



Retail Solutions

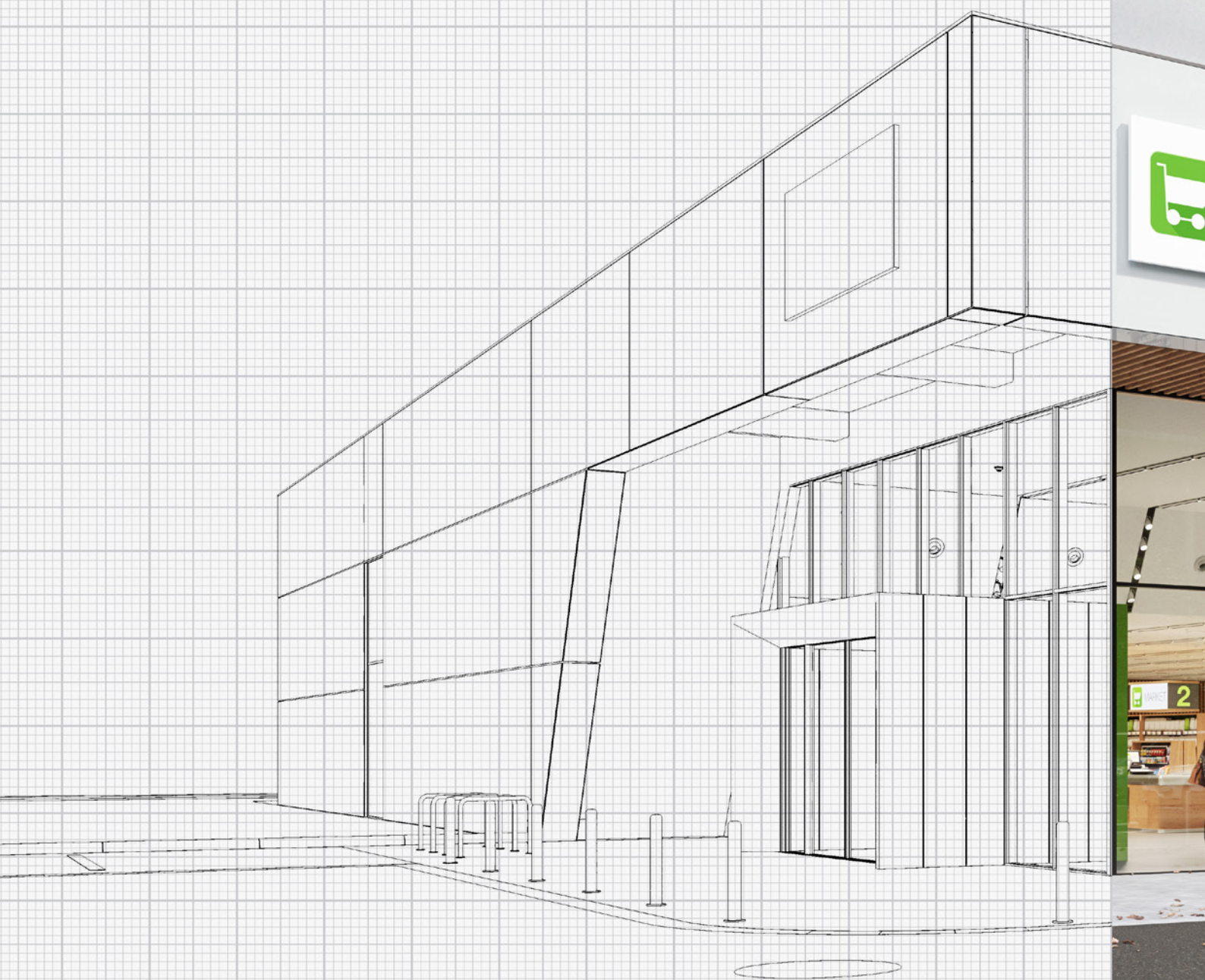




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Complete Automation Solutions from a Single Source – WAGO and the Smart Store





MARKET

1



Lighting Management – Leveraging Greater Efficiency

WAGO Lighting Management is the sophisticated solution for lighting control in large spaces, such as those in your store. Using a combination of predefined hardware and user-friendly software, WAGO Lighting Management facilitates the design and commissioning of new lighting systems. The software also gives retailers several advantages, such as easily creating individually defined scenes, a switch for side room lighting, and even centralized operation via the store manager's PC.

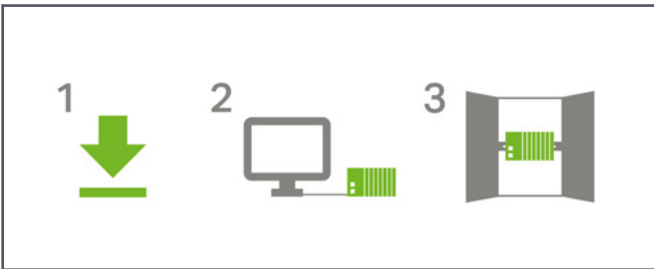
Your Benefits:

- Easy usage and document creation
- Innovative usability via standard web browsers
- Clearly organized input screen



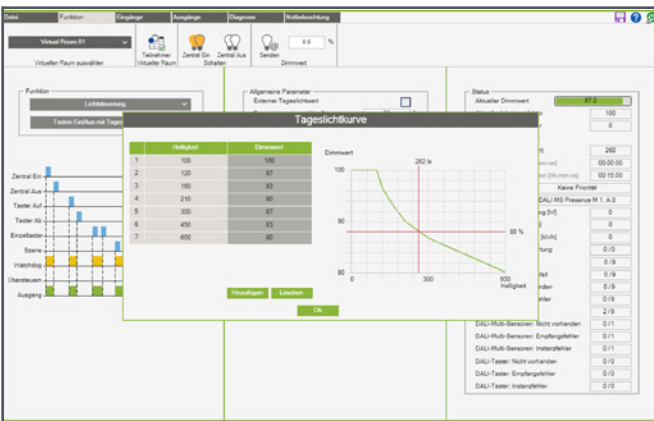
High-quality hardware

- The WAGO PFC200 controller and the DALI-2 module from the WAGO I/O System 750 are the basis of WAGO Lighting Management.
- Each module can integrate up to 64 DALI lights, 16 DALI sensors and 16 DALI transmitters into the system.
- Additional I/O modules can also be linked to the controller, such as three-phase power measurement modules, a module for GPS-based time synchronization or radio receiver modules for EnOcean radio switches.



Modern software

- WAGO Lighting Management can be easily configured on a clearly arranged web interface.
- The system offers preset standard settings, setpoint defaults, maximum and minimum limits for control and enables the configuration of sensors and actuators – along with displaying all operating states.



Easy visualization

- Operation and monitoring of WAGO Lighting Management via an HTML5 web user interface.
- Access via standard web browsers.
- Responsive design optimizes the presentation of data on desktop PCs, touch panels, tablets and smartphones.

Function overview



Switching: Power on/off (with/without watchdog), latching relays, staircase function, automatic light (motion detector), dimming control



Slave function: External virtual room external dimmer



Dimming: Dimming with presence sensors



Safety lighting for both a single and a central battery



Lighting control: Human Centric Lighting, constant light control, daylight control



Accurate **energy** consumption measurement



Time functions: Weekly, vacation and special switching programs, holidays



Simple **project documentation**



Lighting Control – Save Energy the Easy Way

Modern lighting readily meets demands, is convenient and saves energy. When properly implemented, lighting helps protect the environment, lower energy costs and improve both a building's working conditions and general atmosphere. Elaborate installations and complicated programming are a thing of the past, as WAGO's Lighting Management solutions are easily configured via a graphic user interface.

Your Benefits:

- Optimal lighting quality, greater user convenience and more efficient operation
- Simple commissioning – without any programming
- Fast, simple maintenance and conversions



Wide 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.
- Configuration, programming and visualization are easily performed using the IEC 61131-3-compliant WAGO-I/O-PRO software package.



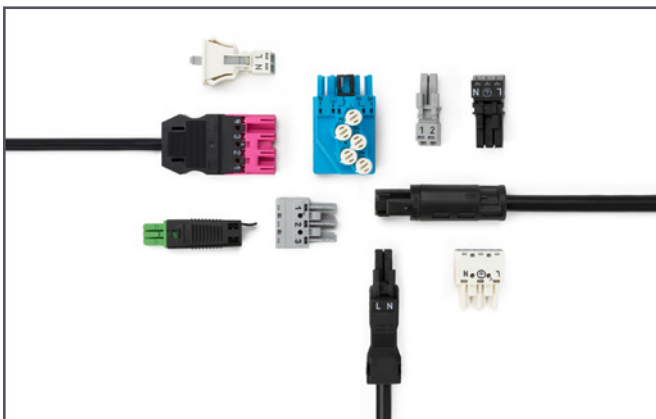
Scalable setup

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



Versatile sensors

- The WAGO DALI MSensor 02 reliably detects lighting levels.
- Energy-efficient regulation of lights via DALI.
- The sensor offers special functions such as night, corridor and panic lighting.



Pluggable Electrical Installations

- The WAGO WINSTA® pluggable connection system makes implementing scalable solutions for convenient lighting applications possible.
- The system provides simple pluggable electrical connections – electrical installations are fast, safe and error-free.

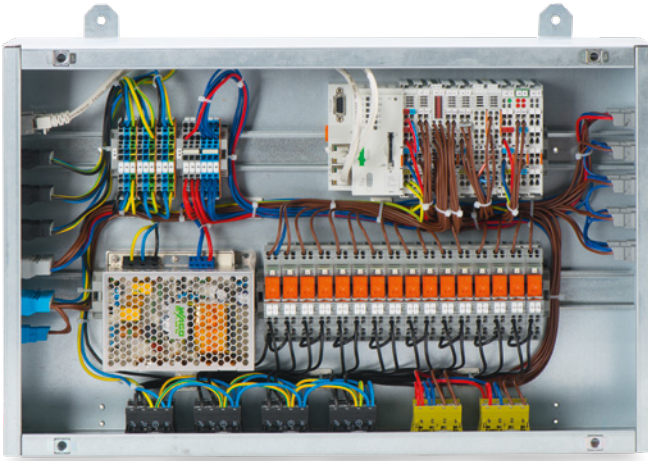


Cash Register Signaling Equipment – Superior Customer Information

In modernized stores, these vital and innovative systems use optical signals to clearly – and from a distance – indicate which cash registers are open or closed, or if a cashier needs assistance. WAGO offers a complete control system that meets all your needs. The system can control different indicator lights, voice output, can be adapted for different cash register configurations, is controllable via the cash register PC, and also offers bus-linked key modules.

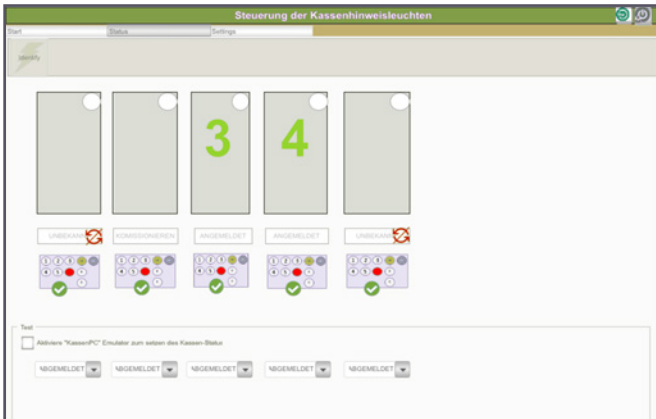
Your Benefits:

- Complete control system with a variety of functions for customer guidance
- Adaptable to different cash register scenarios
- Bus-linked key modules



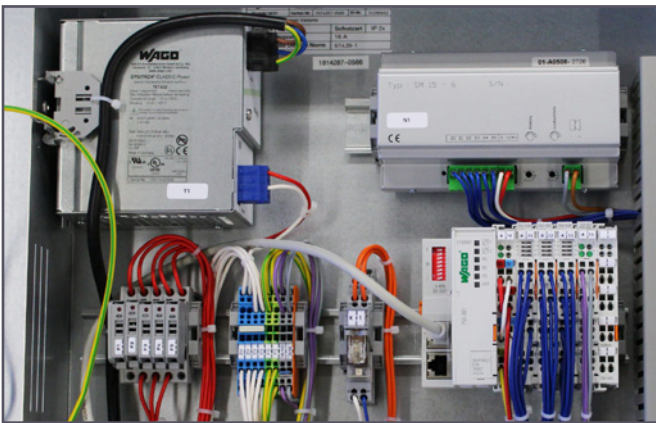
All from the same trusted source

- From pluggable compact distribution boxes to the pluggable connection system and on up to key sensors and speakers, WAGO can organize all the logistics – even right to your store's door if requested.
- This includes a tailored approach and processing.



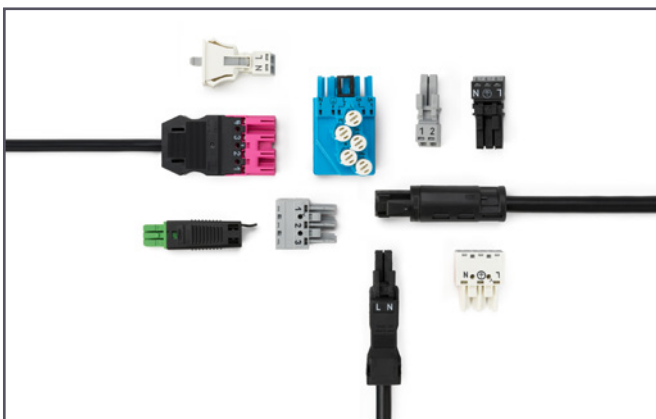
Easy commissioning:

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



Customer-specific developments

- 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.



Pluggable Electrical Installations

- WAGO's WINSTA® pluggable connection system is designed to satisfy the stringent requirements of building installations.
- The system provides simple pluggable electrical connections – electrical installations are fast, safe and error-free.



HVAC Control – Economical Regulation of Indoor Climate

Automatically regulating HVAC systems minimizes energy consumption and improves a building's atmosphere. HVAC automation from WAGO is a cost-effective solution: Extensive libraries with ready-made system macros generally make detailed programming unnecessary. This saves time and facilitates standardization.

Your Benefits:

- An excellent price/performance ratio
lower upfront costs and minimal operating costs
- Ready-to-use programs (macros)
- Expand or modify the system at any time



Efficient control

- Thanks, due in part, to real-time-capable Linux®, the PFC200 is an efficient controller for your HVAC automation.
- PLC and IT functions all in one device
- Multiple interfaces, functions and applications
- High cybersecurity standards (SSL, SSH, OpenVPN and firewall)
- Remote access via mobile communications



Simple programming and configuration

- **e!COCKPIT** enables the integration of new devices such as touch panels and second-generation PFCs.
- The software excels through its smart design, provides graphical network configuration and offers extensive libraries with ready-to-use system macros.



Web visualization

- The macro library includes graphic elements that enable fast, simple creation of a user interface with **e!COCKPIT**.
- This allows the HTML5 visualization to be displayed in a Web browser on any Internet-connected computer at any location.
- The Web visualization can also be accessed on a tablet or smartphone using an app.



Extensive accessories

WAGO, of course, also supplies the required accessories to roll out your project, including:

- Touch displays
- Weather stations
- Temperature sensors
- CO₂ / Indoor Air Quality Sensors
- Modem/Router



Energy Data Management – Parameter Setting Instead of Programming

WAGO's Energy Data Management system records measurement data for different media along with influencing variables for energy monitoring – all are processed for additional analysis, archiving and reporting. The software automatically detects different signals from the connected meters and sensors, making them available for further energy analysis tools via simple parameter settings.

Your Benefits:

- Simple parameterization instead of complicated programming
- Efficiency assessment thanks to key figure calculation
- Maximum security and connectivity



Trusted hardware – the WAGO PFC200

- The PFC200 is the basic platform for the “Energy Data Management” application.
- It makes configuring, controlling and visualizing your projects easier.
- A CODESYS-based runtime environment and real-time-capable Linux® operating system make the PFC200 controller the efficient control solution for your automation applications.



User-friendly software application

- Specific counter data and sensors can be easily allocated.
- Convenient data logging to suit your requirements
- Transparent function check via measurement data visualization
- The software automatically identifies when new hardware is added.



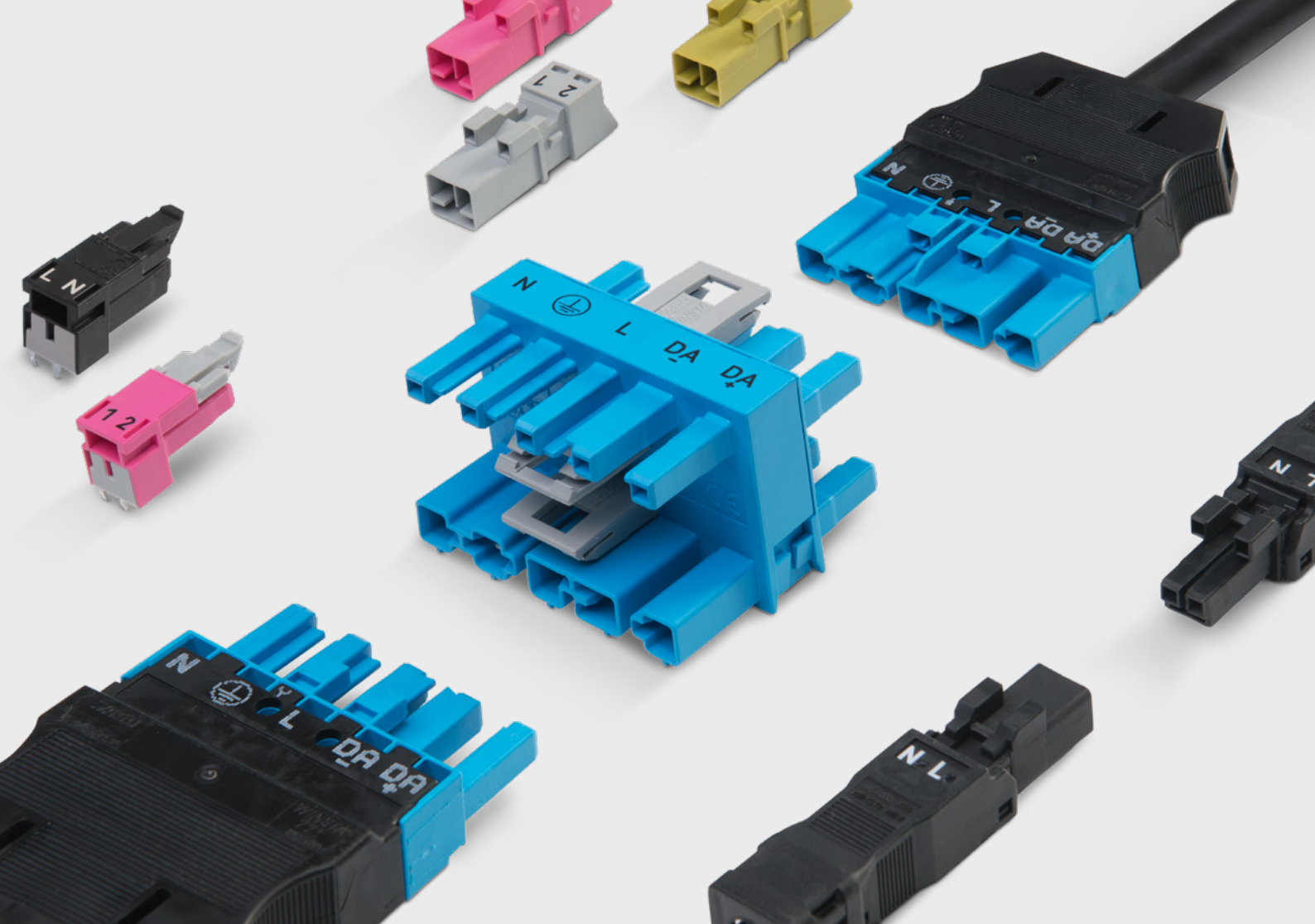
Energy measurement components

- The system includes current transformers for connecting electrical installations of different rated currents
- Retrofitting your existing systems is easy with these components.
- Other components include power taps for voltage measurement and combined current and voltage taps for 2-conductor through terminal blocks.



Secure link to the cloud

- Cloud connectivity is integrated into energy management: Direct link via Modbus®.
- OpenVPN, IPsec and an integrated firewall protect the transmission and storage of data in the cloud.
- Direct file transfer — through FTP, FTPS, FTPES and SFTP — is also incorporated as another way to transmit data to a customer’s in-house server.



WAGO WINSTA® pluggable connection system – click and done!

WAGO WINSTA® can optimize every step of install at your job site. The modular, pluggable installation system consists of cable assemblies and standard components. The installation is planned in advance, and the required components and cables are specified and ordered. The electrical components of a project – lights, sockets or climate control systems – can be delivered with integrated plugs or equipped with plug-and-play WINSTA® connectors for any job site.

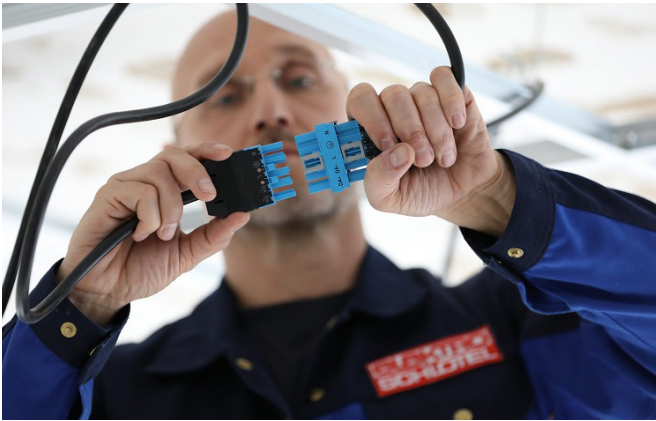
Your Benefits:

- Scheduling reliability
- Flexibility for changing needs
- Predictable flows for installation



Secure planning

- *WINSTA*® makes your electrical installation easy-to-plan while allowing you to accurately account for labor time and costs.
- The *WINSTA*® building-block system for electrical installations creates a standardized plan that can be rolled out across all stores.



Quick and easy execution

- Installation is done with a simple “click.”
- *WINSTA*® is protected against mismatching thanks to color and mechanical coding
- Even inexperienced users can use *WINSTA*® products quickly, safely and error-free. An added safety factor is the ability to test the system – even when mated.



Cost-effective operation

- WAGO's spring connection technology is maintenance-free, durable and helps avoid costs down the road.
- *WINSTA*® offers a high degree of flexibility to accommodate your changing needs.
- The flexible and easy-to-modify structure enables targeted planning and the conservation of resources.



Integrated Store Control System

Systems technology in the retail sector is faced with steadily growing demands, and their difficulties are compounded by rising complexity and costs. When properly applied, modern automation solutions provide a way of combining and concentrating dramatically varying technologies. The concept of integrated store control merges every area, including monitoring and energy management, into one smart solution that markedly simplifies setting up and operating systems. And best of all, it helps you get a handle on costs.

WAGO Store Control Systems consist of a ready-programmed control unit that bundles all of the the functions needed for store automation.

Your Benefits:

- **Easy:** simple operation at every level
- **Transparent:** open concept that's easy-to-understand across all building systems and sectors
- **Universal:** can be adapted to local conditions and integrated into the control system via standard protocols
- **Future-proof:** Add hardware and functions at any time



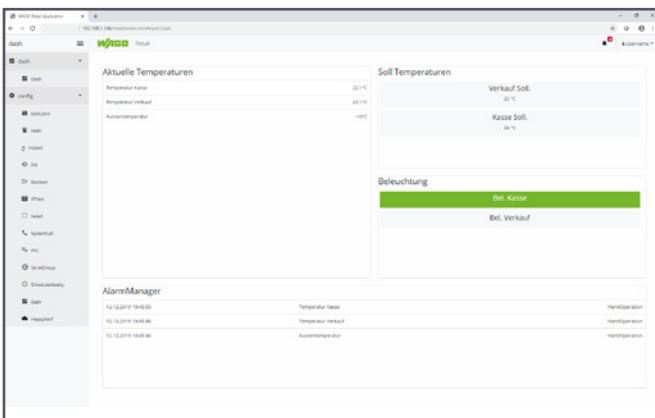
One controller for all functions

- Lighting
- Shading
- Heating
- Ventilation
- Air conditioning
- Timer programs
- Energy data acquisition
- Load management
- System monitoring



Uniform operation

- Visualization of the store control system is provided using a web server that's integrated into the control system.
- The stored visualization screens are designed to be displayed on the most common browsers, making them compatible with any operating system.
- These screens can be displayed on PCs, tablets or cell phones.
- As all the parameters and function changes can be set via the store control system visualization screens, no additional programming tools or configuration programs are required.



Highly versatile

- The separation of application, parameter and language files enables a standardized roll-out from one application to every single store.
- Location-specific modifications are managed in the parameter files and can be conveniently stored at a central location with the help of WAGO Cloud solutions, for example.



WAGO Cloud – Access Your Data Anywhere in the World

Up-to-date data from your machines, systems and processes is essential for implementing future changes that keep you one step ahead of the competition. Open automation technology from WAGO provides this information. WAGO Cloud grants access to it worldwide.

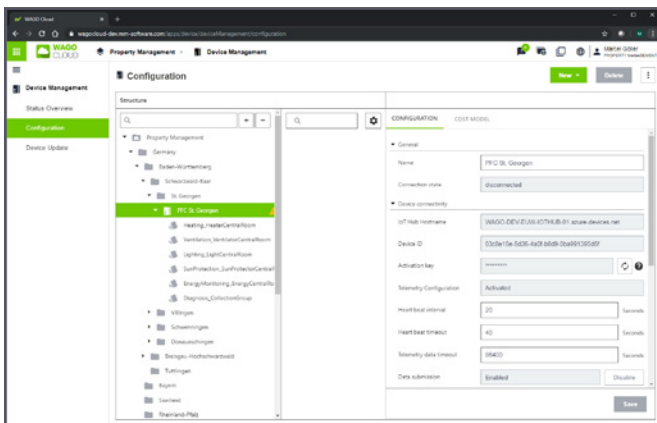
Your Benefits:

- Simple operation with IT expertise
- Individually scalable solutions – you only pay for what you use
- A single source for software, infrastructure and services



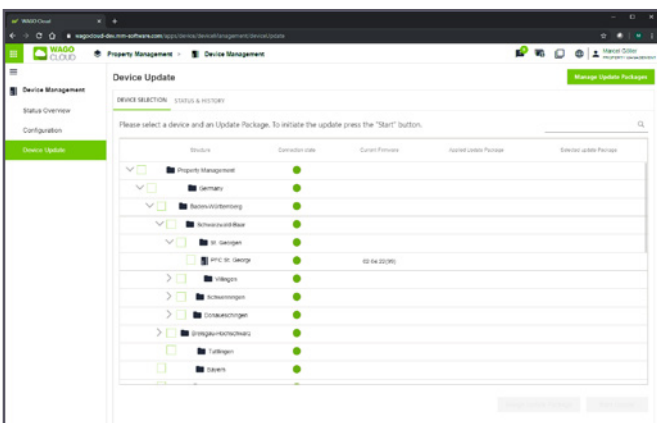
Any cloud system can be used

- You alone decide which cloud system to send your data to via MQTT – for example, Microsoft Azure, Amazon Web Services, IBM Cloud or SAP Cloud.



User-friendly management

- The WAGO controller can be linked to the WAGO cloud in just a few minutes to assign customers, locations and systems.
- All current connection parameters and process data can be easily monitored.
- And, if something were to go wrong, alarm notifications would enable you (or staff) to intervene quickly.



Easy updates:

- Instead of updating each system individually, all systems can be updated simultaneously via WAGO Cloud.
- The user can select which systems should be updated.

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 us by phone, online or using the form

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:

- Advice while planning the construction project from experts with years of project experience
- Creation of customized solutions for large-scale projects that ensure technical and financial success
- Technical support while implementing building projects

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