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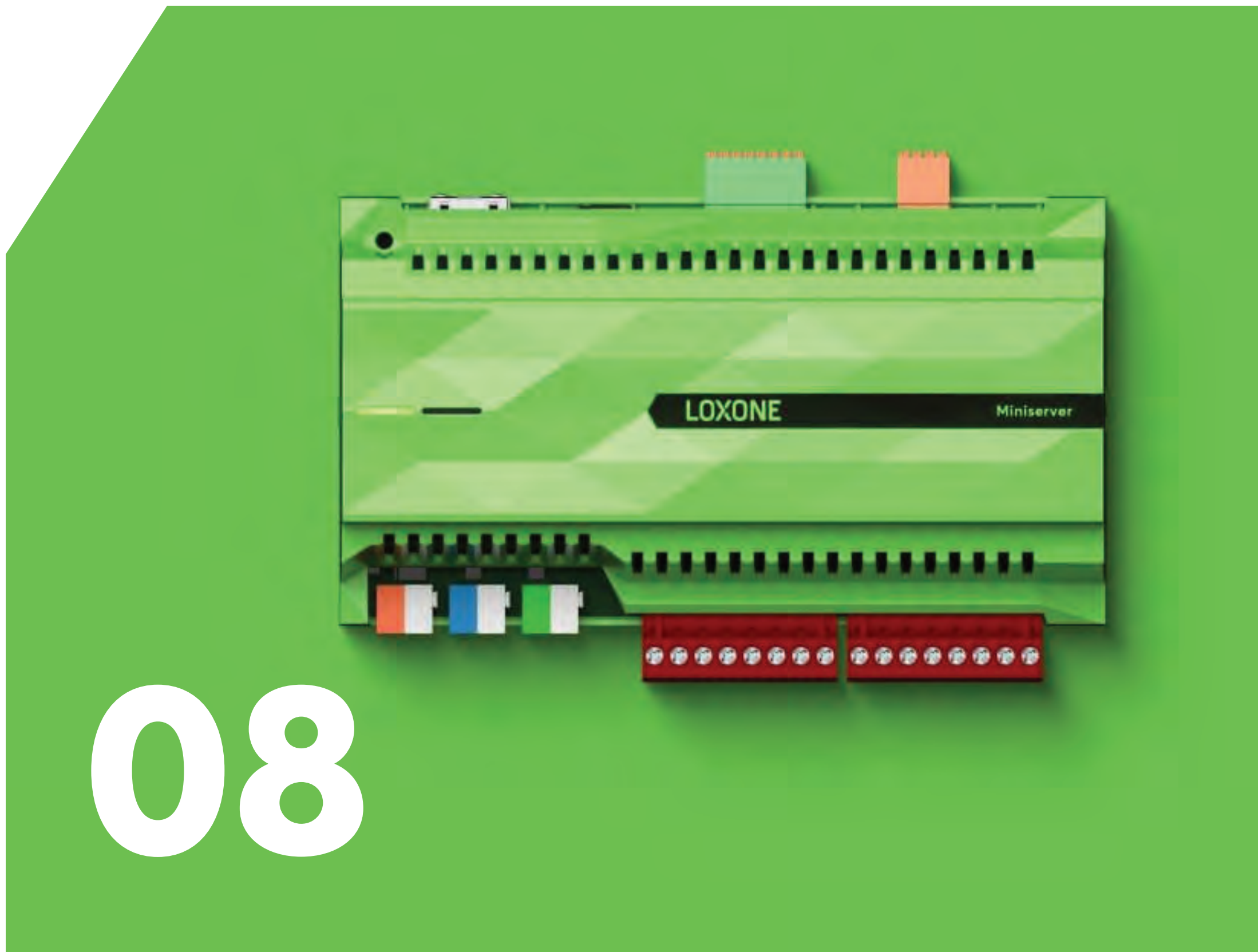


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LOXONE

Content

04	Who is Loxone?	24	Energy Management
05	What is Building Automation?	25	Irrigation
06	Areas of Application	26	Ambient Assisted Living (AAL)
		26	Wellness
08	The Loxone Miniserver	27	Security
08	The Miniserver	28	Loxone Standards & Recommendations
09	The Miniserver Compact	29	Central Commands
09	The Miniserver Go	30	Operating Modes
10	Automation Meets Privacy - Cloudfree thanks to the Miniserver	32	Online Services
10	Expand Flexibly Thanks to Loxone Extensions	33	Smart Solutions by Loxone
11	Loxone's System Architecture	34	Essential Sensors in Automated Buildings
12	Freely Scalable - from Apartment to Commercial Building		
12	Client-Gateway Concentrator Feature	36	Technologies
12	Network Intercommunication	36	Tree Technology (cable-based)
13	Tree Intercommunication	38	Air Technology (wireless)
13	Multiplicator	39	Loxone Library: Open Documentation
14	Features	40	Software
14	Loxone Auto-Config	42	Basic Equipment
16	Shading	43	Loxone Training
18	Climate Control	44	Become a Partner
20	Lighting		
22	Multimedia & Music		
23	Access Control & Door Communication		





Who is Loxone?

The Loxone Group, based in Kollerschlag, Austria, is a pioneer in the field of intelligent automation solutions. As a specialist, Loxone enables simple control and intelligent automation of projects of all kinds. No matter home, hotel, office or commercial building, Loxone makes life and work easier in any situation. More than 200,000 projects in more than 100 countries worldwide have already been implemented by professional Loxone Partners. Authorized Loxone Partners benefit from the high innovation power of Loxone, free software in combination with the easy installation of the products and numerous open interfaces of the central Miniserver. The Miniserver is the heart of every Loxone project and the ultimate tool for intelligent automation of smart homes, commercial properties as well as special applications. The Miniserver was developed, specifically, for the professional electrician.

As the "brain", this central control unit tackles most of the tasks within the building automation: security, comfort, and energy efficiency. The scalable Miniserver structure paired with the numerous open interfaces enables countless creative solutions.

Cloudfree - Privacy and Data Protection

The Loxone technology works differently than other smart home solutions, i.e. without an app, smartphone, or internet. All personal data is stored on the Loxone Miniserver and never leaves the building. In addition, the Loxone system also works without internet connection.

Around the Globe

The Loxone Group has more than 500 employees at more than 20 locations worldwide. The company headquarters in Kollerschlag, Austria, employs around 100 employees.



What is Building Automation?

In times when people fly to the moon and cars park themselves, it should be possible for a building to perform most of the tasks in terms of security, comfort and energy efficiency autonomously. Loxone saves valuable time that you would otherwise spend dealing with technology.

While competitors focus increasingly on the do-it-yourself market, Loxone is deliberately taking the opposite way. Loxone stands for professional solutions for smart homes, commercial properties and special applications, which are implemented by a network of partners.

Definition Building Automation

Building Automation is the automatic control, regulation, monitoring and optimization of features such as shading, lighting, heating and other technical building equipment in a smart system. The focus lays on comfort, security and energy efficiency - whether it is in office buildings, restaurants and other industrial or commercial properties. The term smart home has become established for residential buildings.

Why Building Automation?

The Loxone system is easy to use, affordable and universally applicable. All components work perfectly together.

The main advantages are:

- ▶ Optimize the efficiency of a building (save resources, decrease operating cost)
- ▶ Ensure the safety of people and buildings
- ▶ Maximize comfort for users, operators, and occupants

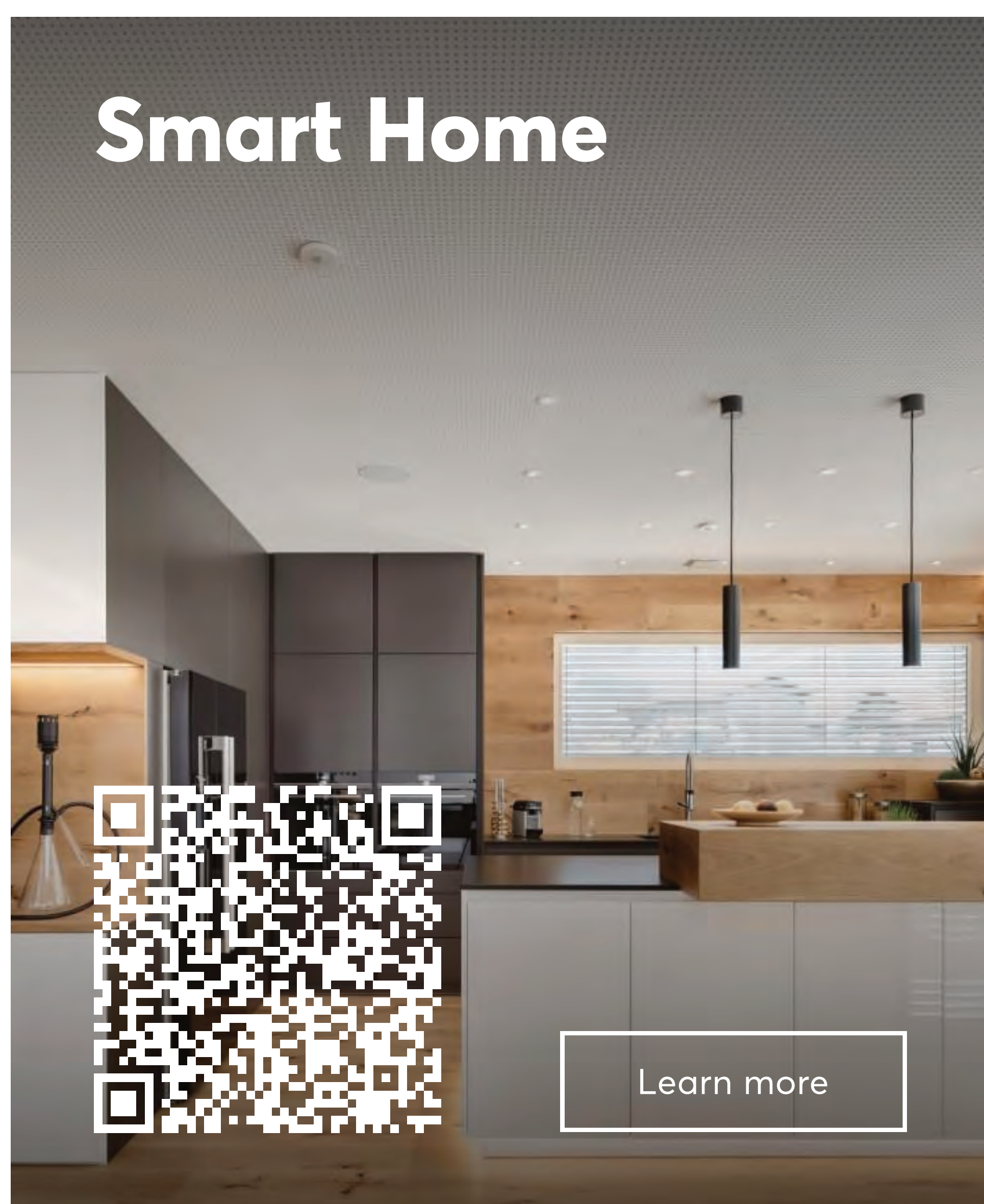
For investors, as well as builders, an investment in building automation is worthwhile. The additional effort or costs are usually amortized in a few years thanks to the large savings potential of building automation.

Areas of Application

Whether it is a two-room apartment, a detached house, an open-plan office in a medium-sized company, a restaurant or a huge hotel complex - Loxone offers the perfect control and automation solution for every project.

Thanks to the Loxone Tree and Air technology, every building can be automated, both new buildings and existing properties.

You can see some of our reference projects below:



Office & Business premises




A modern office interior with large windows, a person walking, and a purple pillar.




Learn more

Spezialanwendungen

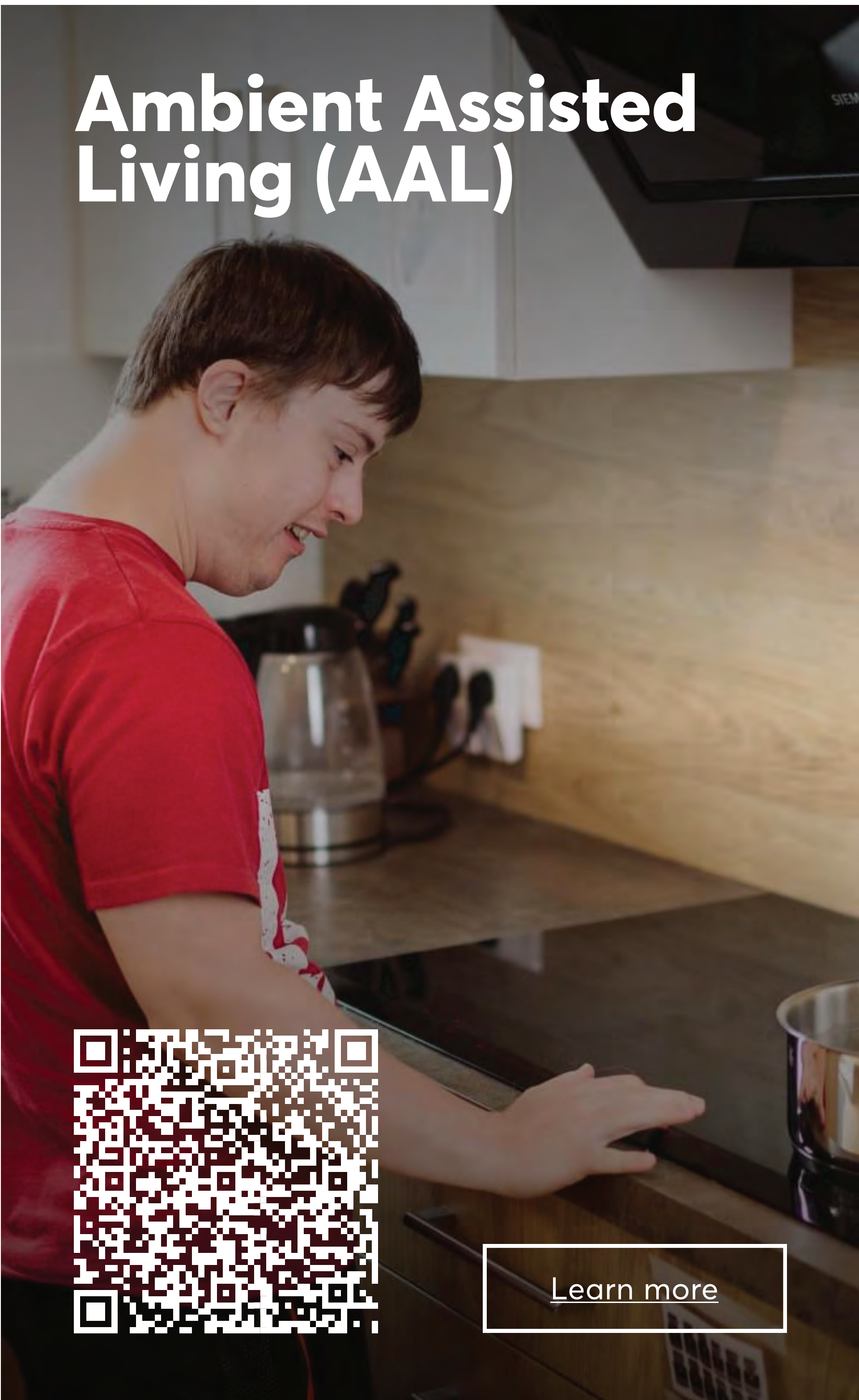


A large stadium interior with red seats and a green field.




Learn more

Ambient Assisted Living (AAL)



A person in a red shirt is using a tablet in a kitchen setting.



Learn more

Ambient Assisted Living (AAL)

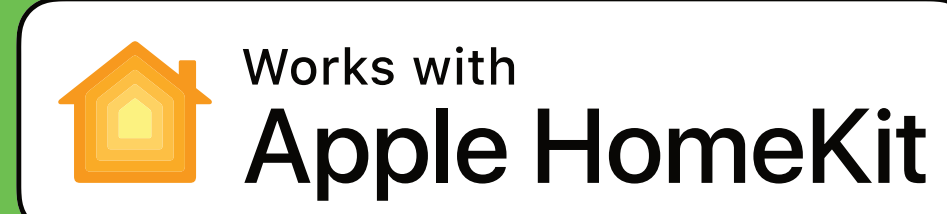


A modern multi-story apartment building with balconies.



Learn more

The Loxone Miniserver

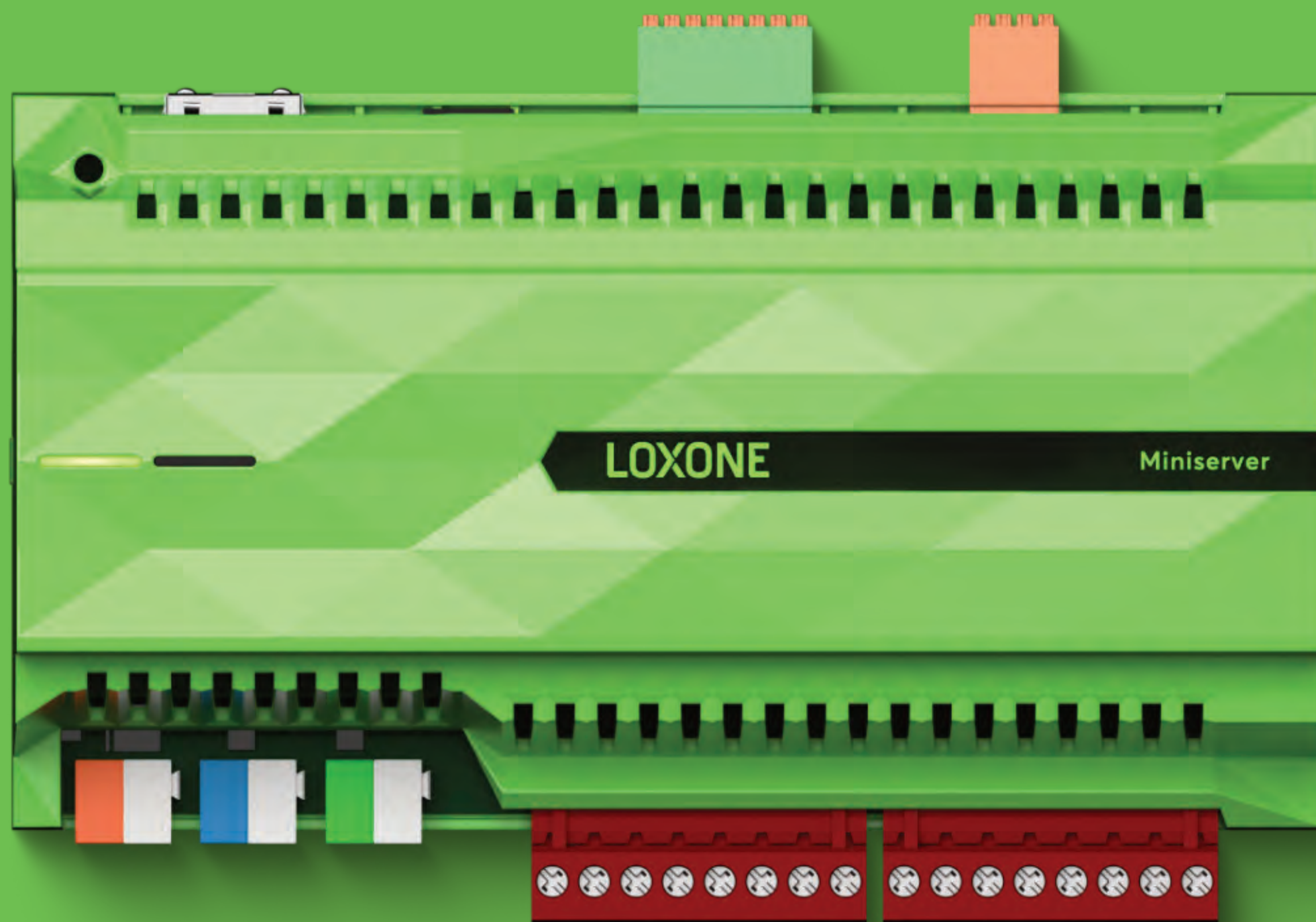


The perfect tool for home and building automation

In an intelligent building, Loxone connects all components, similar to the human nervous system. All strands run towards the central control, the Miniserver. It allows the individual components and devices to communicate with each other and automates most of the tasks in terms of safety, comfort and energy efficiency. Regardless of whether it is a smart home commercial property or special application.

100% reliable and maintenance-free!

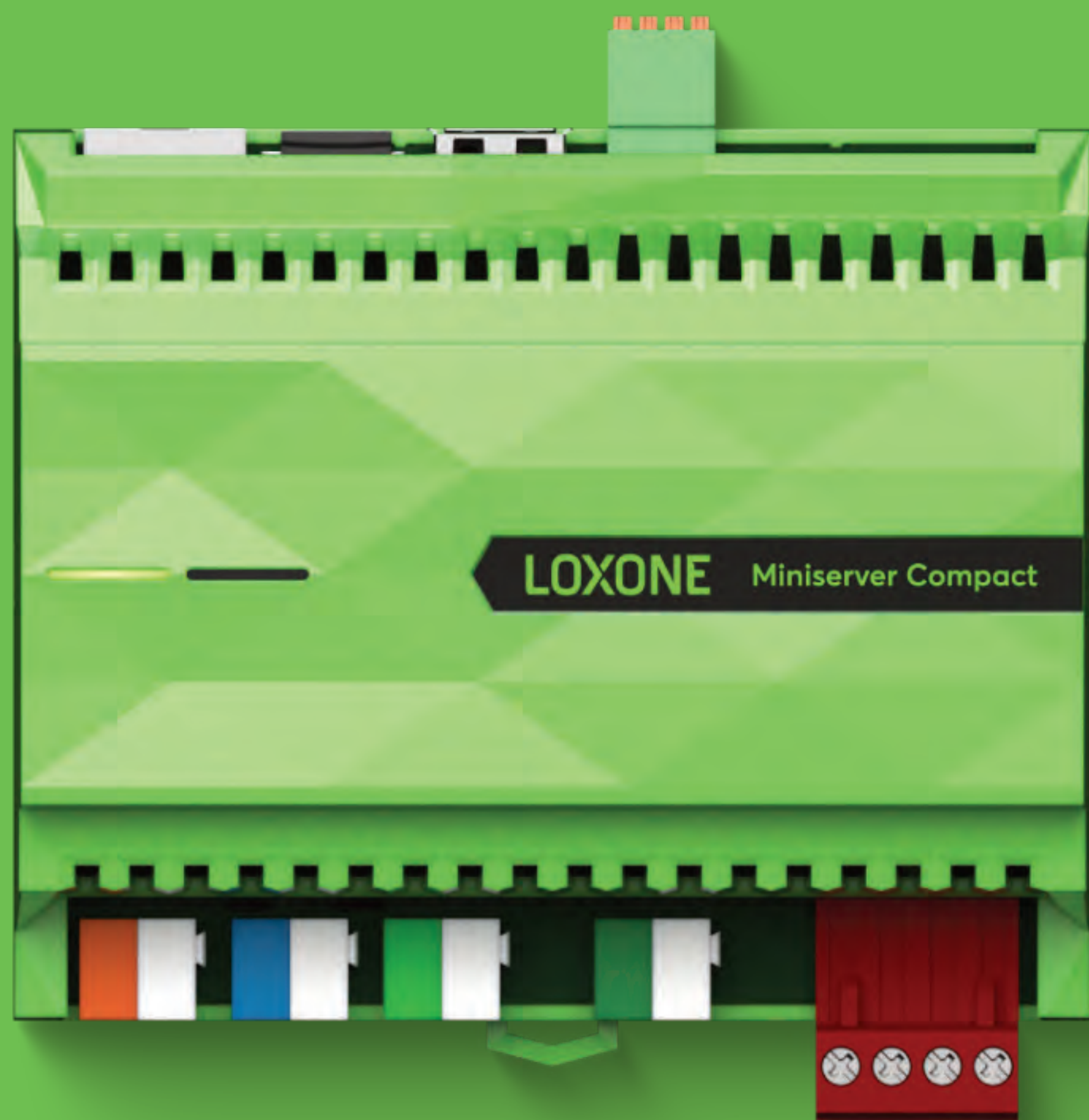
The Miniserver and the Miniserver Go - like all our products and software tools - were designed to provide a building with reliable, 24/7 operation throughout its life. They do not require any moving parts such as fans and are extremely energy-efficient. For more than 10 years, over 200,000 Miniserver have been used with absolute reliability in all kinds of projects all over the world. All of them are 100% compatible with all Extensions ever developed and our latest software generation.



Discover the
Miniserver

The Miniserver

The Loxone Miniserver was developed for the professional electrician specifically. The DIN rail device with a length of 9 division units was developed to be installed in an electrical distribution system, making it ideal for a new building project.



Discover the
Miniserver
Compact

The Miniserver Compact

The high-performance Miniserver in a compact design has many important technologies already on board: it combines Air Base Extension, Tree extension, Audioserver and much more.



Discover the
Miniserver GO

The Miniserver GO

The simplest way of building automation: The Miniserver Go is perfect for any retrofit and renovation project. The wireless version of the Miniserver Go is just as powerful as the wired version. However, the Miniserver Go was designed to be flexible, and can be placed anywhere. With the integrated Air technology, the Loxone Link and numerous interfaces, the Miniserver Go opens up the entire range of options for building automation.

Automation meets Privacy - Cloudfree thanks to the Miniserver



For us, data security is more than just a phrase.

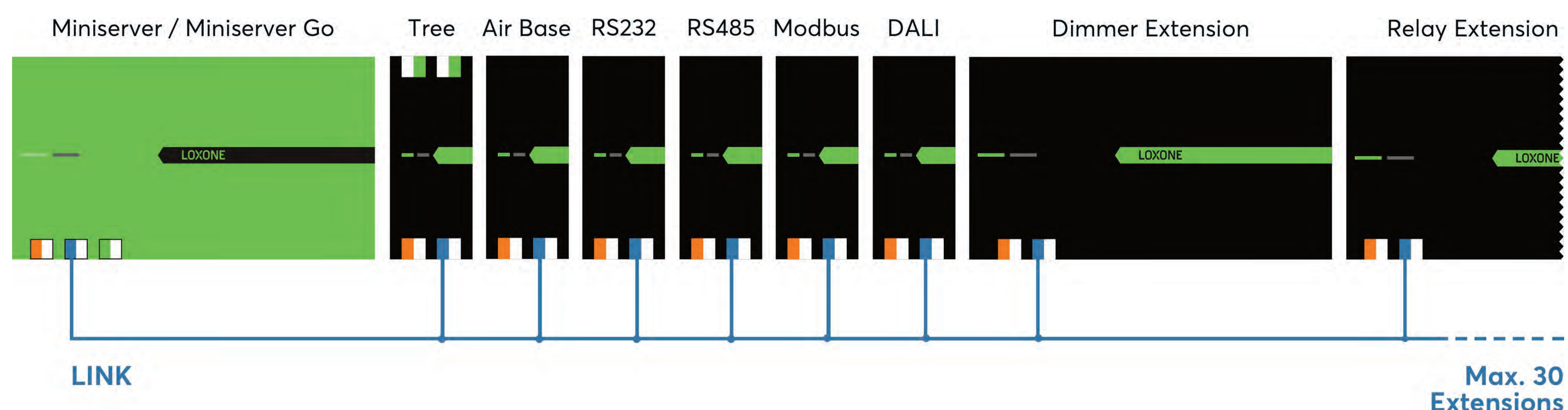
With Loxone, your data stays where it belongs - on your Miniserver. It is the device on which your data is processed. They do not reach the outside and there is no comparison with a cloud.

Our principle applies at all times: Your project, your data! We protect your personal rights 100%.

Expand flexibly thanks to Loxone Extensions



Learn more

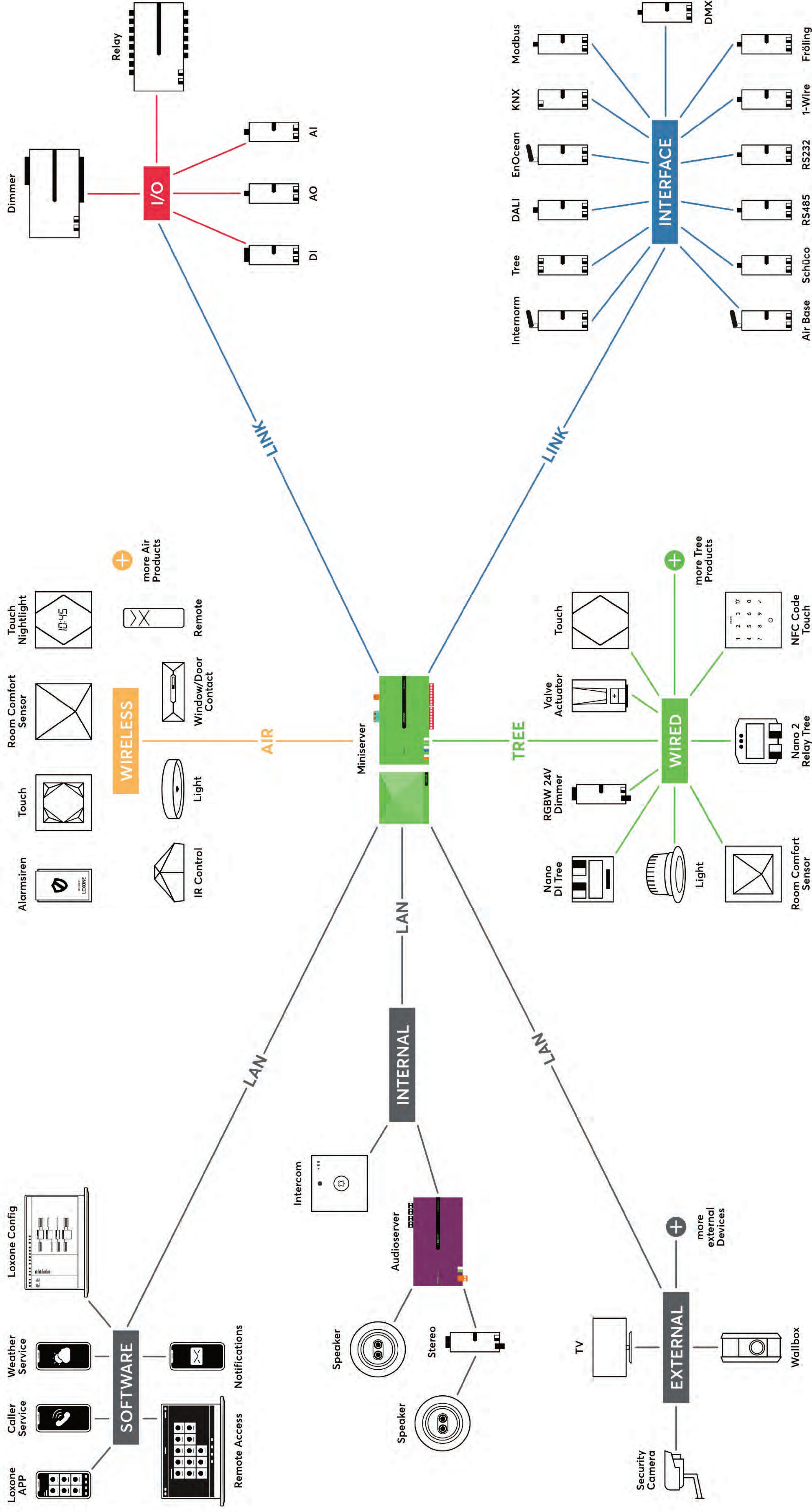


Distributor-based I/O's and interfaces

The Miniserver can be expanded depending on the project requirements. Via the so-called Link interface, the Miniserver can be expanded with up to 30 Extensions to include additional features such as inputs and outputs and numerous interfaces.

Loxone's System Architecture

Thanks to the freely-scalable and modular system, the Loxone Miniserver opens up endless possibilities. Loxone home and building automation is structured as follows:

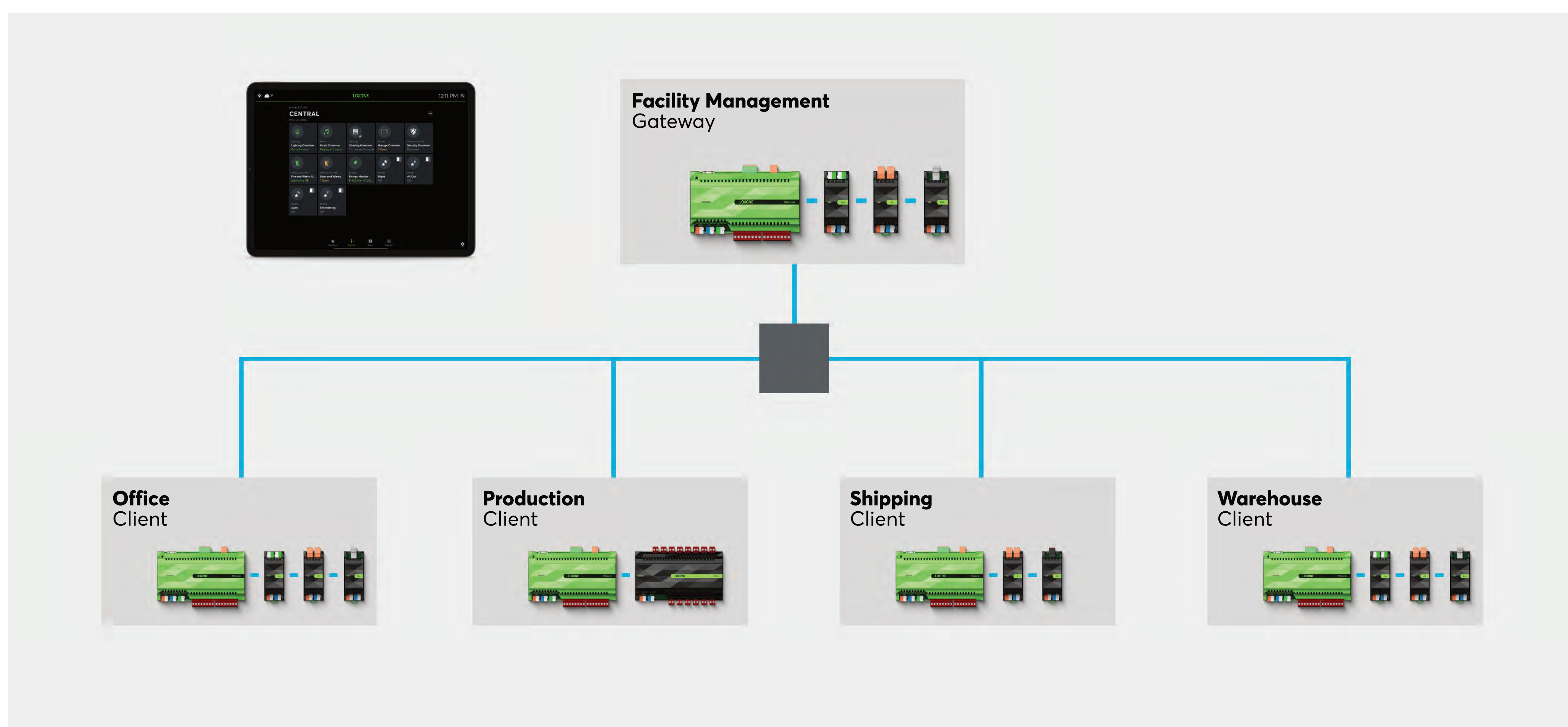


Freely Scalable - from Apartment to Commercial Building

Depending on the size of the building, several Miniservers can be combined within a network. This increases capacity and enables the automation of even extensive, large-scale projects. However, data can also be exchanged between several independent Miniservers. The following technologies for communication between several Miniservers are available to you:

Client / Gateway Concentrator Function

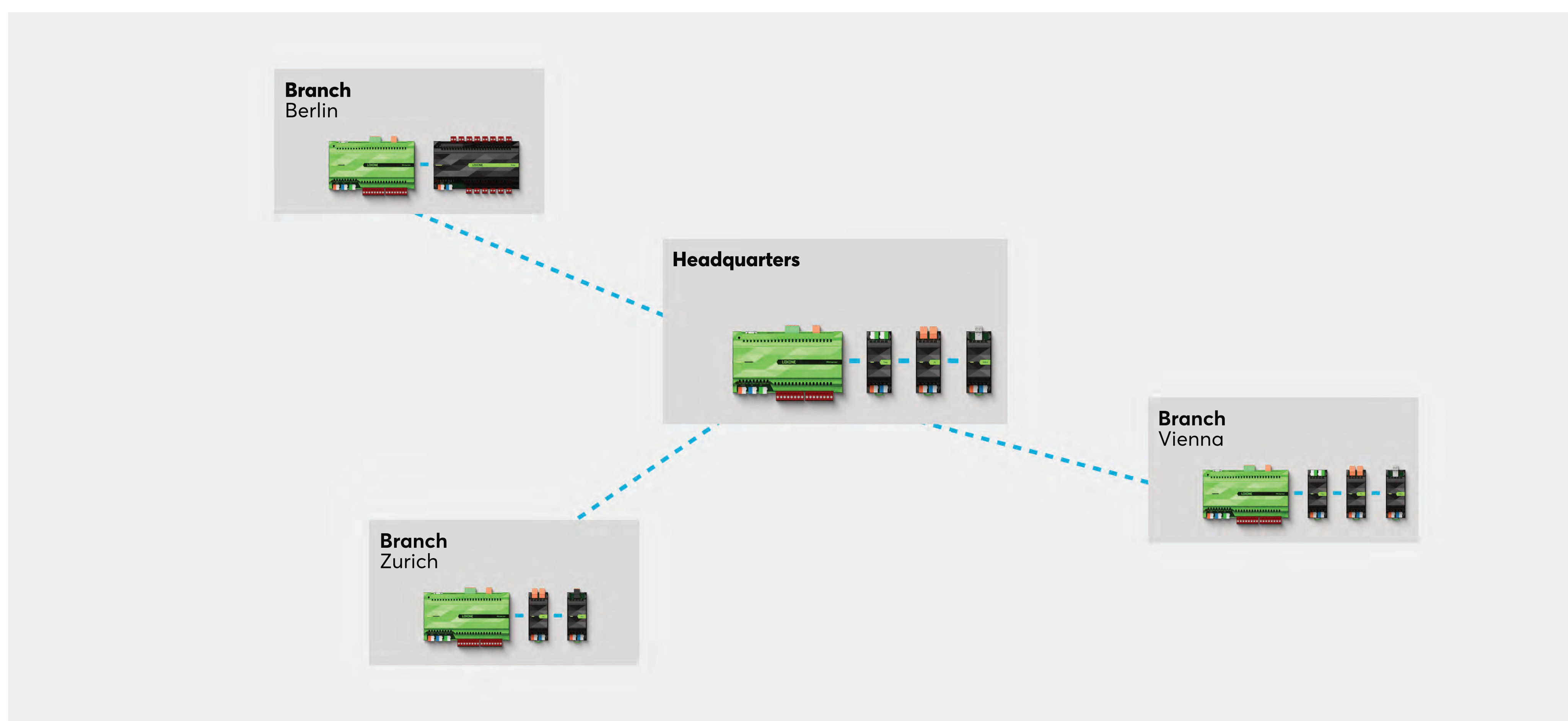
The Client-Gateway function allows several Miniservers (Clients) to communicate with a main Miniserver (Gateway).



Example: Comprehensive visualization for house and building management

Network Intercommunication

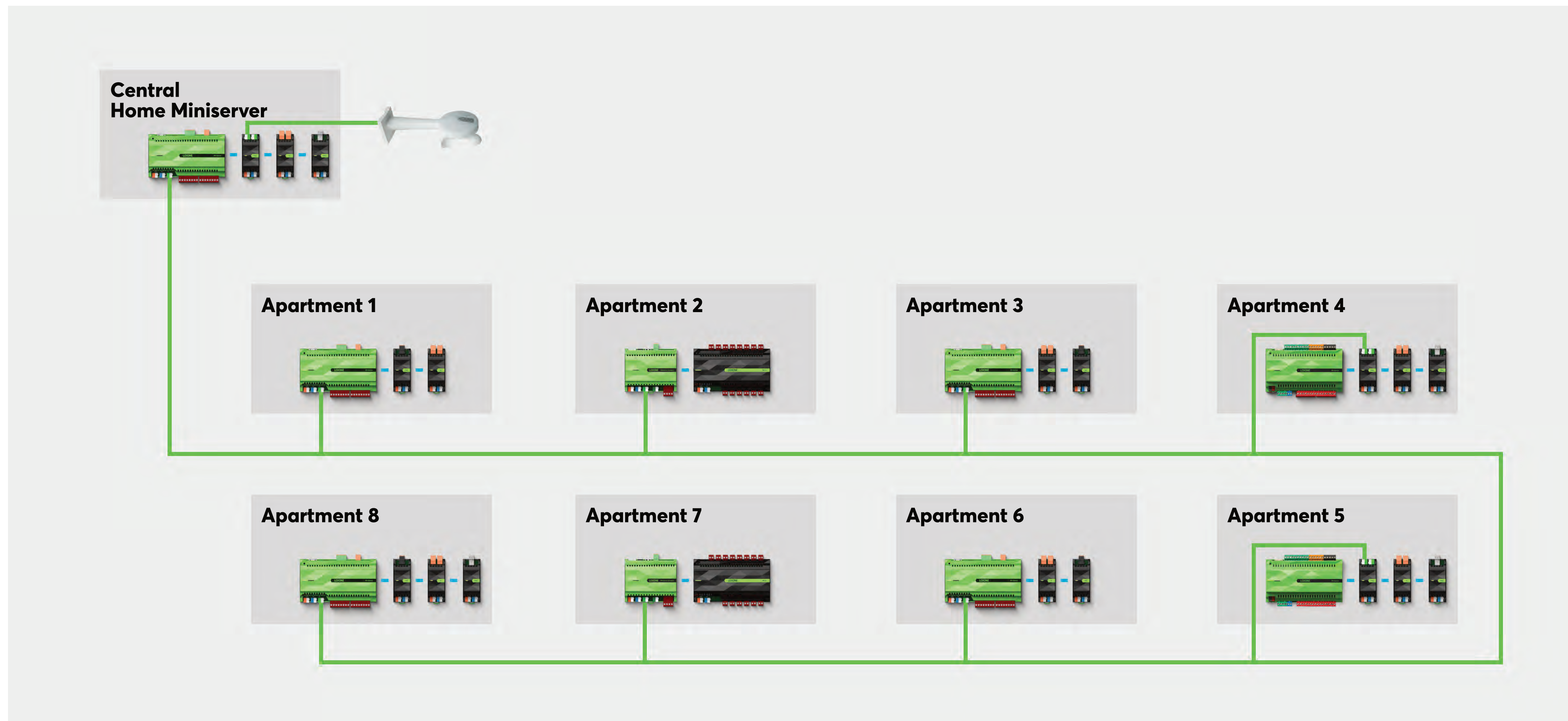
Network intercommunication is used to connect multiple Miniservers in encrypted form via the network interface, as well as to exchange data.



Example: Central administration of several regionally separate locations

Tree Intercommunication

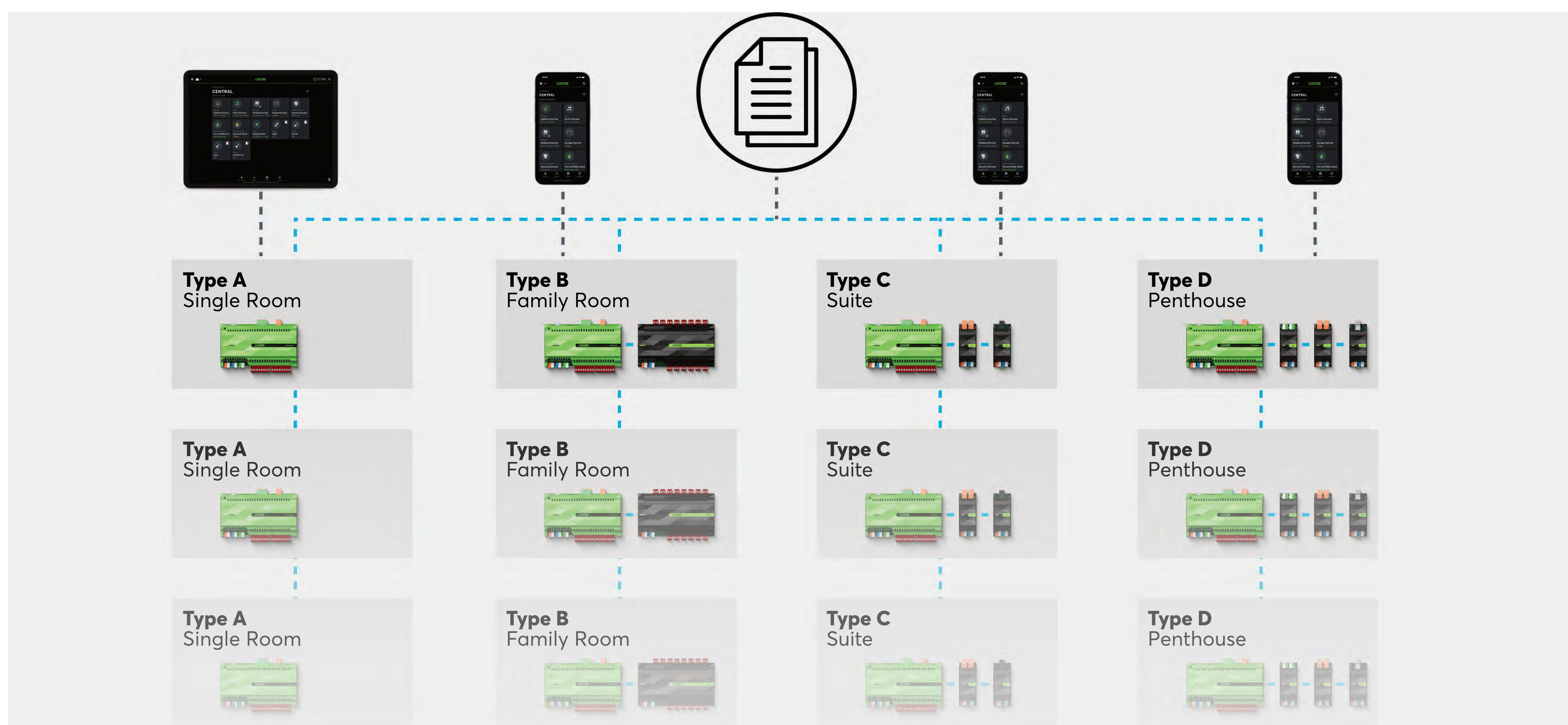
The Tree Intercommunication is used to connect several Miniservers encrypted via the Tree interface of the Miniserver or the Tree Extension, as well as to exchange data.



Example: Central management of housing units with several Miniservers

Multiplicator

Transfer the same configuration to many different Miniservers with just one tap. You will save a lot of time without losing flexibility, especially in hotels, multi-story residential buildings and in large projects in which several Miniservers require the same configuration. Each Miniserver can still be edited individually.



Features

Loxone Auto-Config

The Loxone Config is the software for configuring Loxone home and building automation, and free of charge. To make planning and configuration even easier, faster and, ultimately, even more efficient, we developed a feature called Auto Planning and Auto Configuration.

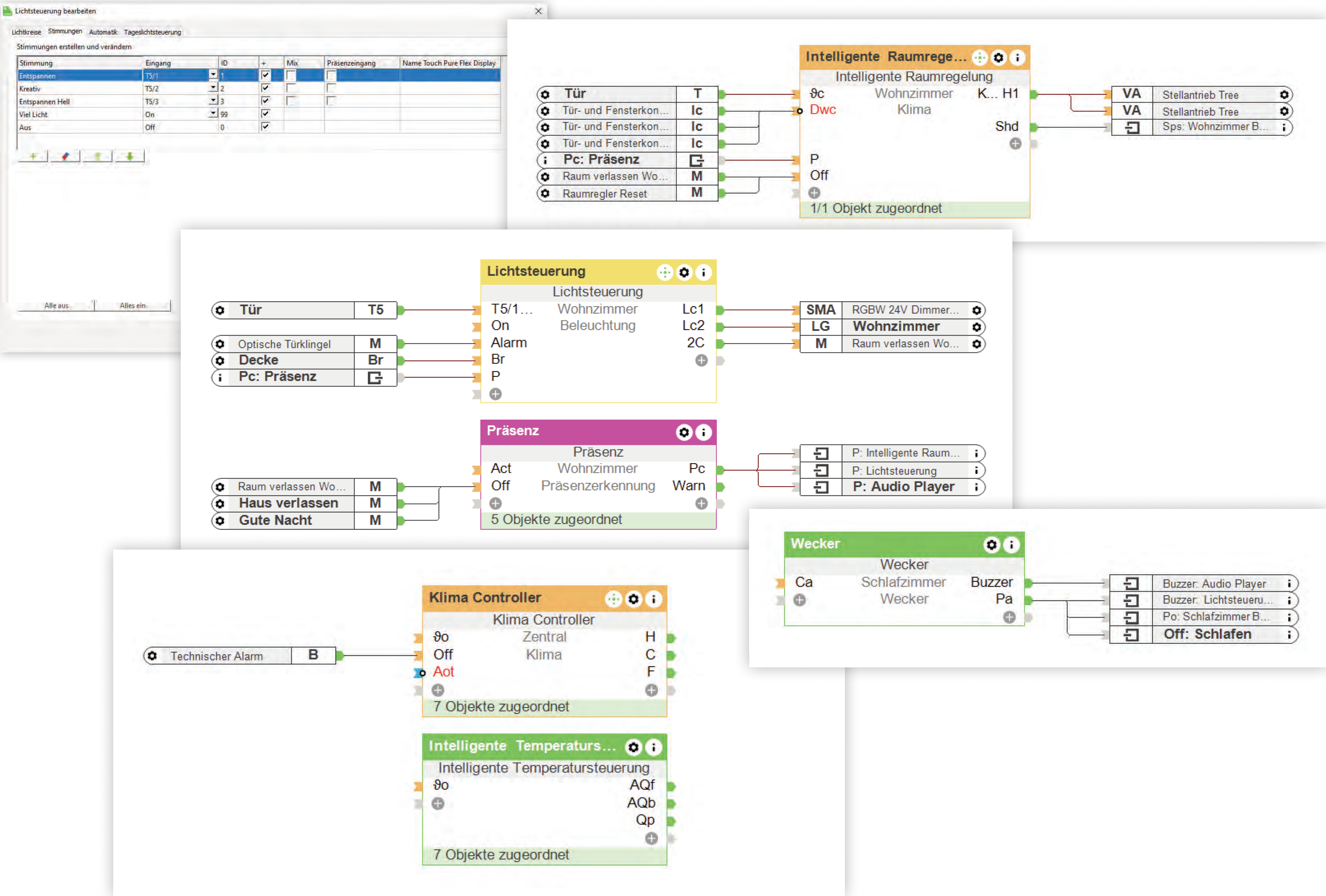
The Auto Planning feature decides which products are required based on the room size, the number of windows and doors, and the intended use of the room. Of course, the components per room can be individually adapted to the respective requirements. Features such as light control, individual room control, automatic shading, music, access and alarm clock are automatically configured for each room. Furthermore, central and security features such as alarm, fire and water alarm center, storm and frost protection and many other features.

Only a proper configuration includes peripherals assigned according to room and category as well as the correct assignment of the room type.

A distinction is made between the following room types:

Bedroom

The Auto Config creates an alarm clock module and connects it to the light control. The "Goodnight" function is also created and, after activation with a triple tap, offers a heavily dimmed night light mood when there is movement. In addition, the heating times and the comfort temperature are adjusted to one bedroom.



**Hallway**

Hallways require significantly shorter motion detection times, so this is taken into account by the Auto Config. Furthermore, the "House off" function is automatically created in a passage room, which can be activated with a triple tap.

Living Room

In a living room, the Auto Configr adjusts the motion detector times, heating times and room temperature.

Legal notice

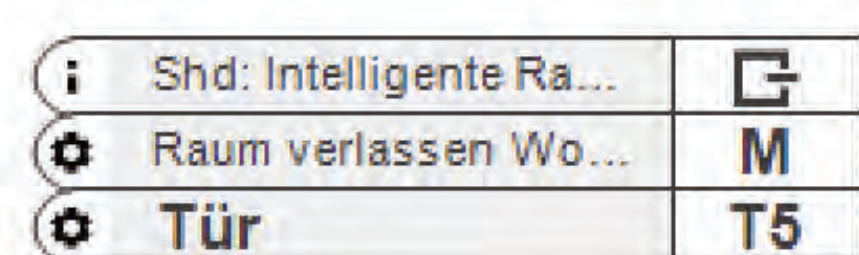
Loxone provides a tool for project planning. This program helps the customer to select the products and to create a bill of materials as well as to create a basic configuration. However, this program does not exempt the customer from having the planning and

configuration checked and approved by a specialist (authorized business owner)! The program does not take into account legal provisions (laws, ordinances or standards) or the actual circumstances or expectations of customers, but only bases the planning and configuration on general empirical values - without claiming to be correct or complete.

Therefore, Loxone is not liable for the correctness or completeness of the parts list and for the usability of the configuration. Loxone is liable for direct or indirect damage as well as consequential damage that arises in connection with the use of the project planning for whatever reason, only if Loxone caused it intentionally or through gross negligence. The amount of these claims for damages is limited to the purchase value of the product that caused the damage.

Shading

The intelligent automatic shading by Loxone ensures inimitable comfort, maximum energy efficiency and the greatest possible privacy.



Top features of shading control with Loxone

- Protection against heat and cold
- Privacy protection at dusk
- Storm protection for blinds etc.
- Flexible groups
- Optimal use of solar energy
- Security 24/7
- Gentle wake-up light
- Child lock

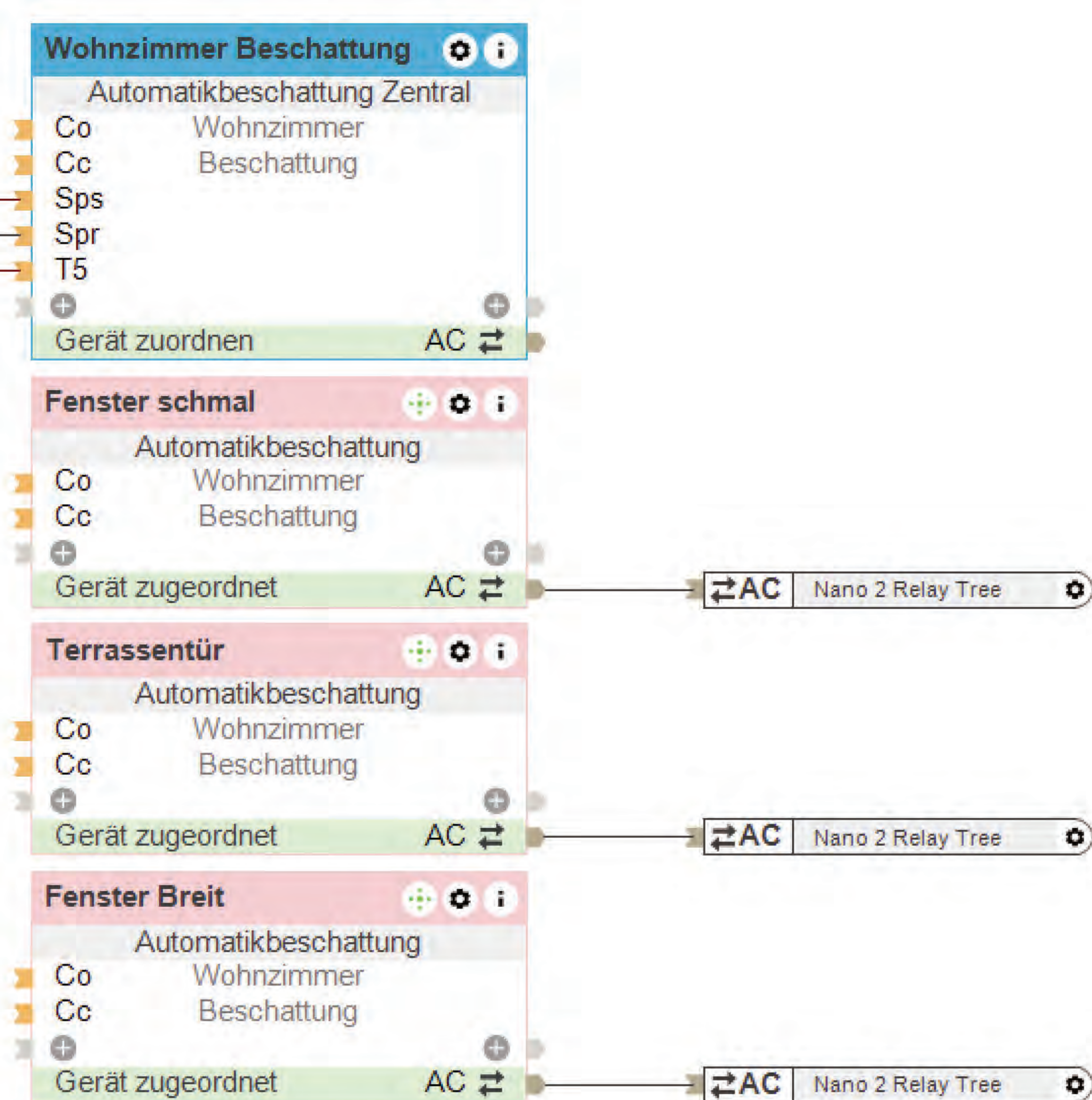
The right control for every type of shading:

- **Blind control:** Blinds and external venetian blinds offer the ideal middle ground between transparency and sun protection.
- **Shutter control:** Shutters offer the best darkening, the most secure burglary protection and are insensitive to wind and weather.
- **Awning control:** Awnings offer protection from direct sun on a balcony or patio. Their high sensitivity to wind requires storm protection.
- **Other types of shading:** Whether pleated blinds, sun sails or vertical blinds - integrate any type of shading into your Loxone installation.

Storm and frost protection

A building can face dangers due to frost and wind. The weather station protects a building automated by Loxone from this. Frost and storm protection are part of the Loxone auto configuration and are implemented as follows:

If the Loxone weather station detects a wind speed above which the shading could be damaged, the storm protection is activated.



This means that all shading elements move to a safety position and operation is blocked. The storm protection can be canceled either manually in the app or automatically when the wind speed is no longer dangerous.

If the outside temperature falls below 1°C and the weather station detects precipitation, a smart building prevents frost damage. All shading elements are stopped immediately and locked for security reasons. The frost protection can either be canceled manually in the visualization or is deactivated automatically at an outside temperature of more than 10°C.

Automatic Shading FunctionBlock

In a building automated by Loxone, the shading is automatically controlled based on the position of the sun and the interior temperature. Reducing the (in)direct sun exposure ensures that a room will not heat up as much over the course of the day.

In the case of venetian blinds and external venetian blinds, the position of the slats is also automatically adjusted according to the position of the sun in order to ensure even better climate control of the room.

Based on the geographic coordinates of the building and the respective cardinal point of the element to be shaded, the Miniserver first calculates the possible shading area in regards to time. The shading area indicates when the sun's rays theoretically shine on the window or door. To ensure that the automatic system only acts when it actually contributes to the cooling of the building, further conditions are necessary:

The first condition is the so-called sunshine. Sunshine or radiant power is measured in Watts per square meter. The Miniserver receives this information from the Loxone weather service, which is included with the purchase of a Weather Station. The sunshine depends on the absolute radiation value, which is supplied by the weather service. The height of the sun is calculated from the geographic coordinates of the installation as well as the time and date. If the sun exposure is now above the calculated threshold value, this information is passed on to the shading.

The second condition for the automatic FunctionBlock to be activated is the current interior temperature. A temperature sensor is required for exact temperature measurement. The Intelligent Room Controller FunctionBlock is a basic requirement to make sure that the interior temperature can influence the automatic shading.

If both conditions are met and the element to be shaded is in the shading area, the shading is automatically closed and the slats are readjusted depending on the position of the sun.

At the end, the shading moves to a previously defined position. Usually, the shading is now being fully opened.

If the shading is operated manually during automatic mode, for example by pressing a button or by operating it via the Loxone App, the automatic feature for this day is ended. If the automatic feature is to be reactivated for this day, this is triggered by the "Leave room" function (double-tap on the Loxone Touch) or by the Loxone app. If it was completely closed manually or by an individual logic, the shading is not automated.

If you want to intervene manually in the shading, this is usually done using the Loxone Switch Standard. All information about the Loxone button standard can be found on page 27.



Like all features, automatic shading can be adapted to the individual needs of the respective building thanks to the freely configurable Loxone Config. This can lead to the shading behaving differently than just described.

Climate Control

The climate inside of a building has a major impact on our well-being and performance. The Loxone system monitors the room climate around the clock and takes care of the ideal combination of temperature, fresh air and humidity.

The Miniserver also ventilates the premises automatically depending on the room climate. Thanks to intelligent individual room control, there is the perfect temperature in every room.

Top functions of climate control with Loxone:

- ▶ Determination of the individual heating requirement per room
- ▶ Reduced energy costs
- ▶ Economy mode during absence
- ▶ Protection of the building (frost, heat,...)
- ▶ Remote access via App
- ▶ Alert in the event of disruptions
- ▶ Statistics

- ▶ Calendar feature including public holidays
- ▶ Operating time meter

The right controller for every heat source:

- ▶ Underfloor heating
- ▶ Infrared panels
- ▶ Radiators
- ▶ Gas heating
- ▶ Oil heating
- ▶ Heat pump
- ▶ and much more

Tip: It is important that the necessary interfaces are coordinated with the responsible heating installer and the ventilation technician. This way, you achieve the best possible comfort and increase potential energy saving.



FunctionBlock: Intelligent Room Controller

Indoors, the room climate is equally as important in smart homes as it is offices and commercial properties. This can mean a pleasant 18°C at home in your bedroom or a concentration-boosting 20°C in the office. Thanks to individual room control, you can enjoy the perfect feel-good temperature everywhere. And without any additional effort on your part.

Learns to optimize itself

The Intelligent Room Controller learns and knows when to activate the heating system so that the room temperature is reached at the desired time. You only have to enter when you want which temperature - i.e. at what times you are present or absent - and your heating control takes care of the rest.

The Intelligent Room Controller maintains a set room temperature and automatically switches between heating and cooling.

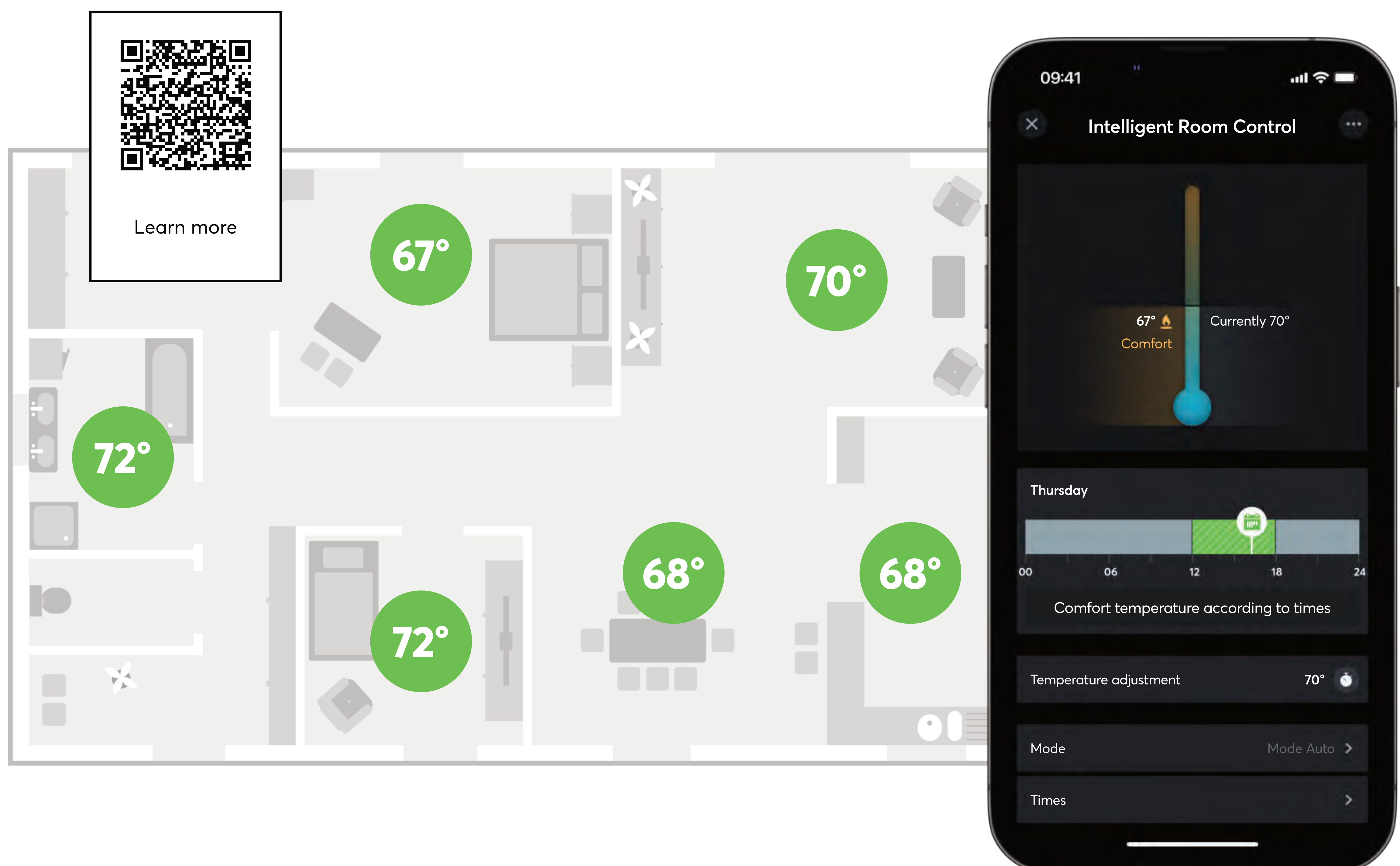
The Intelligent Room Controller FunctionBlock offers a comfort mode with different adjustable temperatures for heating and cooling, which can also be adjusted via the Loxone App.

A timer is available for scheduling the set temperatures. Outside the scheduled times for the comfort temperature, an eco temperature is active to save energy, with a lower room temperature for heating and a higher one for cooling.

In addition to temperature control, the Intelligent Room Controller FunctionBlock is also largely responsible for automatic shading. There are two parameters for activating shading (»Temperature shading heating« & »Temperature shading cooling«). These can be used to set the actual temperature from which the shading is activated.

However, the interior temperature is not solely responsible for the activation of the shading. All further information on the interaction of the intelligent room control and the automatic shading can be found in the chapter: Automatic Shading on page 15.

You can find these functionalities in the Loxone Auto Configuration. Learn more on page 13.



Lighting

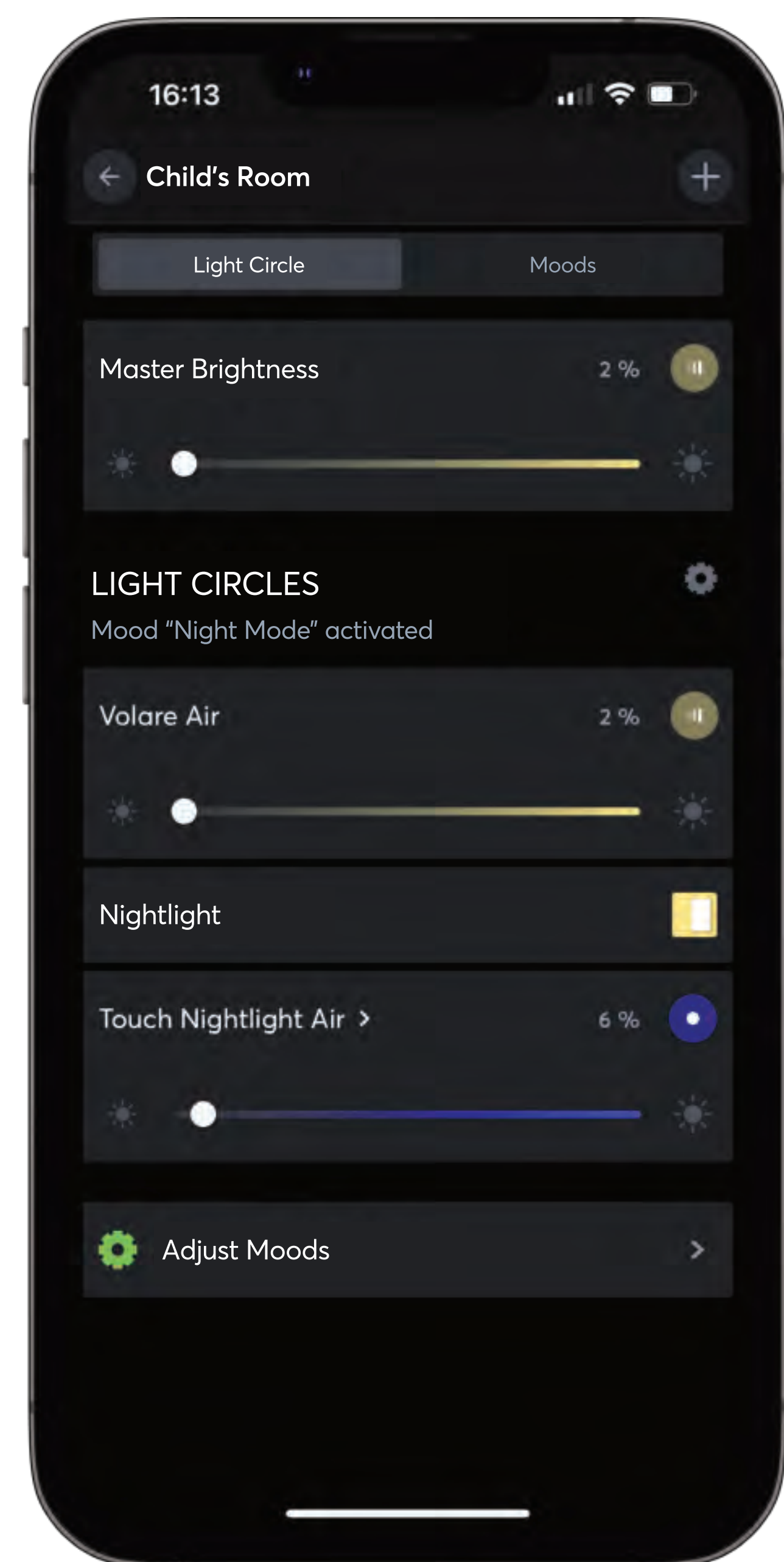
Lighting is a key issue in any building. With well thought-out lighting planning, the perfect work and base lighting as well as background and accent lighting can be implemented.

Loxone makes intelligent lighting control easy with the help of presence detectors and brightness sensors, and enables the integration of any light.

Top features of lighting control with Loxone:

- ▶ Dimming
- ▶ Fade in - fade out
- ▶ Signal (alarm)
- ▶ Alarm feature
- ▶ Night light
- ▶ Energy management
- ▶ Presence simulation
- ▶ Adjusted brightness
- ▶ Different lighting moods
- ▶ Child lock

Tip: In addition to Loxone's own LED lights, Loxone also supports digital interfaces such as DMX and DALI.



FunctionBlock Lighting Controller

The Lighting Controller FunctionBlock enables the control and operation of lighting in a room or area. Switching, dimming and colored light are supported via various interfaces. The different light circuits can be set as desired via the Loxone App and any combination can be saved as a lighting mood. With the right sensors, i.e. presence and brightness detection, the lighting can be automated as required.

The light control can be supplemented with the Constant Brightness Controller FunctionBlock, for example. This ensures constant brightness in a production area, for example.

In most cases, the lighting does not necessarily have to be operated thanks to the extensive automation. The lighting is activated automatically as required. In addition, the lighting can be operated via the middle button of the Loxone Touch according to the switch standard or the Loxone App.

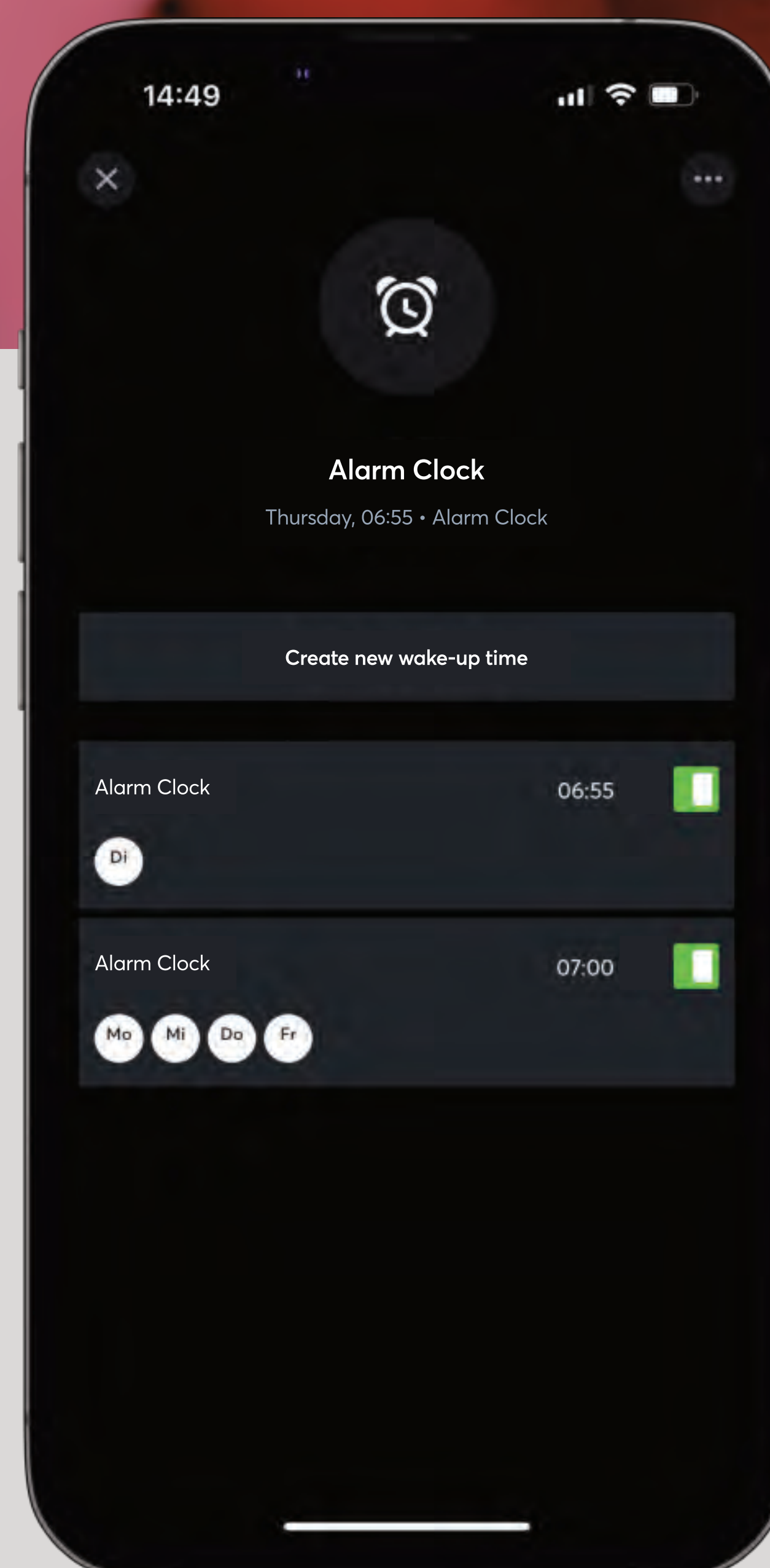
With each tap on the Loxone Touch, you switch to the next lighting mood. Dedicated lighting moods can be assigned to certain buttons so that the correct lighting mood is immediately activated in a certain area by pressing a button. With the help of a presence detector, button or the Loxone App, you can also combine several lighting moods.

Custom, automatic lighting moods can also be activated when there is movement with the Lighting Controller FunctionBlock. For example, a basic lighting mood is activated after nightfall and a heavily dimmed lighting mood late at night. By double-taping on a Touch, »Leave room« as we call this feature, the lighting is switched off.

You can find these functionalities in the Loxone Auto Configuration. Learn more on page 13.



[Learn more](#)



[Learn more](#)

FunctionBlock Alarm Clock

With the Alarm Clock FunctionBlock, you can carry out certain actions on desired days and times, periodically or once. In addition to individual days of the week, you can define your own wake-up times for public holidays, vacation, etc. In addition, the Alarm Clock FunctionBlock has a snooze function (which is dearly loved by many). In addition, a Touch Nightlight Air can be linked, via which a wake-up alarm is issued.

You can get these features through the Loxone auto configuration. Find out more on page 13.

Multimedia & Music

The Audioserver combines great computing power, versatile features and four amplifier outputs in the smallest of spaces. It is infinitely flexible and freely scalable.

In combination with high-quality, passive 4-8Ω loudspeakers, an impressive sound experience is created. Whether it's quiet or loud, crystal-clear background music or powerful party beats - the Audioserver masters all challenges with flying colors.

In combination with the [in-house Loxone speakers](#), the intelligent audio system can be integrated into the building almost invisibly.

Top features of the multiroom system

- ▶ Multiroom audio – fully integrated
- ▶ Smart doorbell
- ▶ Loud alarm tone
- ▶ Text-to-speech
- ▶ Custom announcements
- ▶ Gentle alarm clock
- ▶ Automatic activation
- ▶ Room off - house off
- ▶ All devices under control

Tip: Other multimedia systems, such as projectors and consoles, can also be integrated easily into the Loxone system.



Learn more

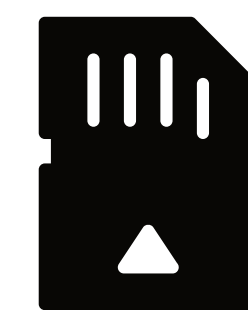
Music Sources & Music Formats



Spotify



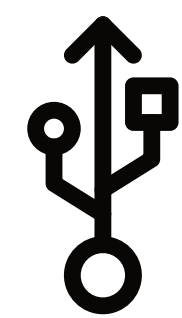
TuneIn



SD-Karte



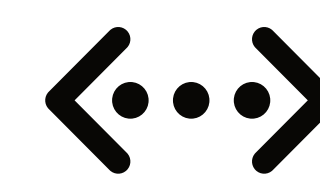
Apple AirPlay 2



USB



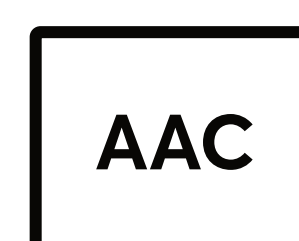
Line-In



Netzwerk



MP3



AAC



ALAC



M4A



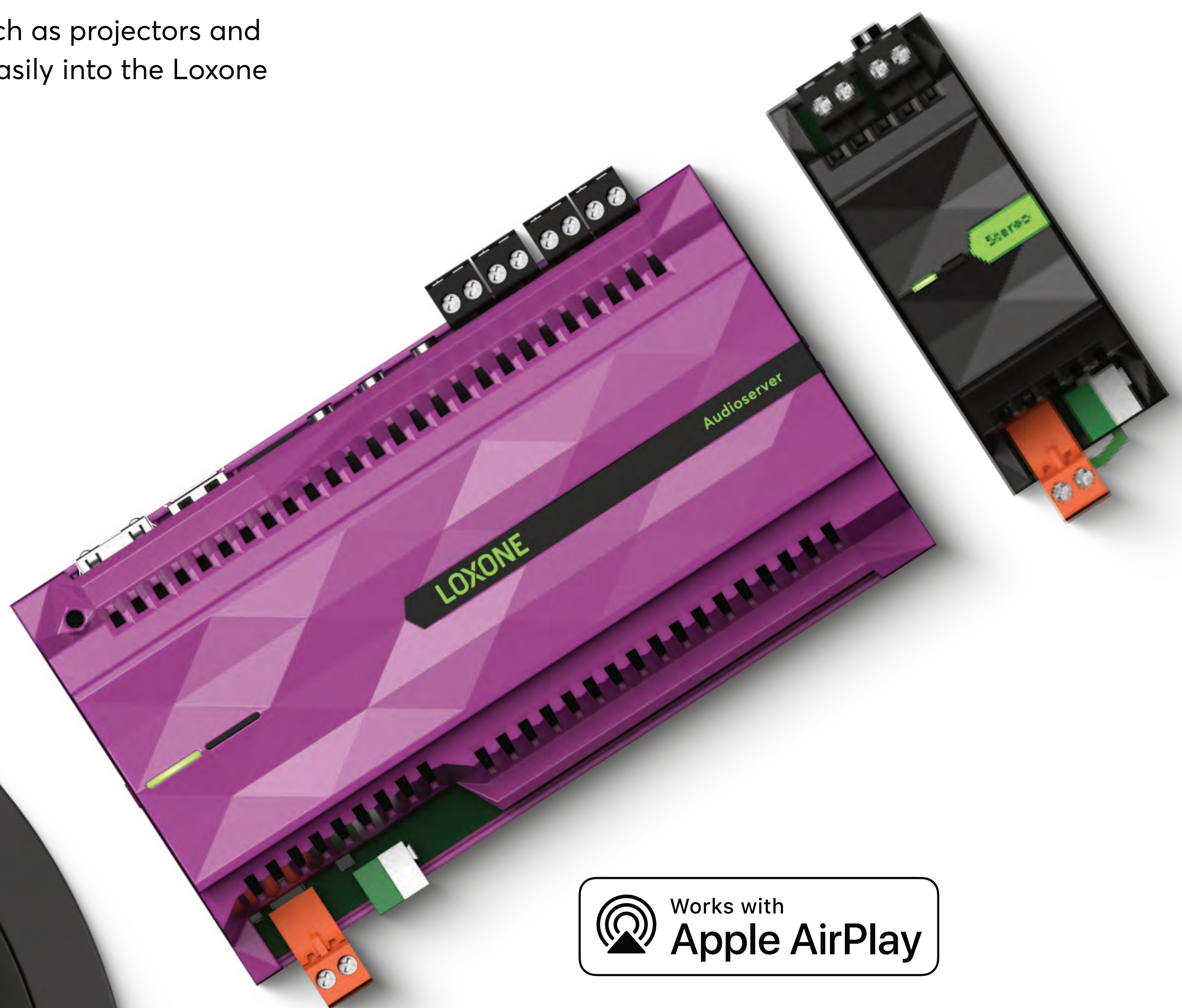
FLAC



WMA



WMA
lossless



Works with

Apple AirPlay



Learn more

Access Control & Door Communication

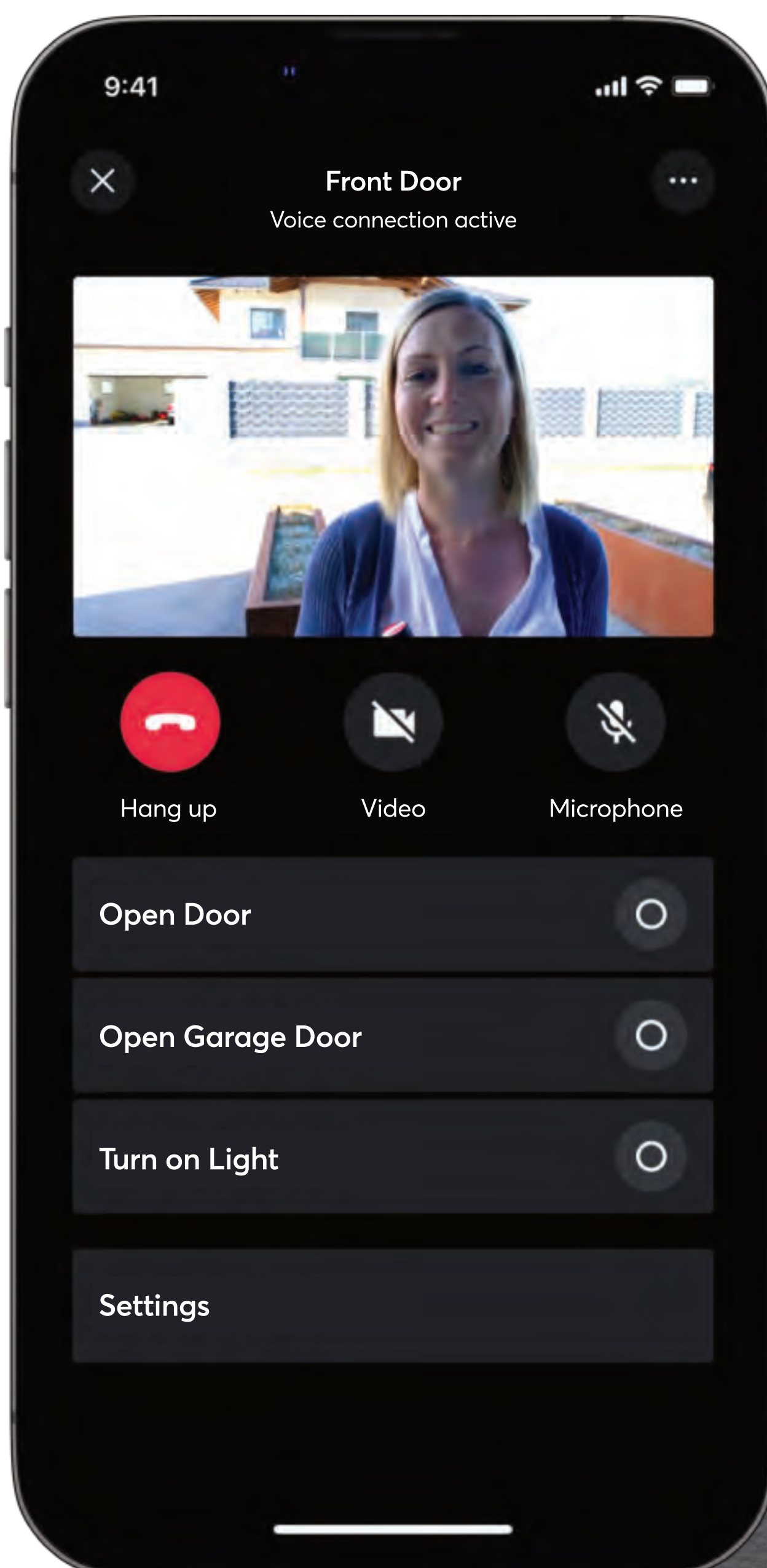
Whether only two or 200 users - with Loxone you can implement the perfect access control for your project.

Loxone offers a comprehensive access system

1. **Code & NFC:** The NFC Code Touch enables contactless and highly encrypted access using the integrated NFC reader and can be used universally (e.g. also for lockers, secret compartments,...).
2. **Intercom:** With the Loxone Intercom, the app-compatible video intercom system, you can keep an eye on what is happening in front of your door at any time, and from anywhere. Open the door on the go or send a text-to-speech message - anything is possible!
3. **Intercom Trust:** With the new Loxone Config 13, it is now possible for a single intercom to be used by multiple Miniservers. This is particularly necessary in projects with, for example, several residential units or an office complex.

Top features of the access control system

- ▶ Custom user and rights management
- ▶ Logging & tracking
- ▶ Flexibility in the choice of system
- ▶ Use of numerical codes
- ▶ Time-dependent codes / one-time codes
- ▶ Custom ringtone
- ▶ Remote access





Energy Management

The optimal use of self-generated energy, e.g. from PV systems, is a significant contribution to environmental and climate protection. The Miniserver controls the intelligent distribution of energy depending on production, demand and prioritization without overloading the power grid. With the help of Loxone, not only is energy management ensured, energy costs can be significantly reduced as well.

Top features of our energy management system:

- ▶ Standby killer
- ▶ Away mode
- ▶ Energy statistics
- ▶ Intelligent heating & cooling phases
- ▶ App notifications
- ▶ Optimization of your energy consumption via integrating a heat pump, battery storage etc.

Tip: Even "stupid" devices such as the dishwasher can be easily integrated into the Loxone system. A new feature is the option of seamlessly integrating smart household appliances with Home Connect from Bosch, Siemens, Gaggenau and NEFF into the building automation.

Battery Storage

Without battery storage, the self-generated electricity is only used by the consumers who are also active during electricity generation. In a conventional building, this always requires manual intervention.

Self-consumption of the electricity generated becomes easier with battery storage: the electricity can be made available when it is really needed – regardless of whether the sun is shining. This way, it is possible to cover a large part of the required amount of electricity with the self-generated electricity of the photovoltaic system.

But the photovoltaic system and the associated inverter as well as the battery storage need a higher authority to work effectively. This task can of course be managed by our Miniserver. All information such as current production, battery charge status, weather forecasts, status of the electric car and much more come together here.

Photovoltaic

A photovoltaic system and battery storage combined with the Loxone Miniserver ensure optimal use of self-generated energy.

This significantly reduces the electricity costs of a building. Thanks to the full integration of the inverter and battery storage in the Loxone system, consumers can be switched on and off depending on the load or consumption. Thanks to the Energy Manager FunctionBlock, the electricity produced free of charge is used optimally. For example, load-intensive consumers such as the heat pump or a heating rod can be intelligently activated when there is a solar yield. If the electricity currently being produced is not needed, the battery storage is charged and serves as a buffer for the evening hours. The interaction of all trades and the extensive logic features of the Miniserver lead to a building that works independently even in times of moderate sunshine, i.e. no electricity has to be purchased.

E-charging Station

In order to perfect the interaction of intelligent energy management and effective charging of an electric car,

it is advisable to select a wallbox that can be integrated seamlessly into the Loxone system.

With a wallbox, the vehicle is charged depending on the energy yield of the photovoltaic system, the consumption of the rest of the house and the state of charge of the battery storage.

FunctionBlock Wallbox

A FunctionBlock called »Wallbox« was developed specifically for this purpose. The block is used to control and visualize a charging station for electric vehicles. One of the most important properties of a wallbox is that the charging current can be limited intelligently.

You can find these functionalities in the Loxone Auto Configuration. Learn more on page 13.

Irrigation

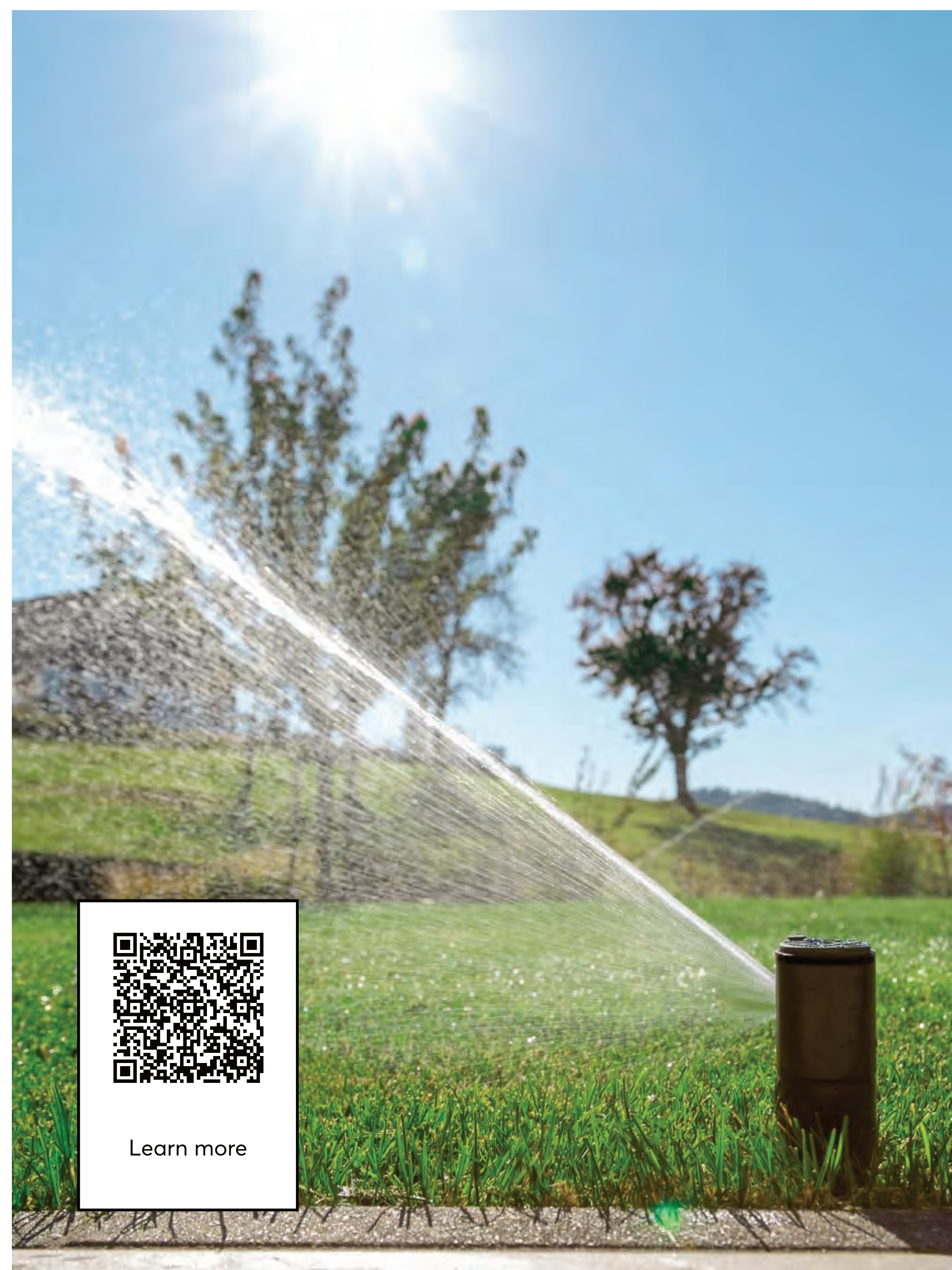
Irrigation systems, sprinkler systems, drip irrigation and more - thanks to the large number of open interfaces and the freely configurable software, Loxone offers unique solutions for automatic irrigation.

Irrigation is controlled either via the weather forecast from the weather station or via moisture sensors in the soil. If a cistern is used to store water and the water level is too low, it will not be irrigated. In addition, the sprinkling can be activated time-dependently or manually via the Loxone App.

Top features of our irrigation control

- ▶ Automatic horizontal or vertical irrigation
- ▶ Relative or absolute humidity
- ▶ Soil moisture monitoring
- ▶ Level monitoring, e.g. of a cistern
- ▶ Weather forecast
- ▶ Monitoring
- ▶ Remote access
- ▶ Notifications

Tip: While automatic irrigation can be useful for every garden, it also provides an enormous advantage for protection against frost in agriculture, for sports facilities or for green roofs and facades.





Learn more

Ambient Assisted Living (AAL)

Ambient Assisted Living refers to technical solutions that support people with disabilities on their way to a more independent life or enable a self-determined life in old age.

With the use of Loxone technology, residents are given more security. In addition, the supervisors are relieved and the investors also benefit from the building automation.

Top features of AAL control

- ▶ Fall control
- ▶ Emergency button
- ▶ Reminders
- ▶ Access for emergency services (ambulance)
- ▶ Detection of changes
- ▶ Alert chain
- ▶ Prevention of hazards

- ▶ Nightlight feature
- ▶ All-round protection
- ▶ Remote access (access for rescue workers,...)
- ▶ Automatic lighting
- ▶ Healthy air quality
- ▶ Feel-good temperature

FunctionBlock AAL Smart Alarm

This FunctionBlock implements an intelligent detection of emergency situations. For example, if a person in need falls, help can be called quickly. In addition, a manual alarm is possible, e.g. via an emergency button or other alarm logic. Loxone products such as Motion Detector Tree can be conveniently selected via a configuration dialog (double-click on the FunctionBlock).

Wellness

Loxone takes over the intelligent control of your wellness oasis and gives you even more time to relax - whether in the sauna or by the pool.

Top features of sauna control

- ▶ Temperature control (monitoring, correction)
- ▶ Lighting with hourglass feature
- ▶ Public announcements
- ▶ Operation via touch surface
- ▶ Safety shutdown
- ▶ Total load monitoring

Top features of pool control

- ▶ Water treatment (filtration, circulation,...)
- ▶ Integration of heat pumps
- ▶ Fresh water supply
- ▶ Lighting
- ▶ Counter-current system
- ▶ Remote access
- ▶ Monitoring

Security

A building equipped with Loxone monitors whether someone is approaching without authorization, and sounds an alarm in case of an emergency. It detects escaping water, warns of dangers such as fire or smoke and, ultimately, ensures all-round protection.

It does not require an additional expensive alarm system. The existing components, such as presence detectors, door contacts, light and shading, are combined into a fully-fledged alarm system that provides 100% reliable protection against danger.

Top features for more security

- ▶ Panic button
- ▶ Away/ Alarm mode
- ▶ Different alarm zones
- ▶ Fire & water alarm control panel
- ▶ Presence simulation
- ▶ Air quality monitoring
- ▶ Notification via push notification, call, and more
- ▶ Customizable alarm chain
- ▶ Remote access

- ▶ Child lock
- ▶ False alarm suppression
- ▶ Logging feature
- ▶ Opening state
- ▶ Monitoring (surveillance camera,...)

FunctionBlock: Fire and Water Alarm

With the Fire and Water Alarm FunctionBlock, extensive features relating to the protection of residents in a smart home can be implemented. If an impending fire is detected by the smoke detector Air or Loxone Touch, the fire alarm is triggered. This takes place in two phases (pre-alarm/main alarm). In an installation based on the Loxone standard, the entire shading system opens during the alarm, the lighting flashes and an alarm tone sounds via the audio server. This way, the smart home draws maximum attention to warn residents. In the event of water detection by the Air water sensor, the same alarm levels are activated as with a fire alarm.

You can find these functionalities in the Loxone Auto Configuration. Learn more on page 13.



Switch Standard

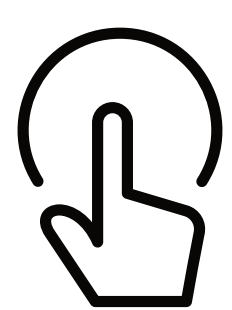
Even if automated features eliminate the need to constantly press buttons, there are scenarios in a building where the use of buttons is more practical. For example, simply changing the volume, manually opening or closing the shading or adjusting the lighting mood. Fewer switches, more clarity - this was our motto when designing the Loxone Switch Standard. This Switch Standard is our clear recommendation for operating and

positioning your buttons that everyone can understand. With the T5 Switch Standard, Loxone is the most advanced system on the planet. All touch points in each room follow the same functional principle. This makes labeling or even complicated memorization of the respective assignment completely superfluous. Only the look of the button has to be selected, the rest does what it is supposed to do: simply work.

This is how the Loxone Switch Standard works



Learn more



Single tap

Touching the large button in the middle switches the lighting on or changes the lighting mood. With a tap on the button on the top left, the shading moves up, on the bottom left it moves down. The music is controlled on the right. One tap on the top and it gets louder, one tap on the bottom and it turns down the volume.



Double tap

When leaving the room, a double tap in the middle of the button is enough to switch off the light and all devices in the room. Double-tap the button at the top right to change the music source. To turn the music off again, double-tap the bottom-right button.



Triple tap

A special highlight is the "house off" feature, which puts the entire building into sleep mode with a triple tap. The lights go out, standby devices are unplugged, the alarm system is armed, etc. Always tailor-made, just the way you want it.

Central Commands

Various "Central" FunctionBlocks can be used to execute central commands that affect the entire shading, lighting and music in a building. In addition, so-called operating modes can be used to influence a large number of different trades and functions at the same time.



Operating Modes

Every building should have a standard of operating modes. We recommend:

House off

When the last person leaves a building, they can put said building into a deep sleep with a triple tap on a button near the entrance door. The entire light in the building is switched off, power guzzlers are disconnected from the mains, the shading moves back to the automatic position, the heating runs on the back burner, the Audioserver goes to standby and, lastly, the alarm system is armed.

Night Mode

Just before falling asleep, a tap on the button next to the bed is enough and the Miniserver puts part of the house into Night Mode. The lights switch off, the shading goes down, the Audioserver goes into standby, the temperature in unused rooms is lowered and the alarm system is armed in defined rooms. When you go to the toilet at night, the lighting is only dimmed so as not to dazzle or wake anyone.

Home in Deep Sleep

Whenever you leave for a family vacation or a company holiday, you want to know that your building is safe while no one is there. To be able to leave carefree, simply activate the operating mode "Home in Deep Sleep" in the App, and the Miniserver will do the rest: set the heating to frost protection temperature, disconnect power guzzlers from the network, activate the alarm

system and presence simulation. Before you come back, the heating is reactivated via a calendar entry so that nobody has to freeze after some well-deserved time off.

Frost & Wind Protection

The central commands also include reliable protection against frost and wind. Reliably differentiating and monitoring wind and temperature automatically protects the building from imminent danger.

Frost Protection

If the outside temperature falls below 1°C and the Weather Station detects precipitation, the Miniserver prevents damage caused by frost. All shading elements are stopped immediately and locked for security reasons. The frost protection can either be canceled manually in the visualization or is deactivated automatically at an outside temperature of over 10°C.

Storm Protection

If the Loxone Weather Station detects a wind speed at which the shading could be damaged, the storm protection is activated. This means that all shading elements move to the safety position and operation is blocked. The storm protection is canceled either manually in the App or automatically when the wind speed drops.

Control Elements



Touch Flex

A brand new way to provide customised room control. Assign only the functions that are most used or needed – thoughtfully made to meet the needs of spaces with frequent new users, such as hotels. With integrated temperature and humidity sensors, it can also act as a thermostat for temperature control.

Touch Pure

The Touch Pure brings an elevated feel to the Touch design. With a high-quality build, the Touch Pure has a frameless real glass surface and ceramic, fingerprint-free finish. Plus, the built-in orientation light will help guide the way at night.

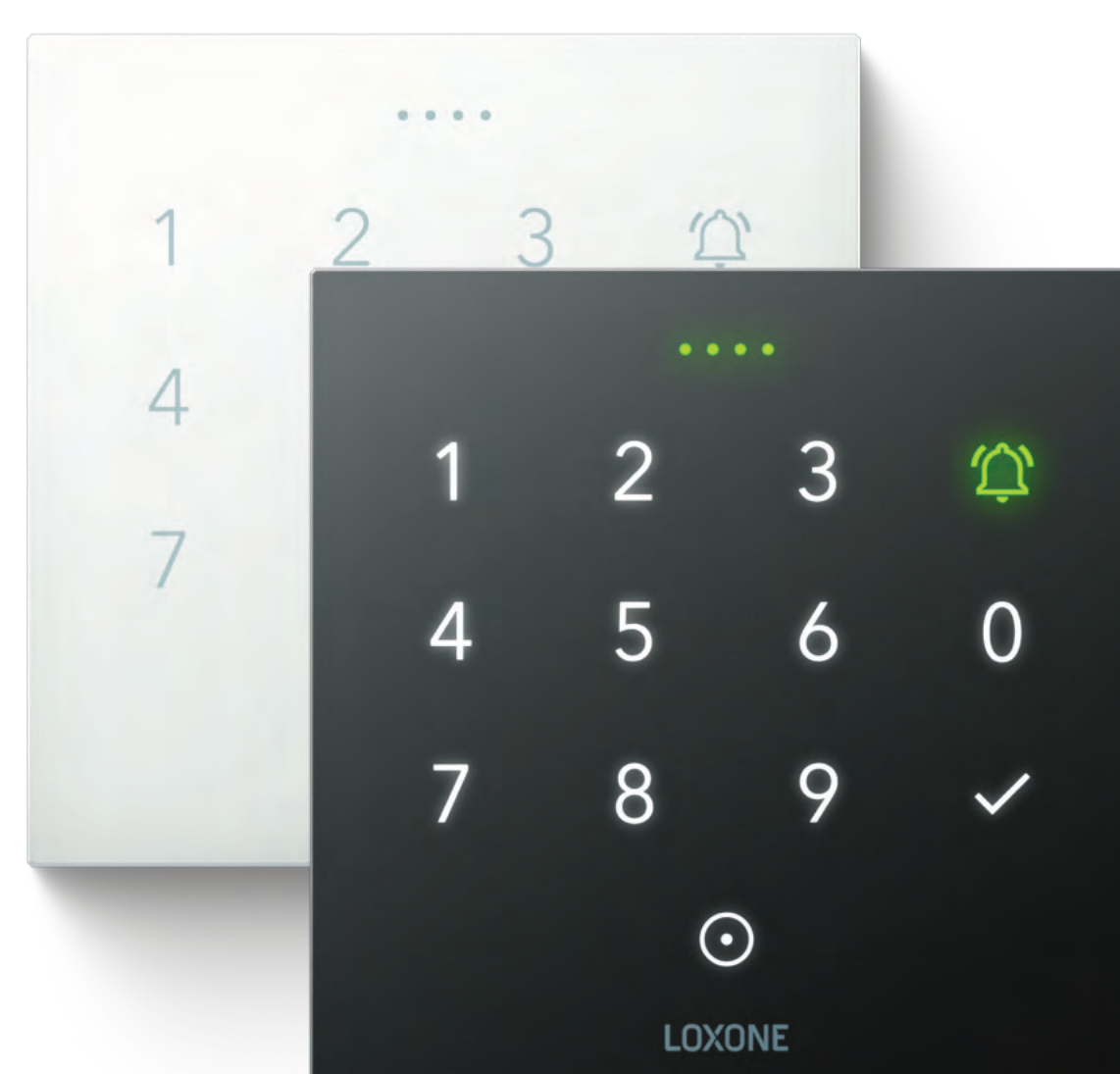


Touch

Beautifully designed with a matte plastic surface, the Touch brings a single compact control element to any room. The five touch points let you control the essential functions in your smart building with ease.

NFC Code Touch

The NFC Code Touch offers an ideal combined access control solution for your doors, gates, garages and alarms in a single device that boasts a modern and sleek design. Thanks to a wide range of functionality, it can be used for individual and one-time access.





Learn more



Touch Nightlight Air

Versatile functionality and stylish design meet to create a control element right by your bedside. The Touch Nightlight Air can be used as an alarm clock, ambient light, and an easily movable control device for any living space.

Touch & Grill Air

Grilling and the outdoors go together with the Touch & Grill Air. This mobile control device has a high-quality housing, a UV-resistant, splash-proof glass surface and a long-lasting battery. With Loxone Air technology you can measure temperatures anywhere!



Learn more

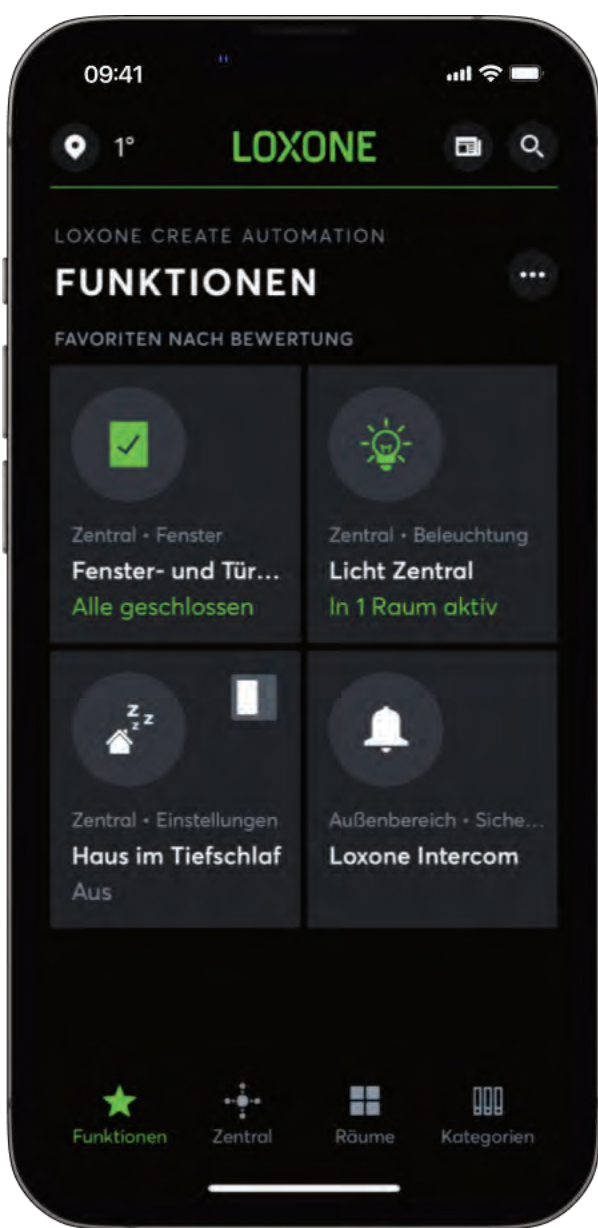


Learn more



Touch Surface

An almost invisible switch, the Touch Surface hides in plain sight on a variety of surfaces like stone, wood, ceramics and glass. Transform your kitchen countertops, desks or even your shower walls into a smart control device for the whole room.



Learn more

Loxone App

Control your home from your phone. With the Loxone App, you can view and adjust key functions within a smart home and view important info and notifications all from one screen. Thanks to simple user management and assignment of user rights, our app is also ideal for commercial properties.



Learn more

Remote Air

The Remote Air is a unique wireless remote control with the same capabilities as its Touch counterparts. Besides the Touch standards for lighting, music or shading, you can also assign the buttons to control the garage door, alarm system and more.

Online Services



The Loxone Online Services enrich every intelligent building with additional services or data from the online world. And all 100% secure and with respect for your privacy. Your data never leaves the house. True to the motto "My house, my data". Equip your building with our online services and implement unique features.

Remote Connect Service

Thanks to innovative technology, our specially developed Remote Connect Service offers you the opportunity to connect to your Miniserver absolutely reliably and securely at any time and from any place. Completely without cloud and third-party tools - your data stays with you at all times and 100%.

The Remote Connect Service works regardless of which provider you are with and whether you have an IPv4 or IPv6 address. You can expect real end-to-end encryption. The service does not require port forwarding and, therefore, no complex and time-consuming configuration of routers, firewalls and the like. **Note:** Only available for the Miniserver Generation 2

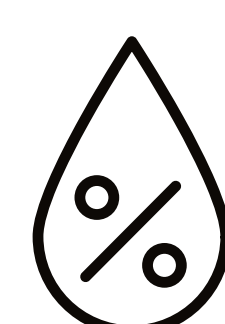
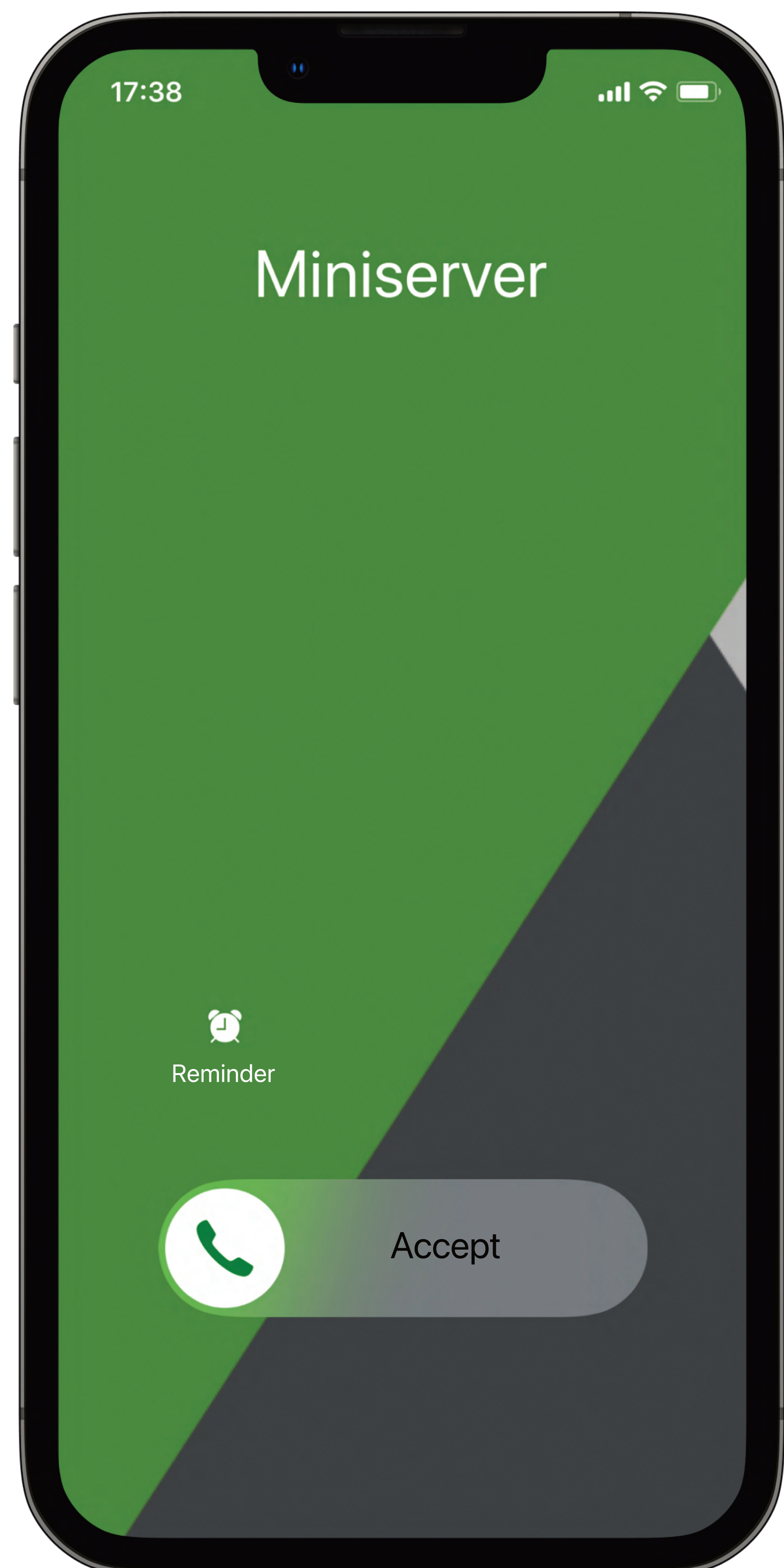
Caller Service

Whether as an alarm or reminder function - the Caller Service will inform you immediately whenever you need it. With the Caller Service, you can have calls made and acknowledged for certain events if you wish. This option is extremely popular, especially in combination with our alarm function. But many other practical applications can also be implemented with it: For example, a telephone reminder at dusk if the garage door is still open.

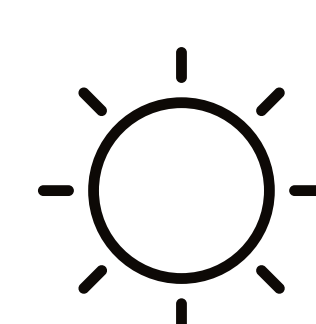
Weather Service

The Weather Service lets the building know the current and future weather conditions at all times. Our service calculates a precise weather profile including a forecast for your geographic coordinates. All weather information is available to make smart decisions. e.g.: the expected precipitation is relevant, for example, to make decisions for automatic irrigation.

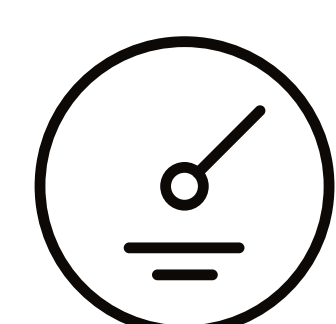
Thanks to the precise radiation data for the coming day, your shading knows when to do what. In combination with our Weather Station, your building always reacts optimally to the weather.



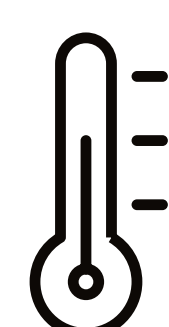
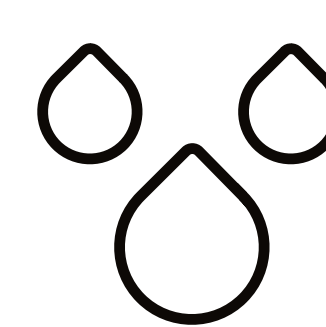
Humidity



Sun exposure

Precipitation,
Rain, Snow

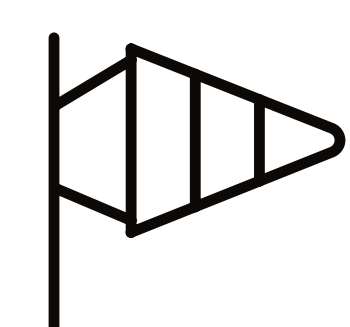
Air Pressure

Temperature
& perceived
Temperature

Dew point



Wind direction



Wind speed



Smart Solutions by Loxone



Discover the
Loxone Shop

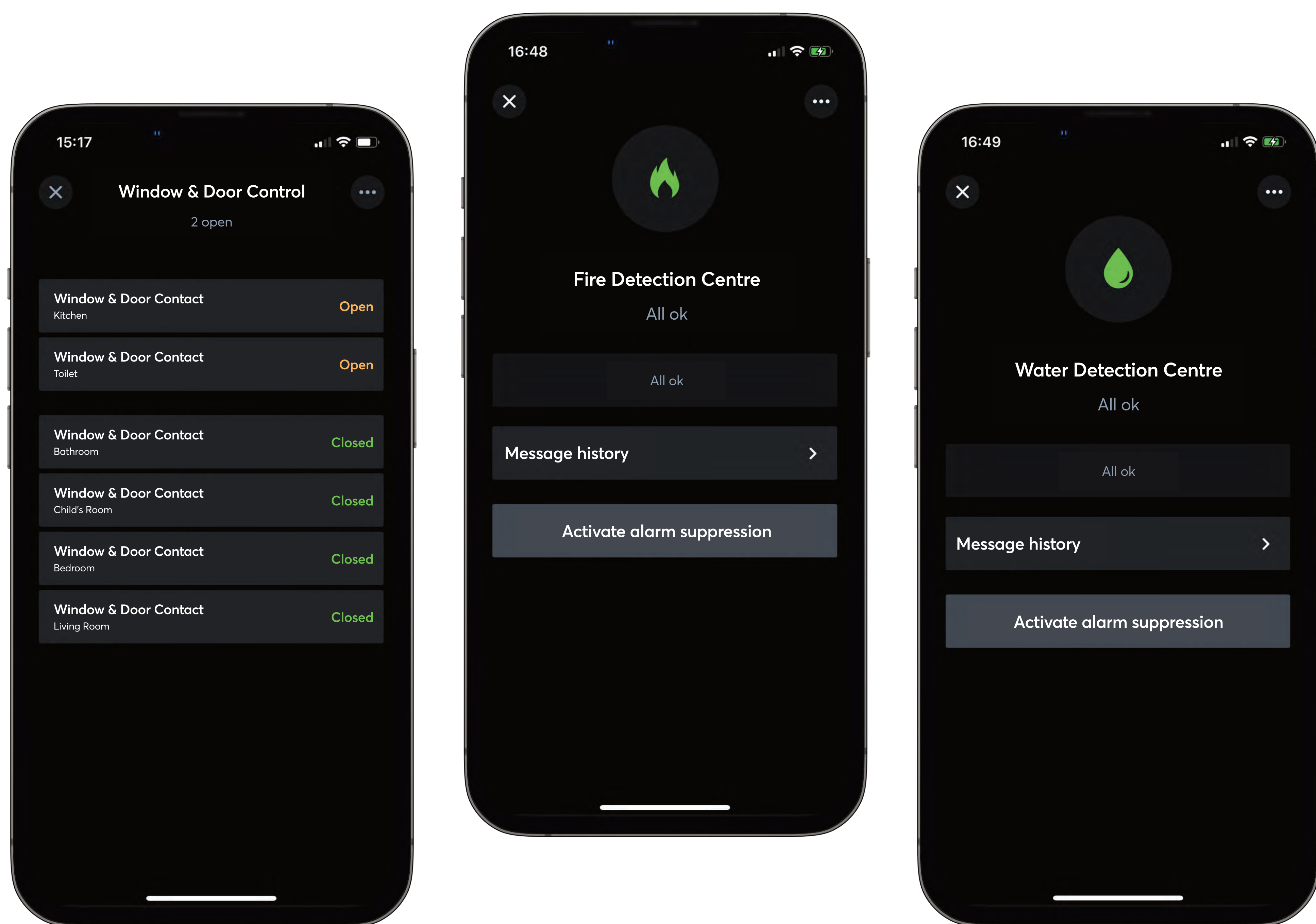
Whether high-quality LED lights, modern access systems, sensors, actuators and many other products - in the past 10 years, we have created a large portfolio of software and hardware solutions. If you want, you can join the Loxone universe and take advantage of complete, 360° solutions without having to forego important functions.

Your Advantage

Loxone offers a 360° solution that results in a perfect interaction of all components. The Loxone product world covers all areas comprehensively - from lighting to multi-

room audio solutions to alarm systems and much more. This complete solution guarantees perfect interaction of all components at all times. We have complete trust in our system, which is why we give our partners within the Loxone system a functional guarantee.

However, we do not block other systems, no matter network, DALI, Modbus, RS485, KNX or many more. As long as there is a suitable interface, we are open to all systems.



Essential Sensors in Automated Buildings

The right selection and correct position of the sensors is the backbone of reliable home and building automation. On the following pages we present the most important sensors:

Presence Detection

Precise presence detection in a building is essential for most automation processes. Therefore, the necessary hardware should be available in every room. At Loxone, presence detection is carried out with the help of Loxone Presence Sensors. Thanks to a combination of PIR, presence and acoustic sensors, presence detection forms the basis for functions such as automated lighting including constant brightness control, alarm, music, heating, ventilation & cooling and much more.

Temperature Measurement

The right room climate has a major impact on well-being and productivity. It is equally important in smart homes, offices and commercial properties. A crucial factor is the correct comfort temperature. Therefore, a temperature sensor is already integrated in all Loxone control devices. Modern heating systems are sluggish, which is why we have to regulate the temperature precisely in each room to compensate for this sluggishness.

Water Sensor

Water sensors can make a significant contribution to protecting a building from damage. The sensors detect water leakage immediately. This way, the building can be protected from major damage. Thanks to the Loxone Air technology, the Water Sensor can be placed flexibly.

Smoke Detection

Smoke detectors are used to protect people and houses in the event of a fire so that everyone can take action before it's too late. Loxone Smoke Detectors have their own siren and work completely independently thanks to the battery. It is also available via an interface to the smart home, which then controls all alarms throughout the house.

Door & Window Contacts

Knowing whether windows and doors of a building are open or closed is essential for a wide variety of tasks. The appropriate sensors are not only used to protect against burglary, but also for comfort features.

For example, a window contact can be used to prevent the shading from closing automatically when the patio door is open, thus preventing damage. Thanks to the Loxone App, you always have an overview of the current status of the windows and doors. This gives a feeling of security when leaving the house or when a storm is approaching.

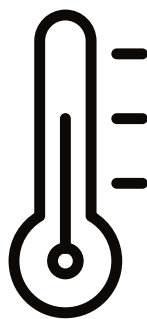
FunctionBlock Window & Door Monitoring

With the FunctionBlock Window you can display the status of the windows and doors without much effort. In addition to Loxone Air products, external contacts can also be connected to the FunctionBlock. It is best to point out that a reed contact should be installed when buying a window.

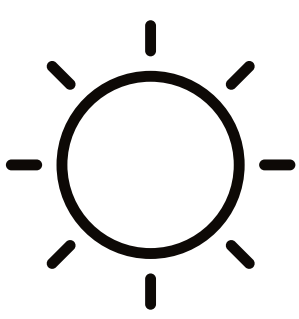
Weather Station

A weather station provides exact weather data for the respective location of the building, and forms the basis for many functions of an automated building. It doesn't matter whether it's automated storm protection, automatic irrigation or automated shading.


The Loxone Weather Station delivers the following measurements:



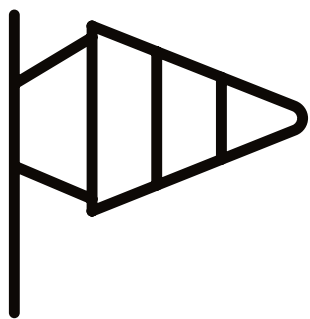
Temperature



Brightness



Precipitation



Wind

Position of the Weather Station

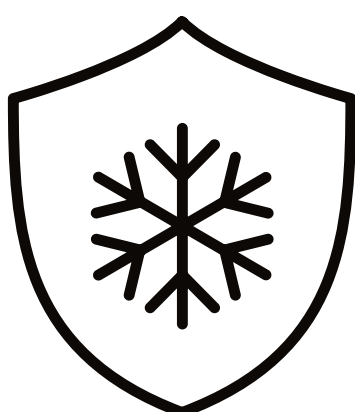
Before the optimal position of the weather station is selected, it must first be defined which measured values are particularly important for the protection of the building.



Storms are often the cause of damage to the shading. Therefore, the weather station should be able to record the wind without trees, walls and eaves slowing down the wind before it reaches the weather station.



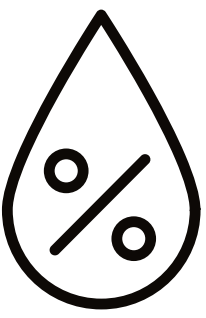
The weather station needs the exact brightness detection for the automatic shading to function reliably. This can conflict with the temperature measurement, which ideally takes place in the shade. It is therefore advisable to use the weather service.



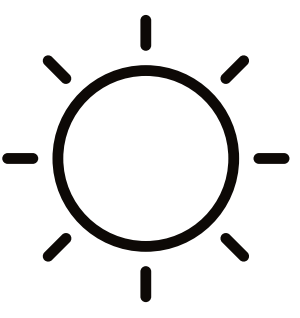
Frost and moisture occurring at the same time can cause considerable damage to the shading. Therefore, it is important that the precipitation reaches the weather station unhindered, so that the intelligent building can reliably protect itself from this danger.

Weather service included


In addition to the local sensors, the Loxone Weather Station is delivered including a weather service. The weather forecasts from the weather service extend up to 66 hours into the future and provide additional data such as humidity, air pressure, dew point, wind direction, wind speed and more.



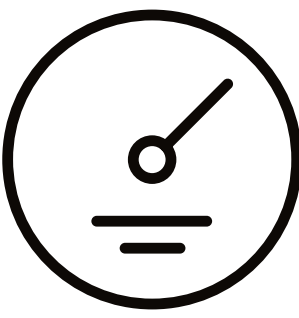
Humidity



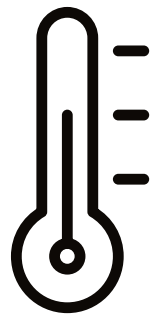
Sun exposure



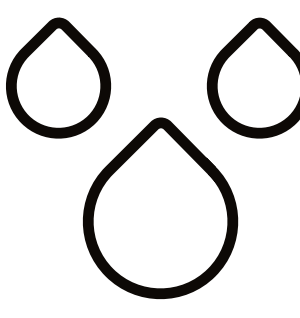
Precipitation,
Rain, Snow



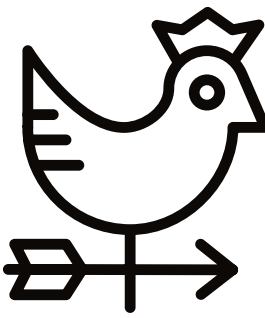
Air Pressure



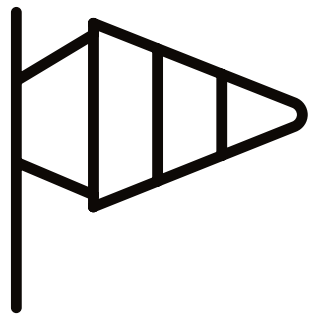
Temperature
& perceived
Temperature



Dew point



Wind direction



Wind speed



Technologies

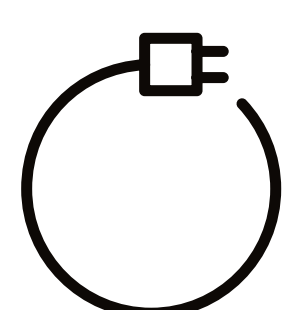
Loxone offers an all-round solution and supports numerous technologies to give you unique and incomparable comfort. A future-proof building requires solid technologies.

We would like to introduce you to the two most important ones, which represent the nerve tracts in a Loxone installation.

Tree Technology (cable-based)

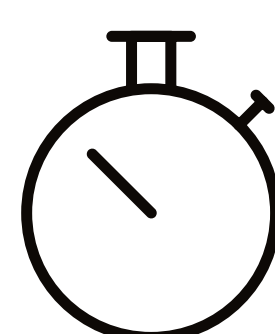
With the development of our Tree technology, we have pursued a clear goal: to reduce the cabling and installation effort in residential and commercial properties to a minimum.

This technology makes the integration of Loxone Tree devices such as spotlights, touch buttons, actuators and much more so revolutionarily easy!



Up to 80% less cabling effort

With Loxone Tree you can wire the peripheral devices flexibly, and connect all Tree devices with each other. This way, you save terminals, cables and space in the distributor.



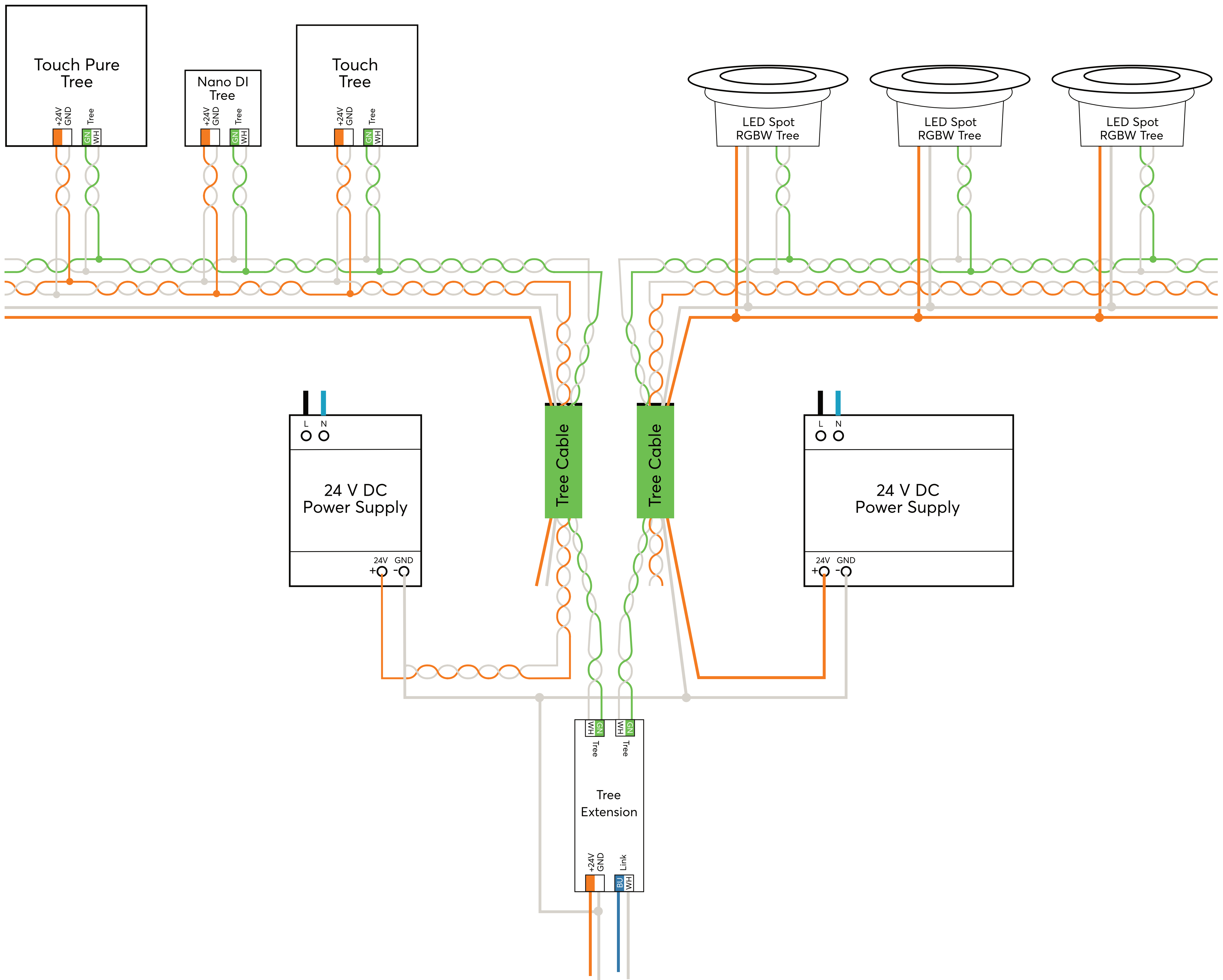
Installation in record time

Loxone Tree devices are ready to go with just a few clicks. For instance, for a motion detector Tree you need 20 seconds to start up.



Completely in harmony

The Tree Technology and all Tree products can be installed via Plug & Play, and work perfectly with all Loxone components.



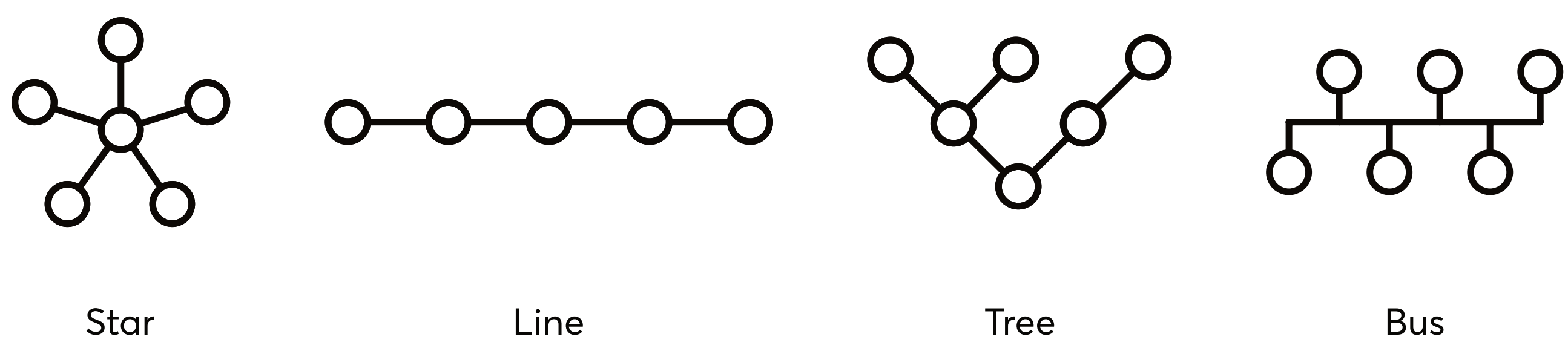
Cabling

All Tree devices are simply connected to the Tree interface of the Miniserver or the Tree Extension. Up to 50 Tree devices can be connected per branch with a total cable length of max. 500m. No connection may be established between the different tree branches. The diagram above shows an example of the wiring of several Tree devices that are connected to a Tree Extension.

The right cable was developed specifically for wiring the Tree devices. One cable for all Tree products - whether it's a motion detector, actuator or LED spot: With the new Loxone Tree cable, you can install and commission all Loxone products in a flash. The standardized color code minimizes installation errors and thus saves valuable time.

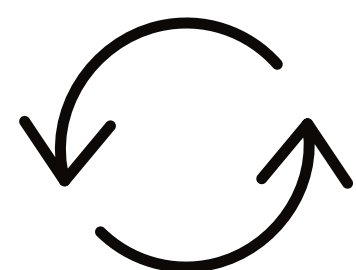


The following topologies are permitted for wiring:

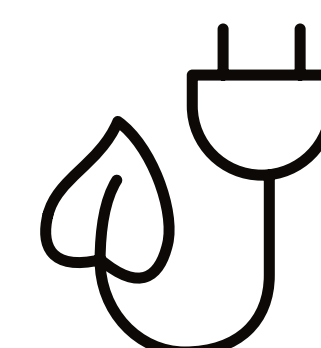


Air Technology (wireless)

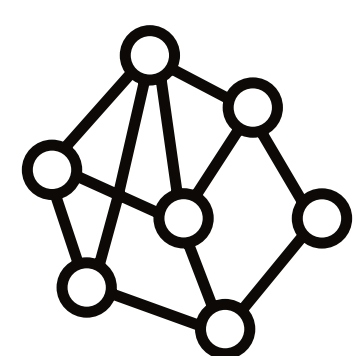
We have developed our own radio-based technology especially for those who have no way of laying a cable. Loxone Air, perfect for all renovators and refurbishers. 100% in harmony with the Loxone system. Solid and reliable. No Stemming. No rewiring.

**Updatable**

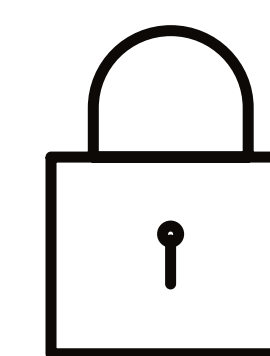
All Loxone Air products are fully updateable. This means that all of your Loxone Air components are always up to date in terms of safety technology. Your Loxone automation solution remains future-proof.

**Minimum consumption**

All Loxone Air products are optimized in terms of their energy consumption. Specially developed chips ensure the lowest consumption. This guarantees long battery life and minimal electricity costs.

**Fully encrypted communication**

Loxone Air communication is encrypted using IPsec, the current security standard. Each Loxone installation has its own encryption key. The Loxone Air technology is safe and reliably protected against replay attacks.

**Mesh technology**

Loxone Air is based on mesh technology. Each product that is connected to a permanent power supply increases the range and stability of the overall system. This creates an incredible range.





Open Documentation



Loxone is an open system. No matter which manufacturer and which area of application - if a product has a suitable interface, it can be integrated into the Loxone building automation. This openness is documented in the Loxone Library. There, you will find all templates and plug-ins for easy and quick integration of various third-party products. In just one place, neatly structured.

Become a developer

In the Loxone Community, fantastic solutions for Loxone

building automation are developed every day. With the Loxone Library, we give your ideas the space they deserve. Submit the templates you have developed and make them available worldwide.

Important: As with all our offers, the quality of submissions in the Loxone Library is extremely important to us. Therefore, submitted templates will only be released for download after they have been successfully checked by a Loxone expert. A rating system allows the community to rate the quality of the released templates.

Interfaces			
Digital In/Output	DALI	Fröhling	Apple HomeKit
Analog In/Output	BACNet IP	SIA DC-09	EEBus
Modbus RTU/TCP	1-Wire	Infrarot	HomeConnect
RS232	Network (LAN)	PWM	Miele@Home
RS485	DMX	EnOcean	u.v.m
KNX	Intercom I-Tec	0-250V	

Network Communication

Our Miniserver was designed for communication via LAN and, therefore, has a LAN interface - it carries the network idea in its DNA, so to speak. This gives you numerous options for communicating with other network-enabled devices. We've got some examples in store for you:

Control your music system or amplifier

Whether volume, on/off commands or selecting the right source. If the network interface of your amplifier is sufficiently documented, it can be controlled with the Miniserver.

Control your TV set via network

For many current TV devices and music systems, we have

integrated ready-made templates in our Config software, which make integration very easy.

Get data from your PV system

Many current inverter models have a LAN interface. We have even created seamless, ready-to-use integration for Fronius inverters.

Send and receive any commands

Use our so-called "virtual inputs and outputs" to send and receive any HTTP commands - for example to automatically wake up the PC when you enter your home office.



Software

The software is an essential part of Loxone's home and building control. Since the introduction of our software in 2009, we have recorded more than 1.5 million downloads of our Loxone Config and around 1 million App installations. With our free updates, we are constantly offering new options and expanding the range of features for your building.

Loxone Config

With the help of the so-called Loxone Config, you can implement your individual configuration tailored to your needs. The experience from many thousands of projects related to building and home automation flows directly into the development of our Loxone Config. More than 100 ready-made FunctionBlocks make using our software

so easy. From intelligent heating control to automatic shading – the FunctionBlocks enable your project to be configured quickly and easily. This is what makes our Loxone Config so unique and the most powerful software for building automation.

Loxone Apps

Although visualization is not needed every day, it is an important part of an automated building. With the help of the visualization, you get detailed information and control options of the building. The settings for comfort temperatures or lighting moods are just two examples of countless possibilities. Nevertheless, the visualization should only have a supporting effect and should not be necessary for daily operation.

Free updates

Like the Loxone Miniserver, our Loxone App is becoming more and more powerful thanks to ongoing updates! Over the years, we have added numerous free updates to our App, which provide new possibilities and features.

Also great for businesses etc..

Thanks to simple user administration and assignment of rights, you have maximum flexibility. You decide who can operate what. The diversity of our App is unmatched.

One App for everything

No matter if iPhone, Android smartphone or tablet. Whether light, shading, music or pool. Operate your home, office, restaurant and even easier via the Loxone App. Use the App on the device of your choice.

Automatic designer scenes

The Automatic Designer is used to create your own logic links using the Loxone App. Certain objects or events are selected as conditions, logically linked and later trigger an action.

Shortcuts

With the help of the quick actions or shortcuts, you can save up to four app positions or commands and call

them up via the Loxone App icon with a 3D touch. These quick actions are also transferred to your smartwatch and are available here.

User management

With the help of the Loxone App, you can edit and create your users quickly and easily on your smartphone. You can change passwords, access authorizations and user groups with just a few clicks.



Basic Equipment



Network

The network plays an essential role in a modern building. It ensures the connection of all network-based devices in a building to the Miniserver. Special attention should be paid to the range of the WLAN, so that the entire building is covered as far as possible. Smartphones and tablets need stable WiFi for a good connection to the Miniserver. Walls, concrete ceilings, etc. sometimes provide strong shielding and, thus, influence the long-term stability of the network. With the help of access points distributed throughout the building, comprehensive WLAN coverage is guaranteed. Important devices should always be assigned a static IP address in order to establish correct connections over the long term. In addition, it is best to connect them by cable. The bandwidth of a cable is much higher, even with the best WLAN. A network cable should be laid especially for multimedia devices, TV, etc.

24V power supply

The 24V low voltage is ideal for supplying the LED lighting. If done correctly, 24V offers many advantages. Safe to touch, this voltage is harmless to humans and animals. Lighting specifically designed and built for 24V has the advantage that a power pack does not have to be built into every light source. 24V based illuminants are infinitely dimmable via PWM (pulse width modulation).

This technique is simple and works well over the long term. The provision of an emergency power supply via 24V is also extremely easy. However, the electricity that flows to the consumers often receives little attention. Just like with 230V, this leads to heating of the cable and is safety-critical. Cables must be secured accordingly. 24V lines are to be secured according to the requirements of the wire cross-section. Another issue could be the line voltage drop at high currents. So that this is not critical, Loxone products are usually provided with a wide voltage input and are therefore largely uncritical against voltage drops.

230V power supply

For all consumers - from the refrigerator to the vacuum cleaner - 230V is still the voltage of choice. The cable cross-sections are a lot smaller with 230V cabling and can lead to very high performance. Fusing with residual current circuit breakers to protect people and miniature circuit breakers to protect the lines is established, mature and provides the necessary safety. Electrical accidents are almost non-existent. Consumers can be controlled very easily via potential-free relay contacts. The dimming of the 230V lighting is also possible without any problems, taking into account the correct dimming type and selection of the light source.

LOXONE TRAINING

Get to know the ins and outs of our Loxone system, and become an expert in a matter of days! Whether you're new to Loxone or an experienced partner, we have just the right training option for you. Find a training near you, or book an online course now.



Find & book
appointments now
loxone.com/training

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