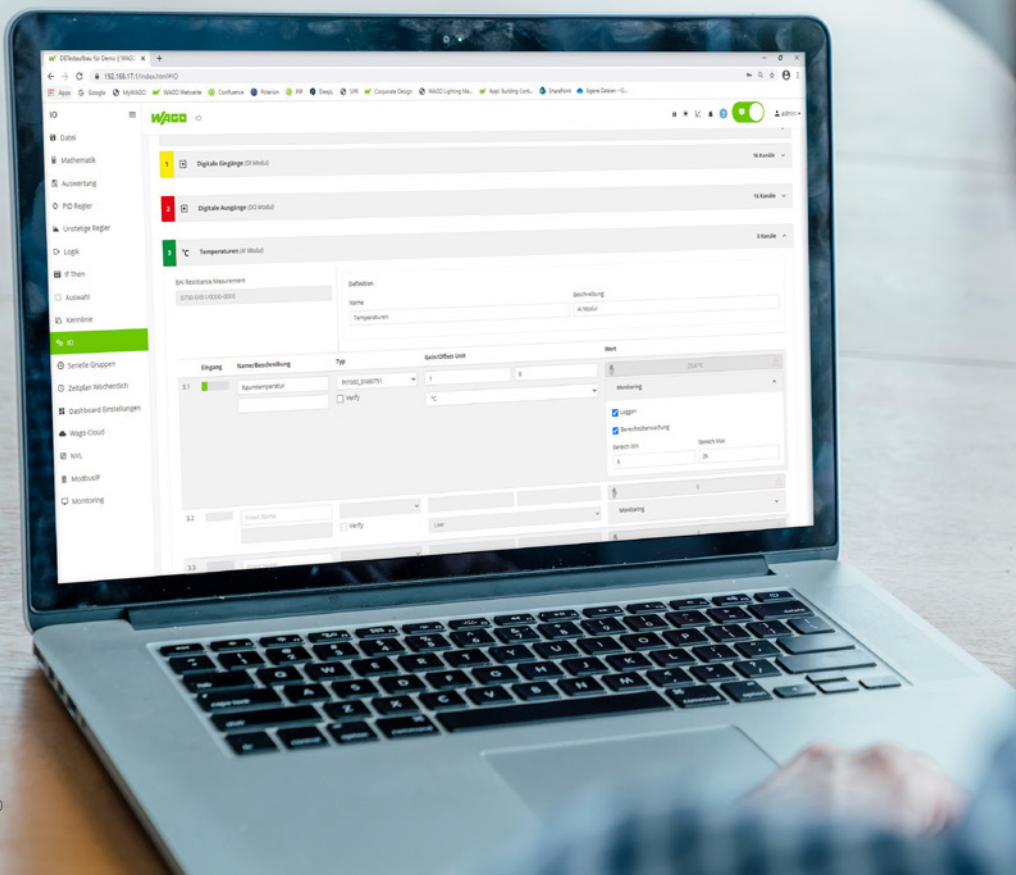
WAGO offers a new pre-programmed solution for these requirements, combining a high degree of flexibility with easy, efficient operation. The WAGO Application Building Control automatically detects the installed I/O modules and allows flexible definition of functions among inputs, outputs and communication interfaces. From logical functions, through mathematical calculations, control loops, comparisons, status conditions and characteristics, up to timer programs – the application offers many options for implementing custom requirements.

The integrated dashboard offers a modern visualization of equipment status information and allows simple, clearly organized operation of the entire system.

The application data can be optionally transferred to WAGO Cloud Building Operation & Control. This combination yields a complete solution, which is also ideal for central monitoring, data analysis, and the operation of distributed properties.

### Your Benefits:

- High cost efficiency and profitability due to quick and easy commissioning
- User-friendly and intuitive visualization and operation
- High functional safety and reliability thanks to pre-programmed and tested functional units

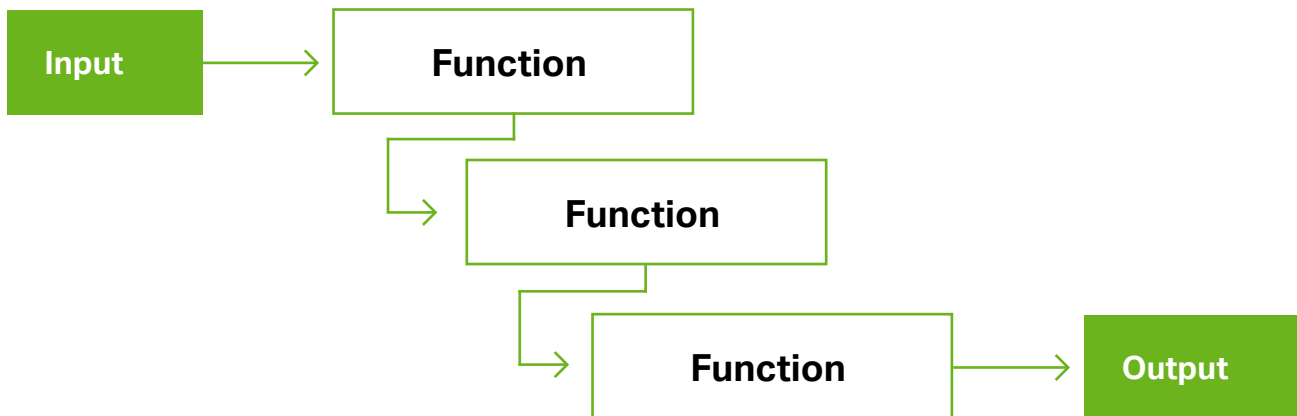


## Configuring – Not Programming

The system integrator uses configuration to compile all the functions and put them into operation without any programming. This pre-programmed solution offers all the functions needed for the various building systems, including monitoring and alarms. The user interface, which

is used both for the configuration and also for on-going operation, is based on a modern Web visualization. System integrators and building operators can access all of the functions using a standard Web browser.

### The Basic Principle



## Functions



Easy configuration, commissioning and operation without programming knowledge



Integrated monitoring, alarming for limit and status monitoring



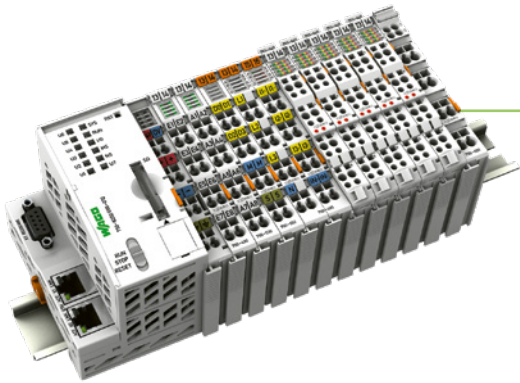
Integrated dashboard for advanced visualization options



Optional connection to WAGO's "Building Operation and Control" cloud solution for access to all of the data from anywhere in the world

# All from a Single Source for Your Property Management

## Easy and Flexible Building Automation



### Broad Portfolio

- WAGO's comprehensive range of fieldbus controllers and I/O modules supports established protocol standards.
- This design reduces hardware and system costs while providing virtually unlimited application possibilities.
- Easy configuration and programming

### Scalable Setup

- Controller in individual components
- System distribution box for installation in suspended ceilings or cable trays
- System distribution box for retrofits (Rittal's control cabinet)
- Mounting plates for installation in switchgear systems
- Distribution systems



### Versatile Sensors

- WAGO's sensors reliably detect lighting levels.
- The sensors offer special functions such as night, corridor and panic lighting.



### Pluggable Electrical Installations

The WAGO *WINSTA*® Pluggable Connection System makes it possible to implement scalable solutions for convenient lighting applications. The system provides simple pluggable electrical connections – electrical installations are fast, safe and error-free.



## Software



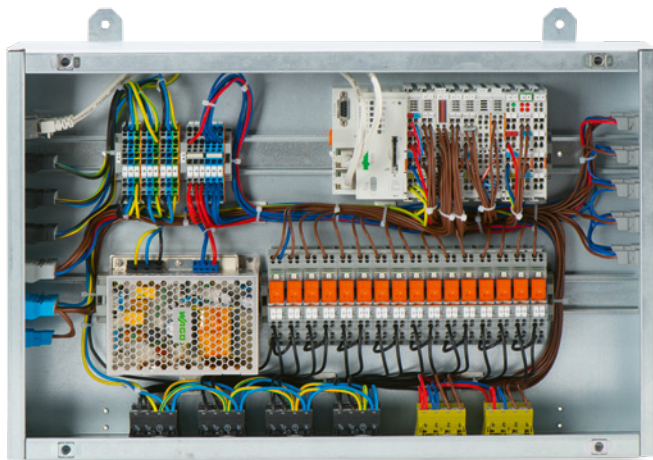
### End-To-End Solution

- WAGO Application Building Control and WAGO Cloud Building Operation and Control merge every area, including monitoring and energy management, into one smart solution that significantly simplifies setting up and operating systems. And best of all, it helps you get a handle on costs.



### Easy Commissioning

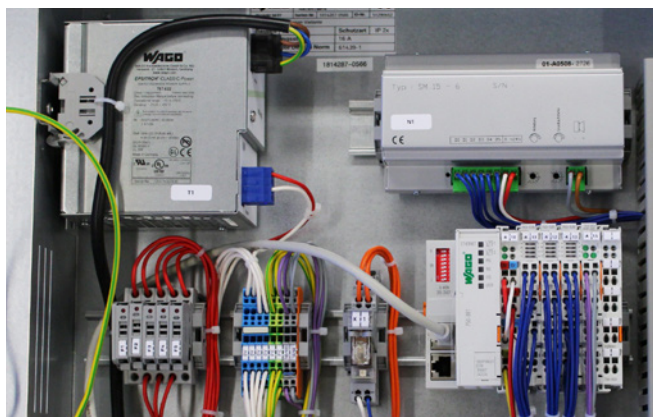
- Software solutions configured for the requirements at hand offer nearly fully automated commissioning.
- Local adaptations can be easily performed without any software installation via integrated visualization.



### All from a Single Source

- From pluggable compact distribution boxes to the pluggable connection system and on up to key sensors and speakers, WAGO organizes delivery to the construction site.
- This includes a tailored approach and processing.

## Customer-Specific Developments



### Customized Development of Hardware and Software by WAGO

- With an extensive product portfolio of more than 40,000 different components, a large pool of off-the-shelf items is ready for creating custom solutions.
- Developing customer-specific components is possible thanks to WAGO's large development team and its in-house test lab.
- Third-party products can also be integrated into the overall concept.

# Easily Monitor and Manage Public Buildings

Anyone responsible for distributed properties of public buildings, such as kindergartens, schools or city halls, knows the dilemma: Each building has its own requirements, a different structure and unique technical characteristics. So keeping track and reacting quickly to discrepancies can be a challenge. This is exactly where WAGO Building Operation and Control comes in, helping property managers record the condition of their buildings at a glance – as comprehensively as necessary and as simply as possible.

With the combination of WAGO Application Building Control and WAGO Cloud Building Operation and Control, WAGO provides property managers with a solution to manage and monitor local infrastructure and decentralized systems from a central location. Data from the building automation system is collected and made available to the cloud – in other words, all building data can be accessed whenever, wherever. The intuitive user interface allows the status of each property to be quickly and easily recorded at a glance. If action is needed in a building (e.g., due to a malfunction or pending maintenance), this is automatically detected, recorded and forwarded directly by notification (email or SMS) to the person assigned to the building systems. This helps minimize downtime and ensures smooth and efficient building operations.

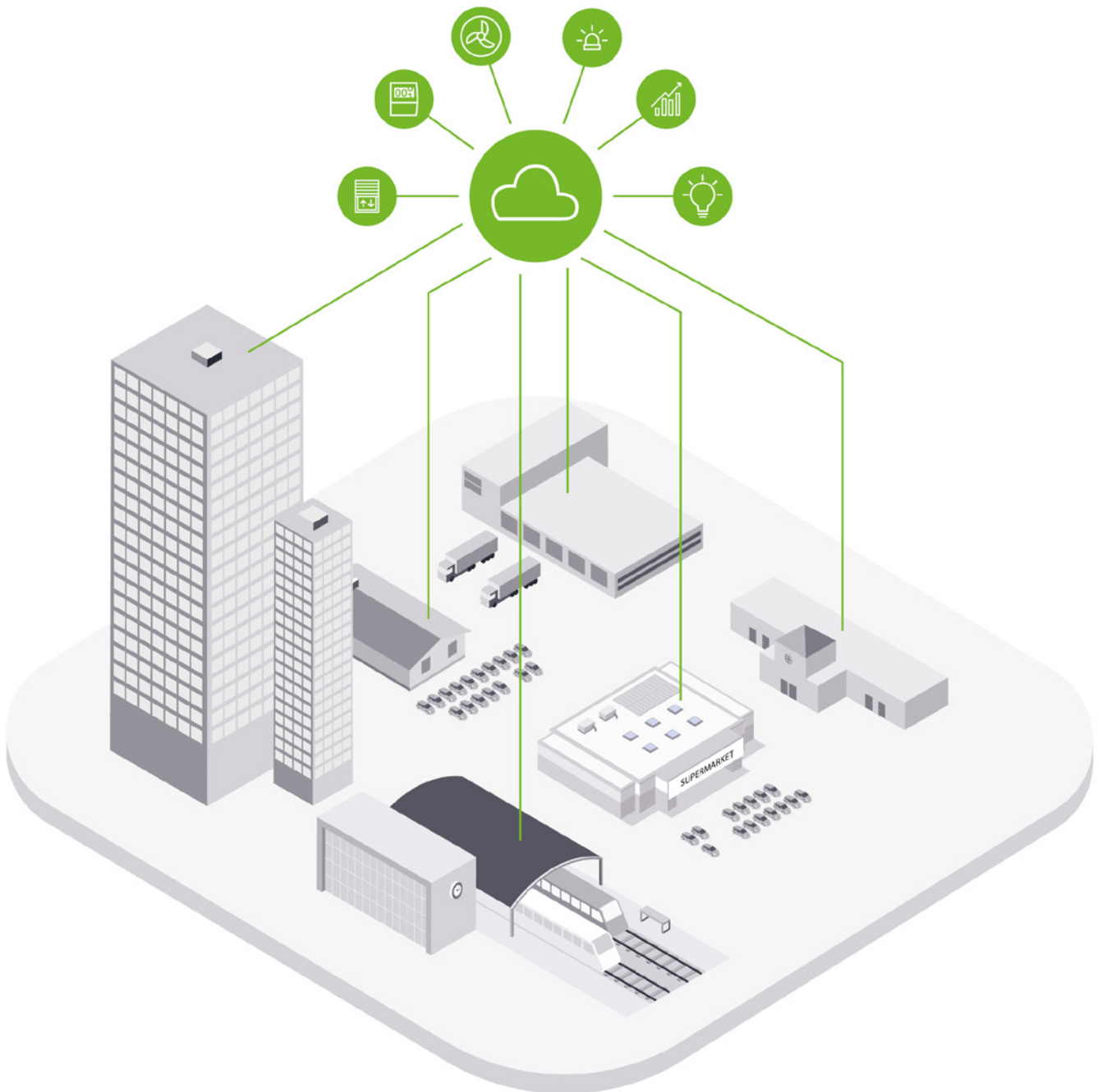
In addition to general operating status and fault management, WAGO Building Operation and Control maps the following tasks, for example:

- Monitoring the technical building systems
- Monitoring temperature, humidity, CO2 and more, as well as status messages
- Outer-shell monitoring (windows and doors)
- Energy data acquisition

All relevant information for the individual building systems and properties, such as energy data, is processed via the cloud and can be compiled and analyzed in reports. Thus, besides providing a general overview of building operations, this solution also helps increase long-term energy efficiency. In addition, WAGO Cloud Building Operation and Control meets all requirements for BAFA (German Federal Office of Economics and Export Control) listed energy management software and is therefore eligible for funding.

**“Property managers of public buildings always have an overview of their buildings through the WAGO solution for building and property management and can thus reliably secure operations.”**

Carsten Wendt, Product Manager at WAGO



## Added Value for the Operator

- Investment security and high scalability of the overall solution
- Hierarchical representation of the properties
- Excellent and simple usability (user-friendly operation both locally and remotely)
- Energy report (generation/consumption) for one or all building systems
- Fault messages for the heat generators (heating, district heating)
- Trending: Supports evaluation of user complaints (too hot or too cold)
- Operators can network various technical systems to a single WAGO Cloud
- Multi-cloud solutions are possible (simultaneous connection to AWS, SAP, IBM, etc.)
- Central user and role concept: Defined access concept for groups to individual building systems

# The Perfect Solution for Shops and Stores

Retailers must satisfy many demands to remain competitive. Cost-efficient store operations and high availability of technical equipment help achieve this. Requirements for this include:

- Lighting monitoring for showcasing goods
- Central operation parameter modification
- Separate energy data collection (e.g., for shop-in-shop concepts)
- Real-time information about fault and maintenance messages

## Fully Focused on Core Business

But how can retailers manage these technical tasks alongside their day-to-day business?

That's where the WAGO solution for building and property management comes into play, a combination of pre-programmed application software and a cloud solution. All essential components for recording operating data and system statuses, storing and backing up data, and visualization are securely located in the cloud. This means that stores can be managed conveniently and without having to maintain an IT infrastructure or perform administrative system work, regardless of their location or equipment, using a modern web visualization system.

## Simple Configuration – No Programming

System advantages are readily demonstrated during commissioning. According to the motto, "Configuring instead of programming," the application can be configured via the intuitive user interface without any special knowledge of

programming languages and additional tools. All relevant functions are already included in the application software, including monitoring and alarms. There are several identical stores to which the configuration should be transferred. No problem: With the WAGO solution, it can be easily copied and scaled.

## Freedom for Custom Concepts

This pre-configured solution offers operators the certainty that all quality standards are met and that the equipment in their stores is set up to their requirements. At the same time, the system's high flexibility and scalability allow adaptations to different needs. This gives retailers all the freedom they need to implement individual concepts in their stores – and provide their customers with unforgettable shopping experiences.

### Application Areas:

- Gas stations, garage chains
- Supermarkets, drugstores
- DIY stores, non-food markets
- Logistics centers
- Outlet centers, clothing stores

**“With the WAGO solution for building and property management, retailers can easily manage their stores via a modern user interface.”**





## Solution Added Values

- Configuring – not programming: Easily create the control and regulation functions
- Investment security and high scalability of the overall solution
- Hierarchical representation of the properties
- Excellent and simple usability: User-friendly operation both locally and remotely
- Energy report: Generation and consumption figures across all building systems or individually incl. benchmarking across all branches
- Recording fault messages for heat generators (heating, district heating), for example
- Trending: Supports evaluation of user complaints
- Operators can network various technical systems with the WAGO Cloud
- Roll-out: Simple multiplication of stores
- Multi-cloud solutions: Simultaneous connection of multiple cloud solutions to AWS and SAP, IBM, WAGO Cloud, etc.
- Central user and role concept: Defined access concept for groups to individual building systems

# CONTACT

## Technical Support

WAGO's technical support staff is ready to assist you with advice and guidance – from selecting the right product, through telephone support during commissioning, all the way up to on-site troubleshooting. You directly benefit from knowledgeable WAGO experts who dramatically expedite project implementation.

### WAGO provides advice and support with:

- Product selection
- Product commissioning
- Troubleshooting
- All technical questions you may have about WAGO products and solutions

### As a WAGO customer, you benefit from first-class support:

- Qualified fieldbus specialists
- Troubleshooting
- Spare parts service
- Contact via telephone, on-site or using the form

## WAGO Kontakttechnik GmbH & Co. KG

Germany

Business Development Building

Phone: +49 (0)571/887 77771

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Email: [projektvertrieb@wago.com](mailto:projektvertrieb@wago.com)



## Project Support

WAGO's technical support offers consultation and project planning services to help devise the best possible solutions for your custom building automation and installation projects. Our experienced team of professionals will gladly help you implement your projects with WAGO products.

### Planning and project development:

- Conceptual design
- Network planning
- Application design
- Component selection
- Quote generation





**WAGO helps customers with:**

- Construction project planning advice from experts with years of project experience
- Customizing solutions to ensure the technical and financial success of large projects
- Technical support while implementing building projects

For more information, please visit our website at:  
**[www.wago.com/global/building-technology](http://www.wago.com/global/building-technology)**

Cutting edges for business card

**WAGO Kontakttechnik GmbH & Co. KG**

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