frogblue™

SMART BUILDING TECHNOLOGY GERMANY

The Professional, cable-free electrical installation

Easy decentralised Installation - High security - Ever scalable - from Loft to Industrial Site

The German Experts in Smart, Energy-Efficient Building Solutions and Communication

Technology Leader frogblue

All frogblue products are developed and produced by our family-owned company in Kaiserslautern, Germany. As founders of MOBOTIX AG, we bring decades of experience and a proven track-record in technology innovation.

Our name and commitment ensure the highest quality, ongoing development, and support. Naturally, we use frogblue products in both our corporate facilities as well as our own homes.

"Frogblue has been a pioneer in wireless, Bluetooth®-based electrical installations for professional use since 2016, VDE and ILAC certified with manufacturing based in Germany.

Our significant advantage is the ability to freely configure the function of switches and 'wiring' at any time via an App, or adapt them to new requirements.

Frogblue is compatible with any switch program, allowing multiple functions to be accessed from a standard light switch. The user interfaces for smartphones and displays are automatically generated from the module configurations.

We achieve the highest reliability and fault tolerance through parallel message transmission over a triple-layer mesh network.

Our professional video door intercom system is fully capable of supporting multi-tenant and even multi-client requirements, thanks to inbuilt support for the universal SIP telephony standard.

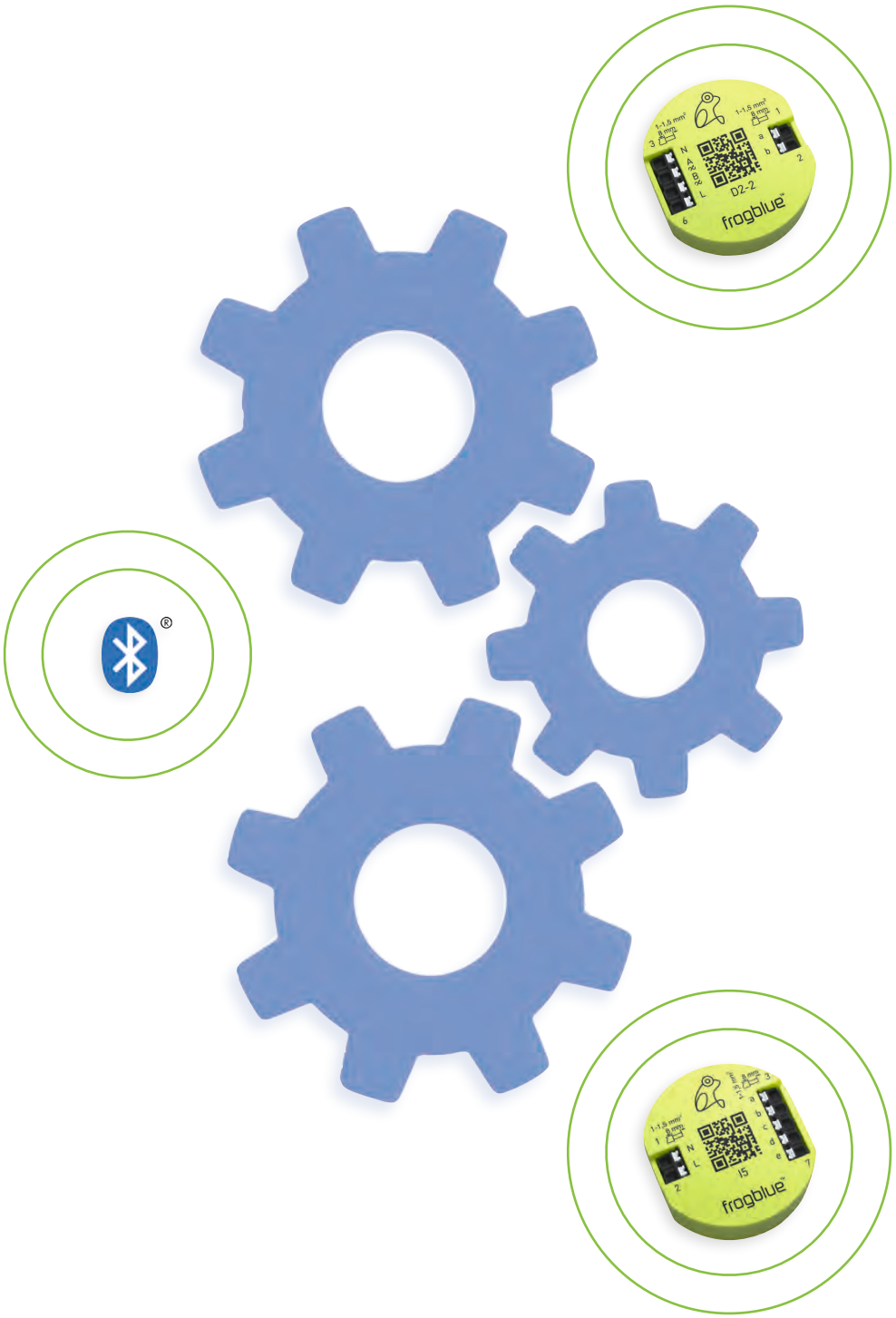
Coupled with an integrated RFID reader and PIN entry via the display, it enables a decentralised access control solution with 3-factor authentication via video."

Dr. Ralf Hinkel • Founder and CEO of frogblue

Made in Germany


frogblue™
Jalousiesteuerung
SMART BUILDING TECHNOLOGY
Made in Germany
frogblue
Wanddisplay

Contents


D2-2
frogblue
I5
frogblue

frogblue Highlights

- *Frogblue offers **professional**, all-in-one building control via a single app: lighting, shading, heating, ventilation, alarm system, access, and door communication.*
- *Requires no control cables or distribution cabinets, allowing for **continuous expansion**.*
- *Supports **standard light switches** from leading suppliers.*
- ***Time-based scenes** control lighting, colour, and shading.*
- ***Highest reliability** through parallel messaging over Bluetooth®-, Wi-Fi-, and Cellular-Mesh networks.*
- *The smartphone communicates directly with the building via Bluetooth® - **zero network or IT infrastructure required**.*
- ***Instant recovery** to last state within 1s after a power outage.*
- ***High redundancy**, as not reliant on a central computer/server.*
- ***Highly secure** through proprietary encryption and timestamps.*
- ***Maintenance safety** through automatic documentation.*
- ***Multi-Tenant SIP Video Intercom**: Direct global smartphone calls and simultaneous connectivity multiple IP telephone system.*

Made in Germany

What does frogblue do?

***Frogblue** offers lighting, shading, ventilation, access, video communication, alarm, and heating control for **professional use**. We manage buildings from single-family homes to industrial complexes.*

*We monitor buildings, record events, and directly send alarms to smartphones. Our **video SIP intercom** facilitates a decentralised **access control solution** with card and PIN from multi-tenant scenarios to large-scale properties.*

*Our greatest strengths are the **reliability** and security of a **mature system**, made in Germany, that flexibly integrates door communication, access, and building automation.*

***REMARKS**:*

(1) User interfaces of wall display, frogTerminal and apps are available in more than twenty languages!

(2) Mains power supply for all modules are within the range of 110..240V AC


09:06

Building Automation

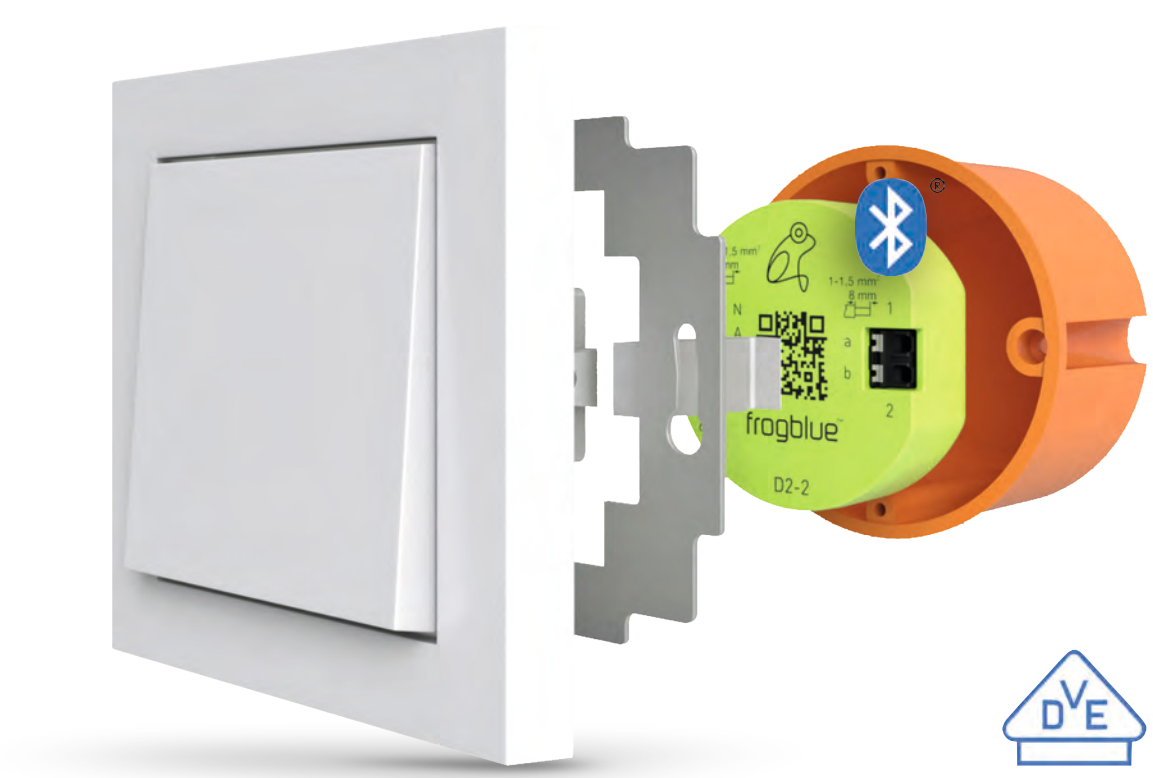
Frogblue offers a wide range of actuators and sensors for building control. It supports a decentralised installation behind light switches without the need for control cables or switch cabinets, making it exceptionally ***efficient*** *and* ***scalable*** *any time.*

A frogblue installation can be a completely concealed, as all functions are initiated through ***standard light switches*** *and transmitted wirelessly. Those who wish can keep their existing switch program. For the user, there's visually no difference between a frogblue and a traditional electrical installation.*

We use ***Bluetooth Mesh*** *for* ***redundant***, ***highly encrypted***, *wireless communication. Partial component failures or disturbances do not affect the core system communication.*

A frogblue system is self-documenting, ensuring operational clarity and accountability for years to come.

frogblue Dimmer D2-2 features two output channels, each with a capacity of 300 watts, and supports control from two standard light switches. Short-circuit resistant and optimised for LED power supplies.



frogblue dimmers are mounted directly in the flush-mount box, where they can control up to three standard light switches. Even at 300 watts, they remain lukewarm to touch. Other frogblue devices control doors or monitor window contacts.

Product Range

Our Frogs

are the heart of frogblue. Without control cables, our frogs wirelessly link lights, blinds, fans, windows, doors, rolling gates, heating systems, intercoms, and standard light switches via Bluetooth®. They are installed in the switches' flush-mount boxes requiring just a 110..240V mains connection.

Cubes

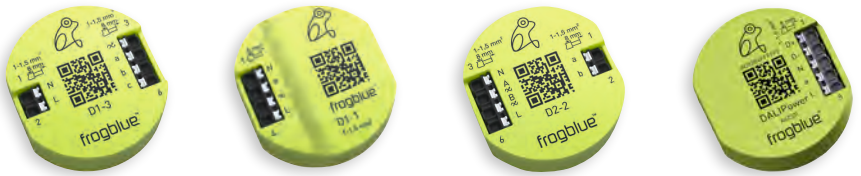
are minimalist in design, flat, finished in white glass, and the same size as a light switch. Mounted on a flush-mounted box and powered by 110..240V, they are energy-efficient activating only when needed thanks to their integrated proximity sensor.

The frogTerminal

is a video SIP intercom that enables decentralised access control solutions with card and PIN options for everything from multi-tenant scenarios to large-scale projects.

frogKey: position-based
1-button remote control

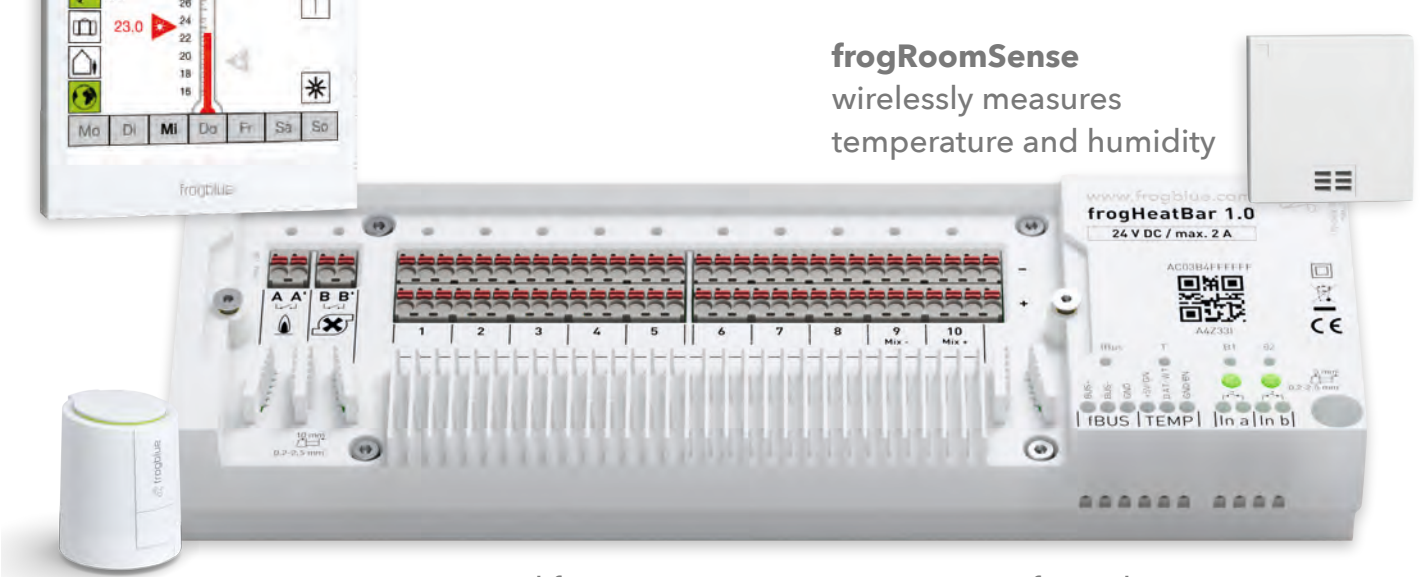
Frogblue SIP Door Station features an 8-megapixel hemispheric all-round camera and touchscreen (PoE, WLAN, H264, SIP, door contact, relay). Colour touchscreen display for flush-mount installation, room control, motion detection, and access control.



frogblue Dimmer supports 2 x 300W outputs and can be connected to up to 3 light switches, short-circuit resistant, and optimised for LED power supplies. **frogDALIPower** Dimmer including integrated DALI bus power supply.

frogDisplay for heating control

frogRoomSense wirelessly measures temperature and humidity



HeatBar: Heating control for up to 10 rooms, monitoring of supply temperature, control for burner stages, circulation pump, and connectivity for 1-Wire sensors.

Zero IT Infrastructure

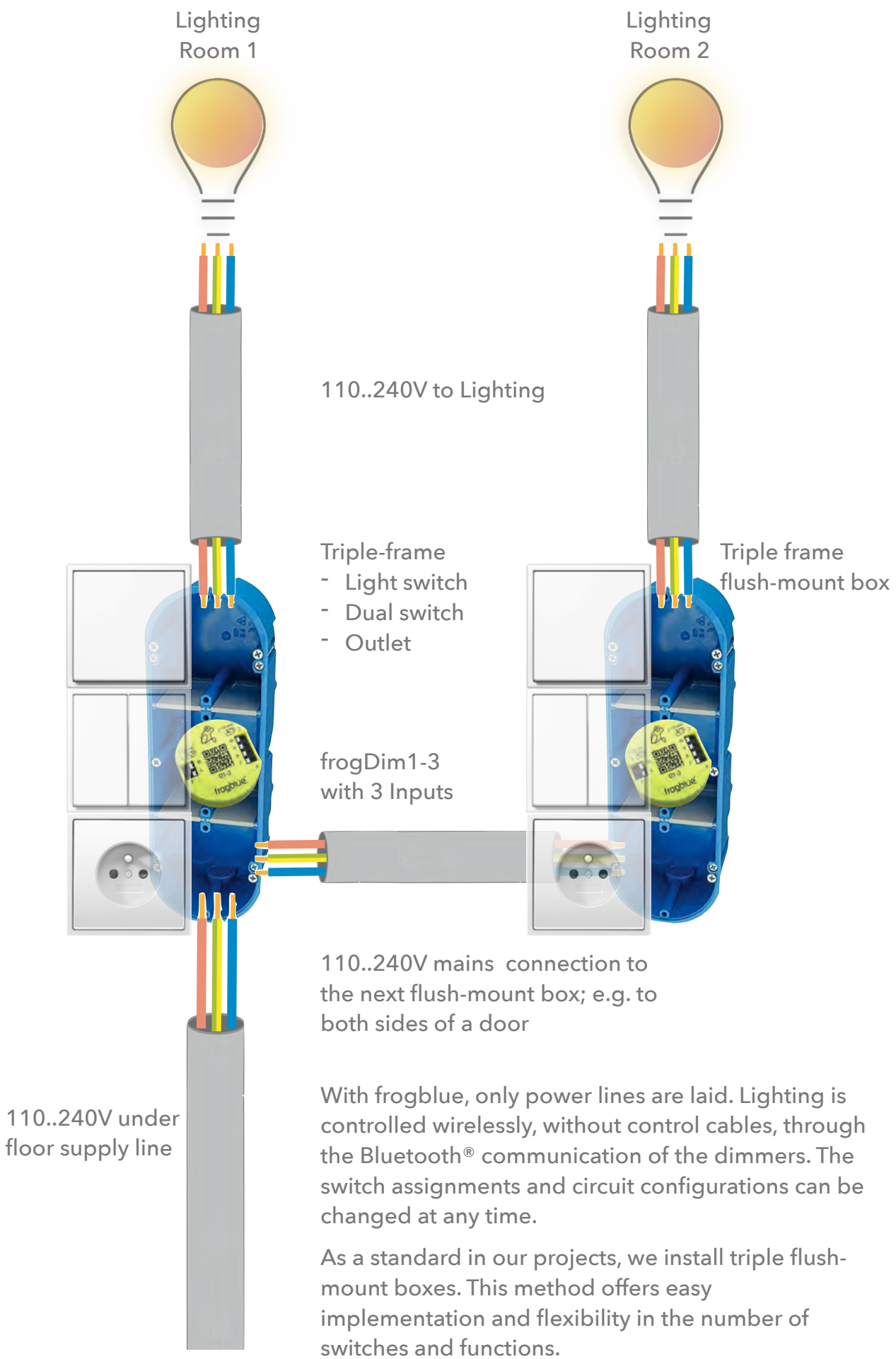
*The frogblue building control system fundamentally requires **zero network** infrastructure or Wi-Fi within the building. Our modules also **do not require control wiring**, just mains power.*

*This significantly reduces the need for **wiring harnesses**, **cable trays**, and **core drilling**. Individual switch modules, door contacts, or temperature sensors can be powered by a battery for three to five years.*

*Frogblue requires **no switch cabinet** and no sub-distribution modules. This not only saves space but also minimises labor and energy costs.*

Additionally, fewer cables to install means minimal effort required for fire protection.

==> Significant reduction in cabling and labor costs, perfect for renovations and new builds.



With frogblue, only power lines are laid. Lighting is controlled wirelessly, without control cables, through the Bluetooth® communication of the dimmers. The switch assignments and circuit configurations can be changed at any time.

As a standard in our projects, we install triple flush-mount boxes. This method offers easy implementation and flexibility in the number of switches and functions.

Wireless, not radio, not Wi-Fi

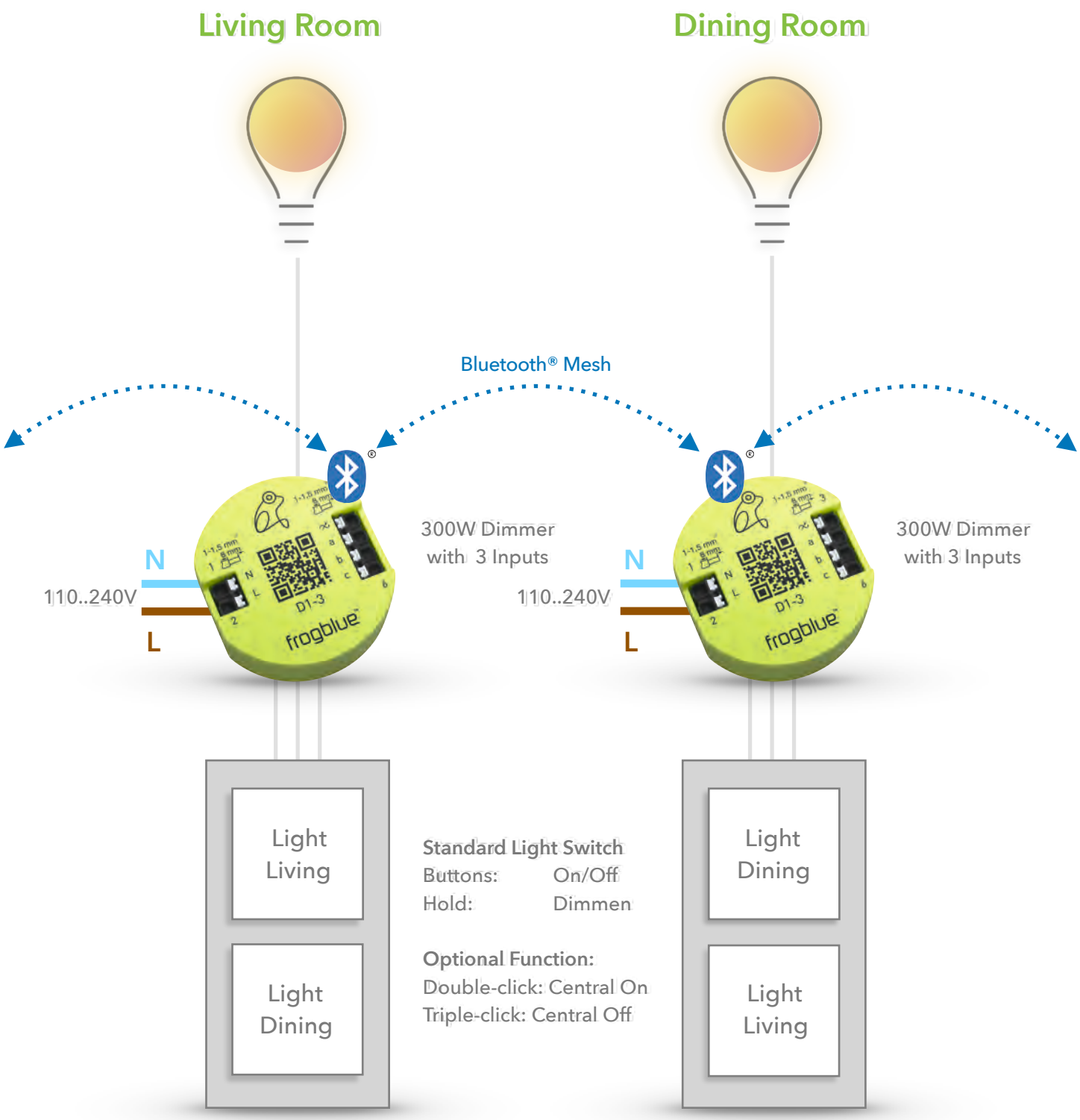
*We are **not a typical signalling solution**, with each frogblue module relaying incoming messages until all modules are reached, there's **no range limitation** within buildings.*

*Our frogblue **Bluetooth Mesh** offers unparalleled reliability and is extremely **resistant to interference**, courtesy of our cutting-edge technology.*

*Unlike radio or Wi-Fi systems, there are **no central components** for message relaying that could fail.*

*We ensure all messages are **highly encrypted** and secured against tampering (replay attacks) through the use of integrated **timestamps**.*

==> Frogblue ensures reliable and extra secure data transmission.



Toggle-switch via a wireless virtual Bluetooth® link across all modules simultaneously and securely encrypted. Additional toggle-switches, central control switches, or lights can be added at any time. Switch reassignment or function changes can be performed at any time in just a few seconds. Additional features like scheduled power down, delayed off, or night-time dimming are also possible.

CLOUD simply on-demand

*Cloud services or internet access is **not a prerequisite** for building control. Also, **zero data is stored offsite** from your building.*

*For remote control, operators can either activate the direct and highly secure **VPN access** or use the complimentary and secure frogCloud.*

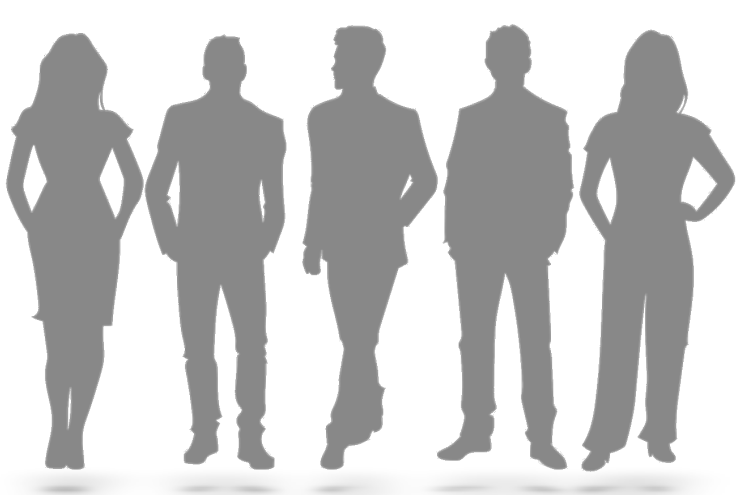
*frogCloud does not require an account or email address; it's **anonymous** and **free-of-charge**.*

*Our configuration assistant automatically and securely establishes a connection to your smart device via QR-Code **automatically generating** the **user interface and permissions**.*

*Our frogCloud utilises the **universal MQTT** standard and is managed from a datacenter in Germany.*

==> Only users seeking building control externally require frogCloud.


18:56
Verbindungen
Backup-Status OK
frogCloud
Mobile Daten (LTE)
WLAN
Bluetooth
Garten - 233_Fassade_Süd Bega 2
Direkte Verbindung
Projekt: Musterhaus MZ-Finthen
Version: 6090 / 20.12.2023 / 15:30
Software: frogControl Version 1.6a6
Benutzer: Admin
Load display settings
Projekt wechseln



SIP Video Door Intercom

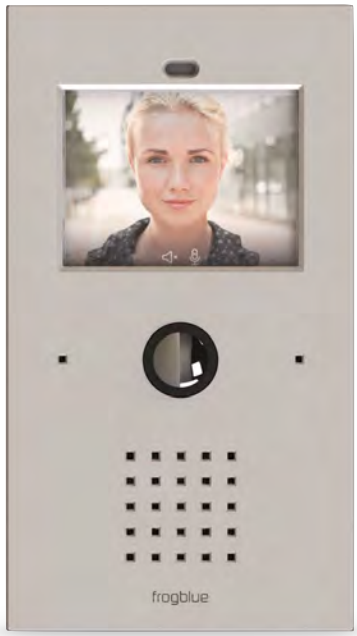
*The frogblue video door intercom, **frogTerminal**, is based directly on the integrated universal SIP telephony standard, supporting multi-tenant scenarios up to large-scale distributed deployments. Our greatest strength lies in the ability to simultaneously integrate multiple SIP phone systems and SIP servers from **multiple clients** with no additional hardware required.*

*Additionally, frogblue enables **direct SIP calls** to any IP video phone. Smartphones are automatically connected to the intercom via a call through **our SIP cloud**.*

*The **8-megapixel camera** with light-sensitive optics ensures a full 180° panoramic view. Even in **noisy environments**, speech remains crystal clear.*

*The **Video log** records both ring events as well as access via PIN or RFID. Invalid entry and unauthorised access attempts are also recorded.*

==> frogTerminal communicates directly with any IP phone system via SIP and network, no extra box required.



frogTerminal: our SIP door station can be used both for exterior and interior doors. The door can be opened with the integrated relay or wirelessly via frogEntry. Control of digital doors and Mediators/Normally Open (NO) actuators is built-in. Two contact inputs allow for integration of a magnetic and bolt contact. The frogTerminal connects via network/PoE or Wi-Fi and a 12/24V power supply.

The **frogTerminal S3-SV** model is available for a SIEDLE® Vario triple-frame module.

Decentralised Access Control

*The **frogTerminal** allows each participant in a multi-tenant system to manage their own **PIN numbers** for door access or to activate special functions. To enhance security against PIN spying, the keypad display continuously scrambles its layout.*

*The integrated RFID reader (DESFire EV2®) enables **2-factor authentication**. Additional call verification, after hours for example, allows for **3-factor authentication** with video.*

*Cards **do not require extra programming**; they self-identify upon usage.*

*The frogblue RFID integration architecture provides a **decentralised access control solution**, network connections to each frogTerminal are not necessary.*

Proximity to the frogTerminal, touching the display, or incorrect entries can also automatically trigger calls.

==> frogblue is the flexible access solution from cloud-based to a network-free architecture.

The **frogTerminal** supports weekly schedules, zoning, and multi-factor authentication. Thanks to its decentralised architecture and storage of access data on the RFID card, there's no need to program these into offline stations.

Universal IP Receivers

*Frogblue seamlessly integrates with all endpoints following the **universal SIP standard**, enabling compatibility with any IP telephone system, including pure IP audio systems.*

*The frogTerminal can directly communicate with IP phones or IP video phones through a **Direct SIP Call** without a SIP server. This simplifies installation and maintenance significantly for smaller systems; combinations are also possible.*

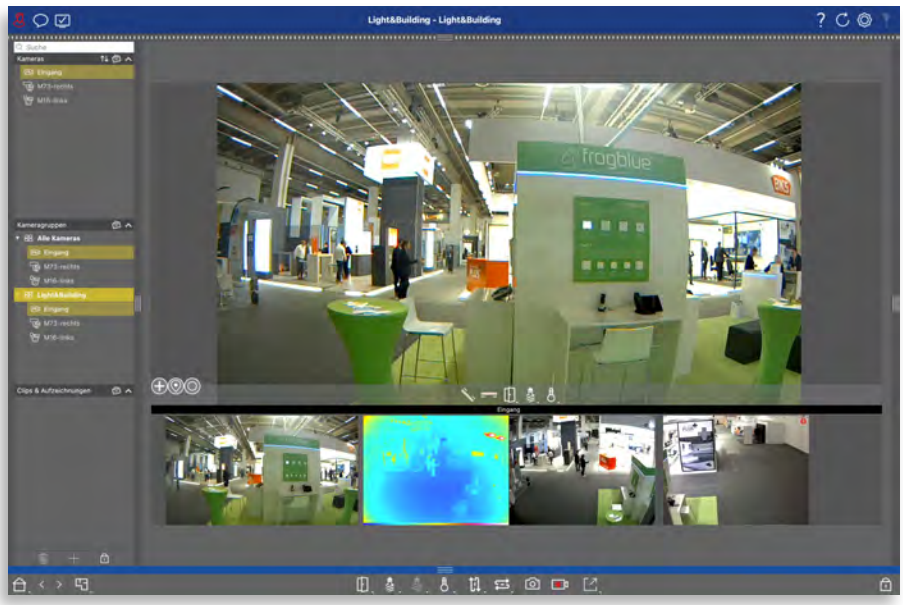
*A 'normal' call to a **smartphone** is facilitated through a highly secure frogCloud connection, using the free frogSIP App.*

***Video Management Systems**, like MxMC®, can be simultaneously integrated.*

*An **event search** with user, RFID card, or tamper attempt based image recording is already built-in, and the log can be accessed at the endpoint with the appropriate user permissions.*

==> The frogTerminal connects simultaneously to all these systems, including multiple SIP servers.

frogStation
white, silver, anthracite, Glass-line
Network/POE, WiFi with 12/24V~



Video Management, e.g. MxMC®
Format: MJPEG, H264
from Q4 2024 also with ONVIF® Standard

Smartphone
Tablet/Mac
iPhone®, Android®,
with frogSIP-App
via frogCloud (anon)

Fritz!Phone®
SIP Connection,
Still Image

SIP Video Telephone
various manufacturers,
such as Grandstream, SIP
telephone systems with
audio extensions

frogblue Display
Glass-line white
110..240V with WiFi
from Q4 2024 with PoE

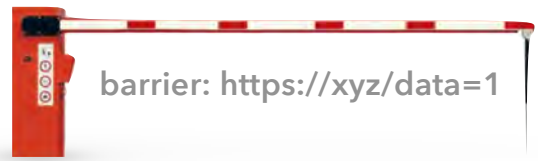
Open for Integration

Connecting 3rd-party hardware and additional functions, such as controlling outdoor lighting via a 3rd-party building management system or triggering a camera to record, can easily be integrated with the frogTerminal via ***Bluetooth or IP commands****.*

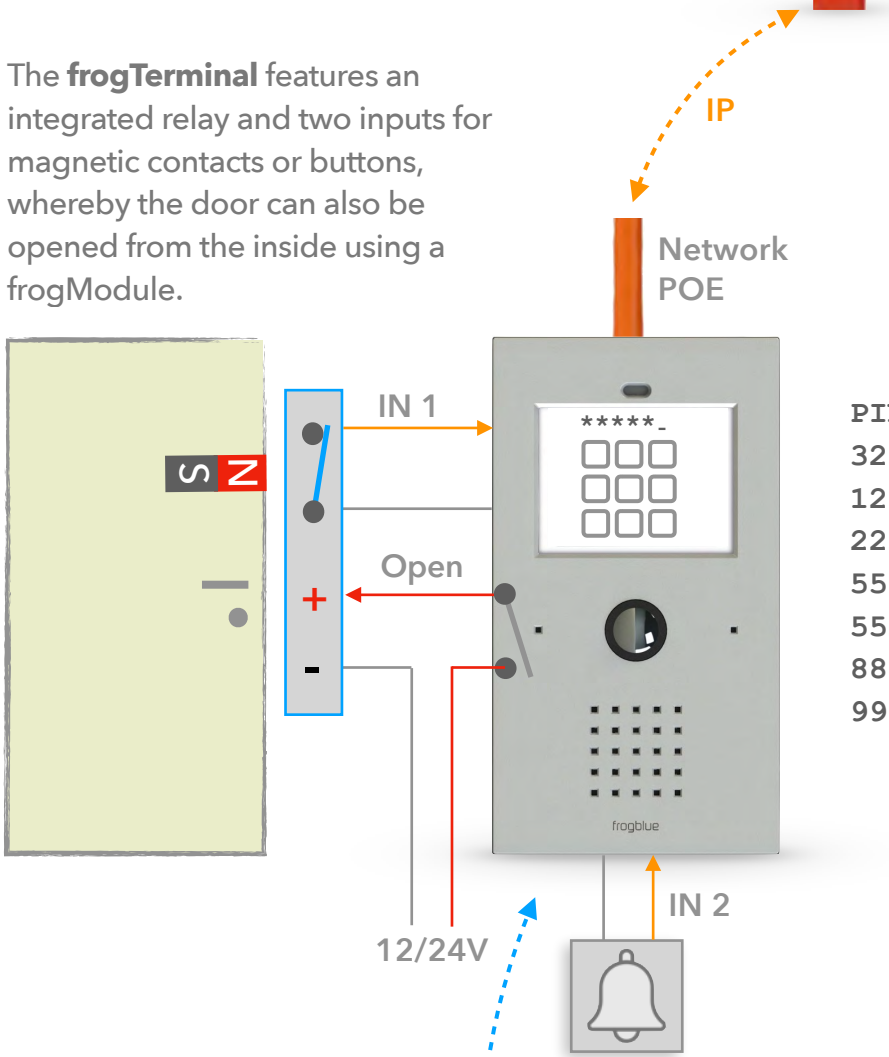
These actions can be triggered via PIN and RFID card, as well through a phone call. For instance, barriers can be controlled over IP, or the status of rolling gates can be queried.

Our frogLink-USB Serves as an SDK or gateway to 3rd party systems, such as MOBOTIX® cameras or EisBär® building control.

==> frogblue embraces the universal SIP video telephony standard and integrates third-party systems such as BacNet®, KNX®, etc. with customisable IP Links.

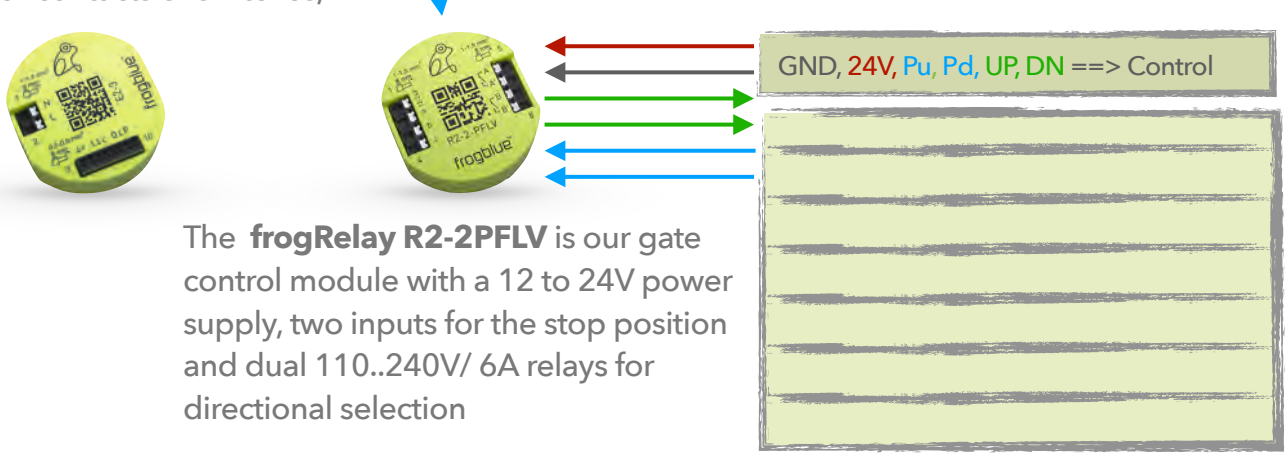


The **frogTerminal** features an integrated relay and two inputs for magnetic contacts or buttons, whereby the door can also be opened from the inside using a frogModule.




```
PIN
321: Door
123: Light 60s
222: Barrier up
551: Garage up
552: Garage down
888: https://www...
999: IP-CALL 123...
```

Our **frogEntry 2-3** with an integrated 12V power supply, controls motor locks and reads door contacts or switches;



The **frogRelay R2-2PFLV** is our gate control module with a 12 to 24V power supply, two inputs for the stop position and dual 110..240V/ 6A relays for directional selection

Operation is child's play

*Frogblue controls the entire building from just **a single App**. Our touch display features the same user interface as on the smartphone, making operation easy at home and on the go.*

From the top level view it's immediately clear in which area or room a window or door is ajar.

*Lighting, shading, and heating can be controlled by **room**, **area**, or throughout the **entire building**. As an example, all lights in an area can be **colour-synchronised** with one click.*

Connecting a smartphone to the building control or door communication is made quick and easy through a QR code scan from the App's integrated assistant.

==> With frogblue you maintain control and oversight from just one App


Übersicht
Beleuchtung
Beschattung
Zugang
Fenster
frogblue


Menü
Home
Szenen
Licht
Beschattung
Türen
Räume
Fenster
Heizung
frogblue


Elemente wählen
Weiter
Büro
Kinderzimmer
Küche
Schlafzimmer
Wohnzimmer
frogblue


Videoquellen
Einfahrt
Empfang
Balkon
Eingang
frogblue


Zeitsteuerung
Fertig
Zeitsteuerung
Astro
Aktiv
Sonnenauf/-untergang
Aufgang
Offset
0 Minuten später
Frühestens
07:00
Spätestens
09:00
frogblue


Berechtigungen
Raum
Room
Szene
View
Einstellungen
None
Kamera
View
Favoriten
View, Modify
frogblue

Interfaces Generated Directly

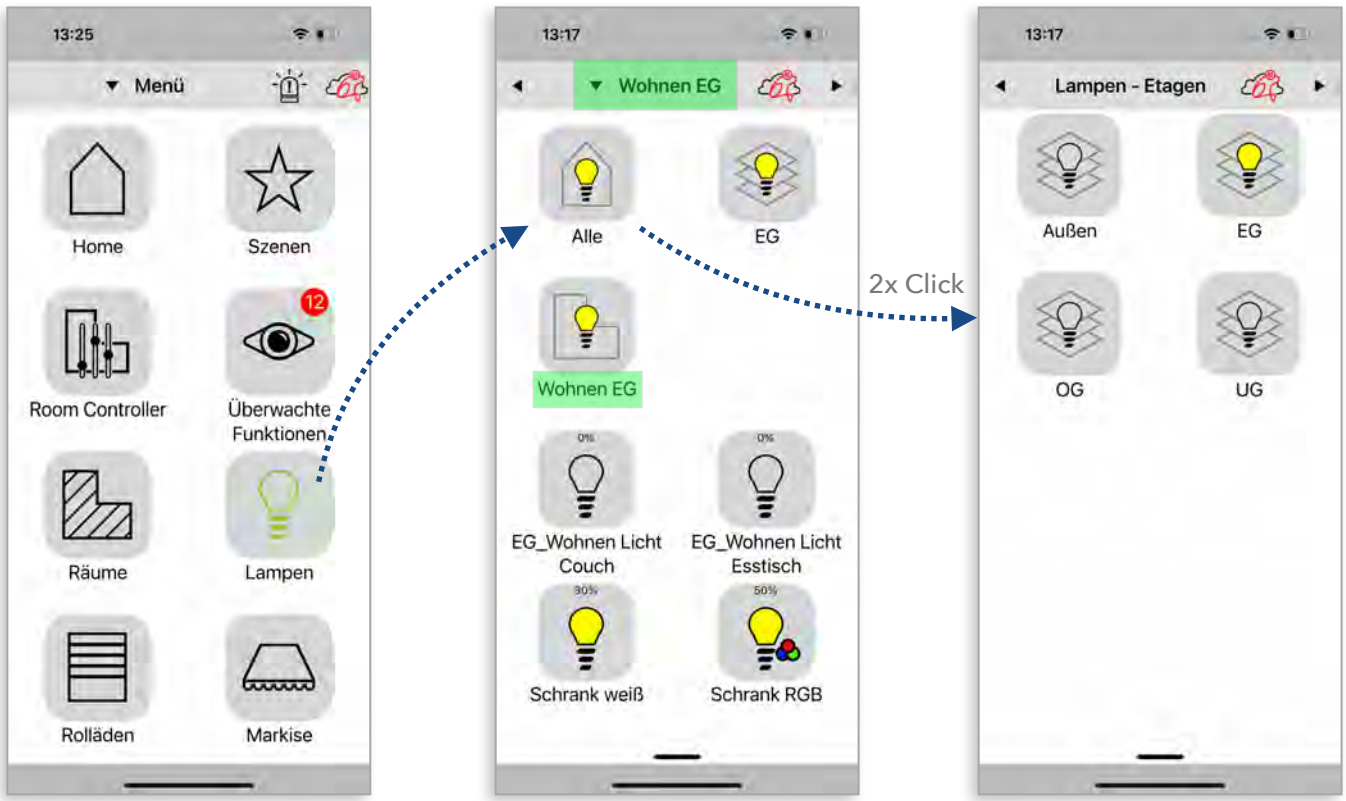
*All graphical user interfaces for the wall display and smartphone are **automatically** generated directly reflecting the specific information assigned during each module's configuration:*

This includes:

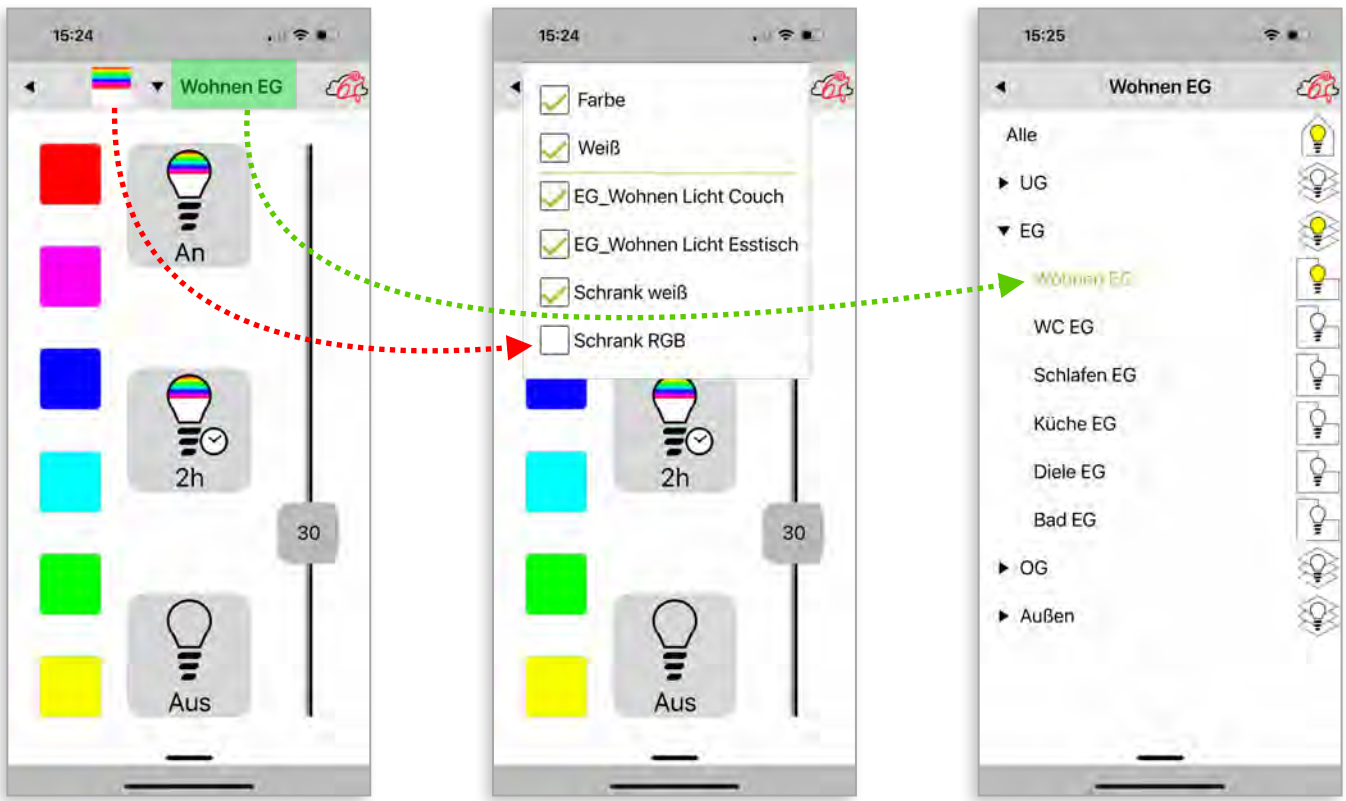
- *The module's **room position** (e.g., Building 13, Ground Floor, Outdoor Area, Office-12, Foyer)*
- *The **function** of the module's inputs and outputs (e.g., Light, Ventilation, Blinds, Light Switch, Window Contact)*
- *The **natural descriptive messages** at the module (e.g., Ceiling Light, Wind Status, Central Bell, Night, LR Window Contact)*

*A significant additional benefit is that this approach leads installers to cleanly configure the project, ensuring **efficient long-term maintenance**.*

==> The automatic generation of user interfaces significantly reduces configuration costs. Any subsequent changes are immediately integrated.



The surface tiles are created automatically, but only if the corresponding functions have been configured. Thanks to the topology, a top-down access from area to room and individual lights is possible. As such, with a single command, the lights of a floor can be simultaneously switched, dimmed, or color adjusted. From the header, directly switching to other rooms or areas is possible.



Easy Configuration

*Frogblue is configured with ease - **no programming** required! Configuring functions such as circuit switching or Central Off is done using **real, descriptive names**, such as "Foyer Light", "Gate Bell", or "Hall Door."*

Each input can be assigned multiple functions through actions like click, double-click, long-press, etc., and can control any function in the project, including preset scenes.

*When dimmer outputs share the same name, the **lights automatically synchronise** brightness and color; with the same names at the module inputs, a **toggle switch is automatically formed**.*

This approach is clear, minimises errors, and supports long-term documentation.

*A simple setup involving lighting, shading, ventilation, heating, plus an intercom can be configured in **half a day**.*

==> Fast clearly documented install, while maintaining oversight, all with zero programming skills required.

The frogblue **ProjectApp** displays a 2-channel dimmer, frogDim2-2, in the room "Kitchen," configuring two lights: "Ceiling light" and "Floor lamp." With these names, the lights can also be controlled from other light switches or by scenarios.

The **frogLink-USB** provides a high speed connection between the frogblue Bluetooth® network and a PC, or serves as a gateway or SDK to other systems, such as MOBOTIX™ cameras or overarching building management systems.

Protected Config

*The separation of the **configuration** (ProjectApp) and **control App** (frogControl) prevents unintended misconfigurations and **safeguards electrical installation** work.*

*All frogblue products are configured **from a single app**, ensuring that the modules work seamlessly together.*

*The ProjectApp automatically generates **backups** of all module configurations for a project, also locally, and allows for their restoration with just the press of a button.*

Software updates feasible while the system is in operation!

Linking modules by real descriptive names and assigning them to specific areas and rooms, as well as when defining all input and output functions, ensures intuitive operational clarity for years to come.

*All frogblue **Apps are free-of-charge**; including software updates.*

==> frogblue ensures high installation security and safeguards system integrator's expertise.

This ProjectApp section shows settings for a frogStrip120e, controlling an RGB strip with three channels and a white strip simultaneously as a second independent light on another channel.

This ProjectApp section shows settings for blinds in a building equipped with over 200 frogs.

Investment Costs

*The net **cost of frogblue components** for a simple setup, including lighting, heating control, blind control, and a video intercom, is approx. 8,000 EUR (excluding installation).*

*The software for configuration (Project-App) and operation (frogControl) is free of charge at frogblue. The use of the cloud, hosted in a **German data center**, is anonymous and also free of charge.*

Compared to wired systems, about 70% of cabling can be eliminated. Additionally, frogblue eliminates the need for switch cabinets, further saving on costs and space.

*After planning the zones and functions, **configuration time to handover is about half a day**, as the user interface for smartphones and displays is created automatically from the module configurations.*

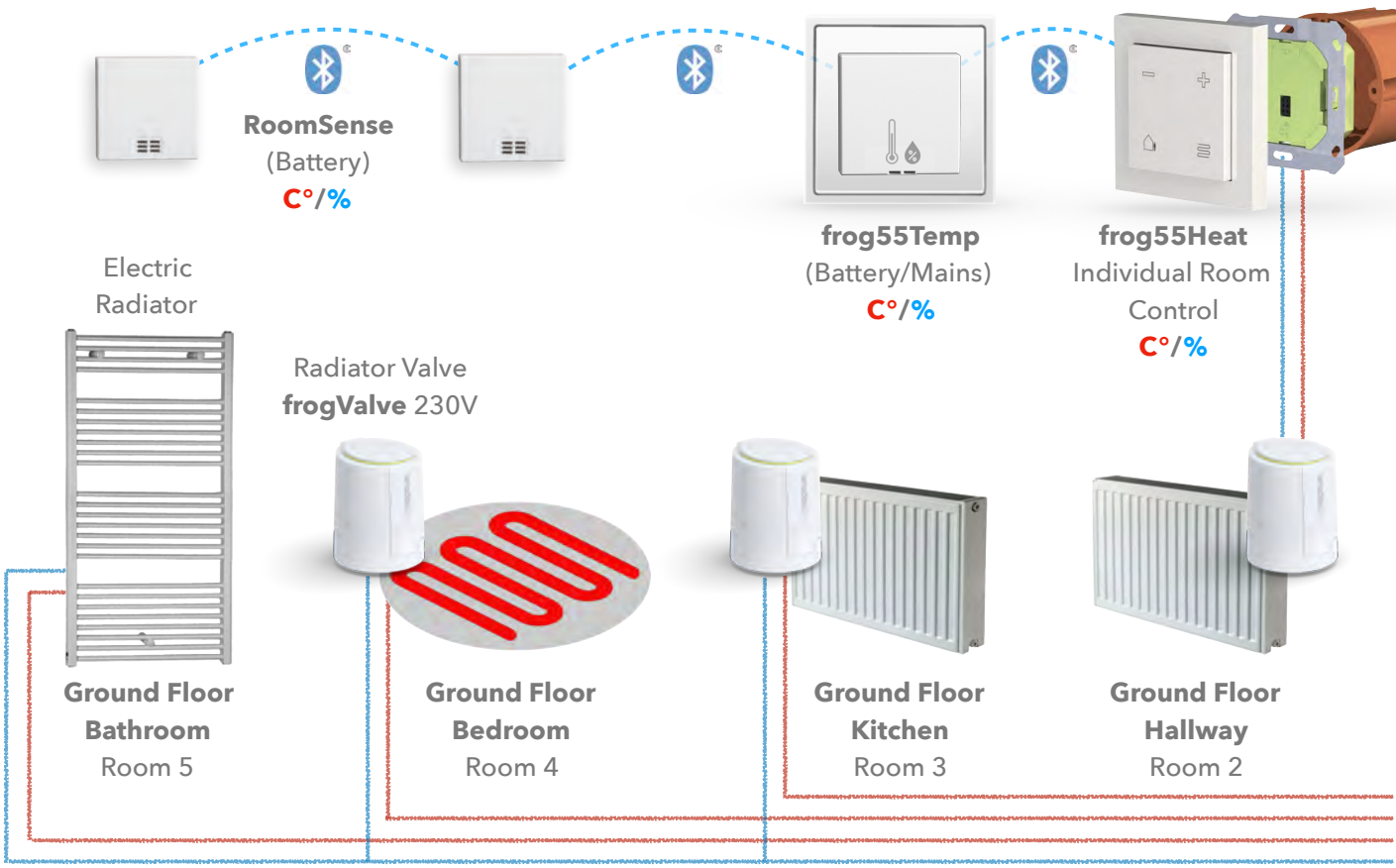
==> frogblue is affordable, reliable, sustainable, and easy to configure.

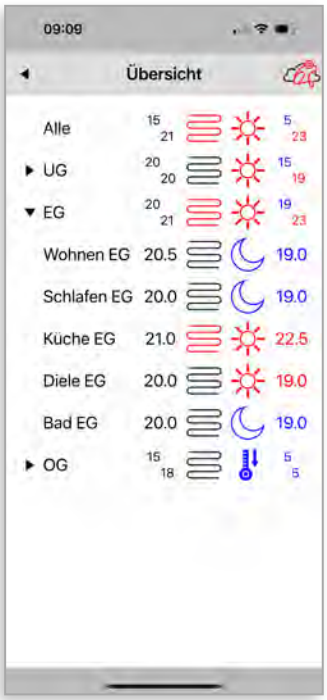

Übersicht
Beleuchtung
Beschattung
Zugang
Fenster
frogblue

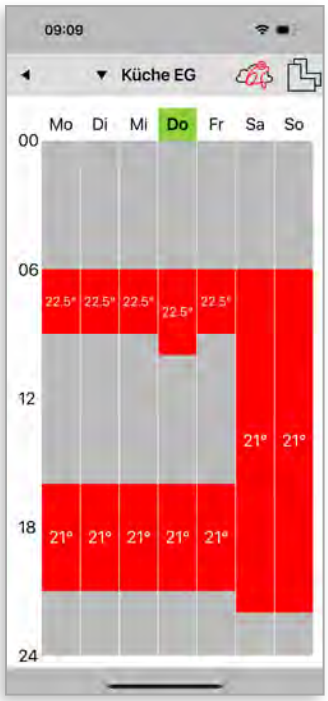
Universal Heating Control

The frogblue Heatbar is easily connected to underfloor heating or radiator valves and controls rooms individually, by zone, or groups, both from home and remotely. Temperature and humidity are wirelessly measured from battery sensors.

*Radiators, underfloor heating, and electric heaters can be combined in **mixed operation**.*





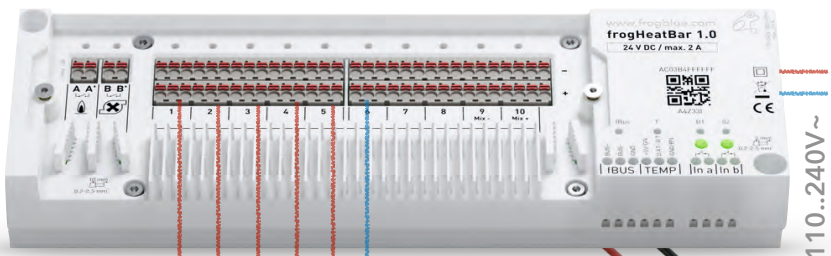


RoomSense
(Battery)
C°/%

N/L/L´ 230V~

frog81Heat Individual flush-mounted Room Control **plugRelay** 110..240V C°/% (from Q4/2024)

HeatBar 10-Room Heating Control potential-free relay, with burner and pump control, 2 contact inputs, emergency running buttons



110..240V~

Zone A

Zone B

Ground Floor Living
Room 1

Supply/Return Temperature of Pipes via 1-wire sensors

Heating Cost Savings

*The frogblue "**Heatbar**" heating control system features innovative functions to individually and efficiently control room temperatures with daily, weekly, and holiday programs, even remotely via a smartphone.*

Large rooms can be divided into heating zones, allowing priority heating of important areas. This enhances comfort in seating areas and saves energy costs.

When immediate adjustments are needed, entire floors can be heated or cooled with a single click, and automatically reverting back after a set period to the scheduled weekly plan of each of the rooms.

*The **frog55Heat** offers a single-room temperature controller with a standard connection (110..240V, relay) that integrates into the heating control system just like another HeatBar channel.*

HeatBars and individual room controls are flexibly combinable.

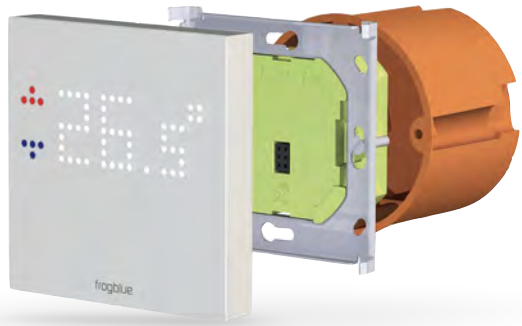
==> frogblue offers an innovative heating control system that, with its flexibility, saves on energy and costs.

frogRoomSense wireless room temperature and humidity. Surface-mounted with a replaceable battery (CR2450) for approx. 5 years of operation. (Dimensions: 45 x 45 x 13 mm)

frog55Temp in the 55mm size for standard switches, with a replaceable battery or optionally a 110..240V connection via the flush-mount box (from Q3/2024)

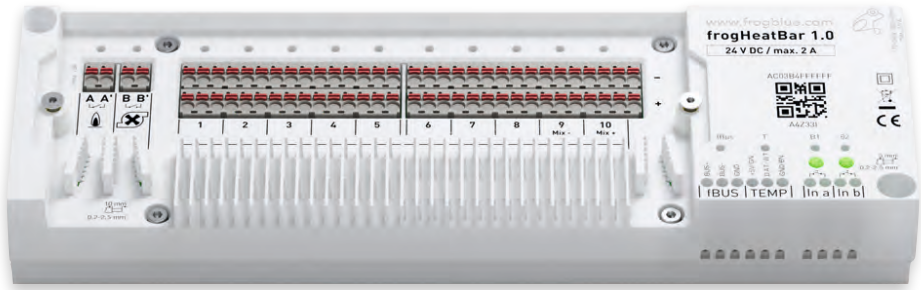
frogDisplay heating control with scheduling, window monitoring, party mode, setback mode when away, and temp. recording for optimisation.

frog55Heat: Single-room control in the 55x55 mm size, suitable for standard switch frames. Requires the flush-mounted Plug230-1-0 module with relay.



frog81Heat LED display of temperature/humidity and controls for lighting and blinds (from Q4/2024). Requires the flush-mount Plug230-1-0 module.

frogValve thermoelectric radiator valve available in 24V and 230V models



HeatBar: frogblue heating control for up to 10 rooms, flow temperature monitoring, control for burner stages, circulating pump; the **frogBoxHeat** offers a more compact module for up to 5 rooms.

Electricity Cost Savings

*A frogblue module consumes **~0.2 Watts** per hour in standby mode. For a simple setup encompassing lighting, shading, and heating control approx. 30 watts (0.03 kWh).*

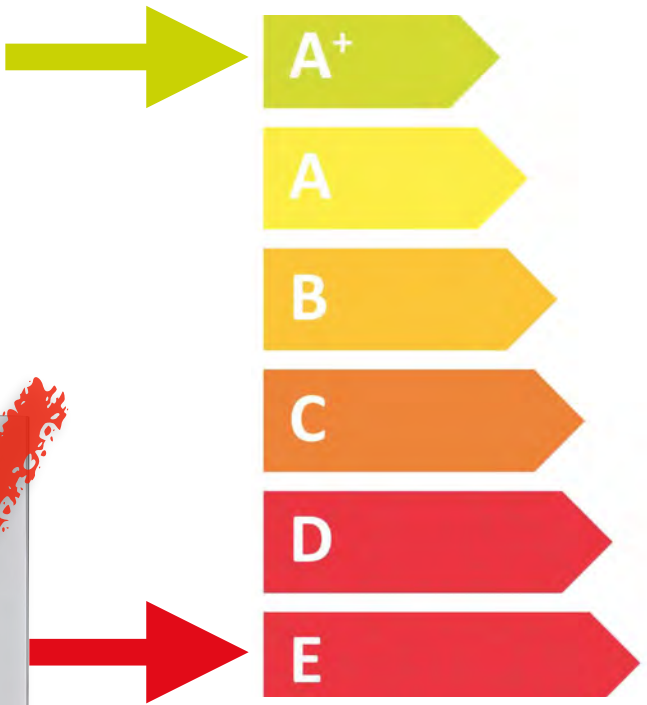
This is less than 1 kWh per day. Comparatively, frogblue uses only about 20% of the energy of a typical wired system with a central switchboard.

The elimination of modules in the distribution cabinet generally also saves additional space and costs.

*To maximise energy efficiency, the frogblue App provides an instant overview of each lighting zone. With just a click, zones can be dimmed or automatically adjusted by **time** or **daylight**.*

==> frogblue is the professional, cost-effective, energy-efficient solution for building technology

A+



Frogblue eliminates the need for switch cabinets and sub-distribution space, reducing energy consumption by about 80% while saving space, costs, and time.

Typically, a switch cabinet for wired building controls consumes between 250W and 500W per hour, that's 12 kWh per day!

Colour and LED Illumination

Frogblue supports all types of lighting fixtures. Our dimmers are compatible with both leading and trailing edge and are ***short-circuit resistant*** *and they don't even become lukewarm. The modules are VDE and ILAC certified.*

LED strips *can be connected as White, Tuneable White, RGB, and RGBW, as well as in combination on a single module. We synchronise brightness and colour across multiple modules.*

Individual zones or the entire building can be set to a desired colour or brightness with just one click.

The frogblue ***DALI Module*** *enables lights with a DALI-2® interface for control via broadcast as well individually as by groups.*

==> frogblue is your go-to expert for innovative colour LED lighting.

frogStrip120e
4 Channels, 2 Inputs

frogblue integrates DALI

*DALI-2® is a universal standard **bus system for lighting technology**. DALI supports 64 lights with 16 groups. A significant advantage of DALI is that **no extra bus cable** is needed, and data lines can be run up to 300 meters in a 5-core power cable.*

The frogblue DALI module, equipped with two button inputs, controls DALI-2® lights via broadcast as well as individually or through groups. This enables area-wide or building-wide switching functionality e.g. Central-off.

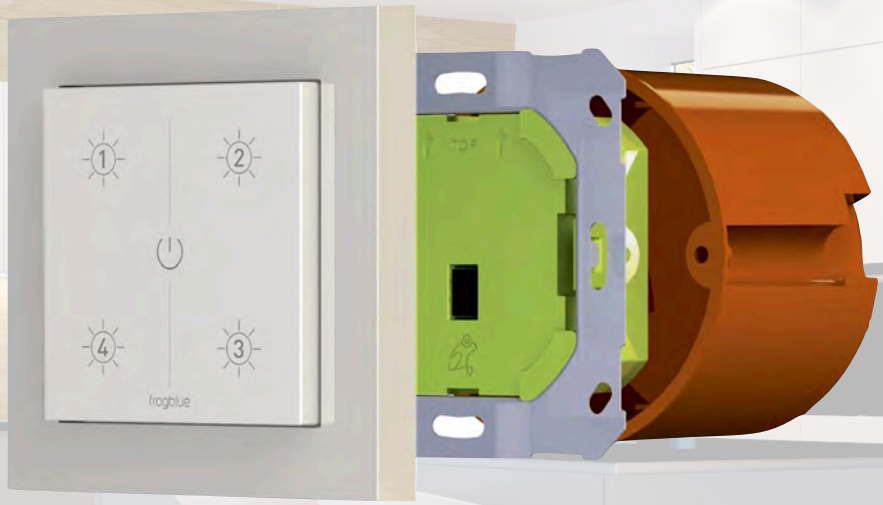
*Our **frogDALI-Power** is powered by 110..240V and features an integrated DALI bus power supply and direct control of lighting through it's button and dimming inputs.*

*The **DALIPlug** is flush-mounted and powers both the DALI bus and attachable 55mm and 81mm frogblue touch panels.*

==> with frogblue, the universal DALI standard for lighting is fully integrated

frogDALIPower: The frogblue DALI dimmer connected to 110..240V with a bus power supply (110 mA, switchable) and a 110..240V push-button input. The button is pre-configured for direct out-of-the-box operation.

frogDALI2: The frogblue DALI dimmer powered by DALI bus voltage, without 110..240V. Its two contact inputs are pre-configured for immediate out-of-the-box use.



frog55DALI: The touch sensor in the standard 55mm size fits any common switch program. Requires the flush-mount DALIPlug module. Controls DALI lights, scenes, and shading in the building.

plugDALI: The frogblue DALI flush-mount interface with 110..240V supply incl. bus power supply (110 mA, switchable) serves as power supply and interface for the frog55 and frog81 series control elements

Easy Installation

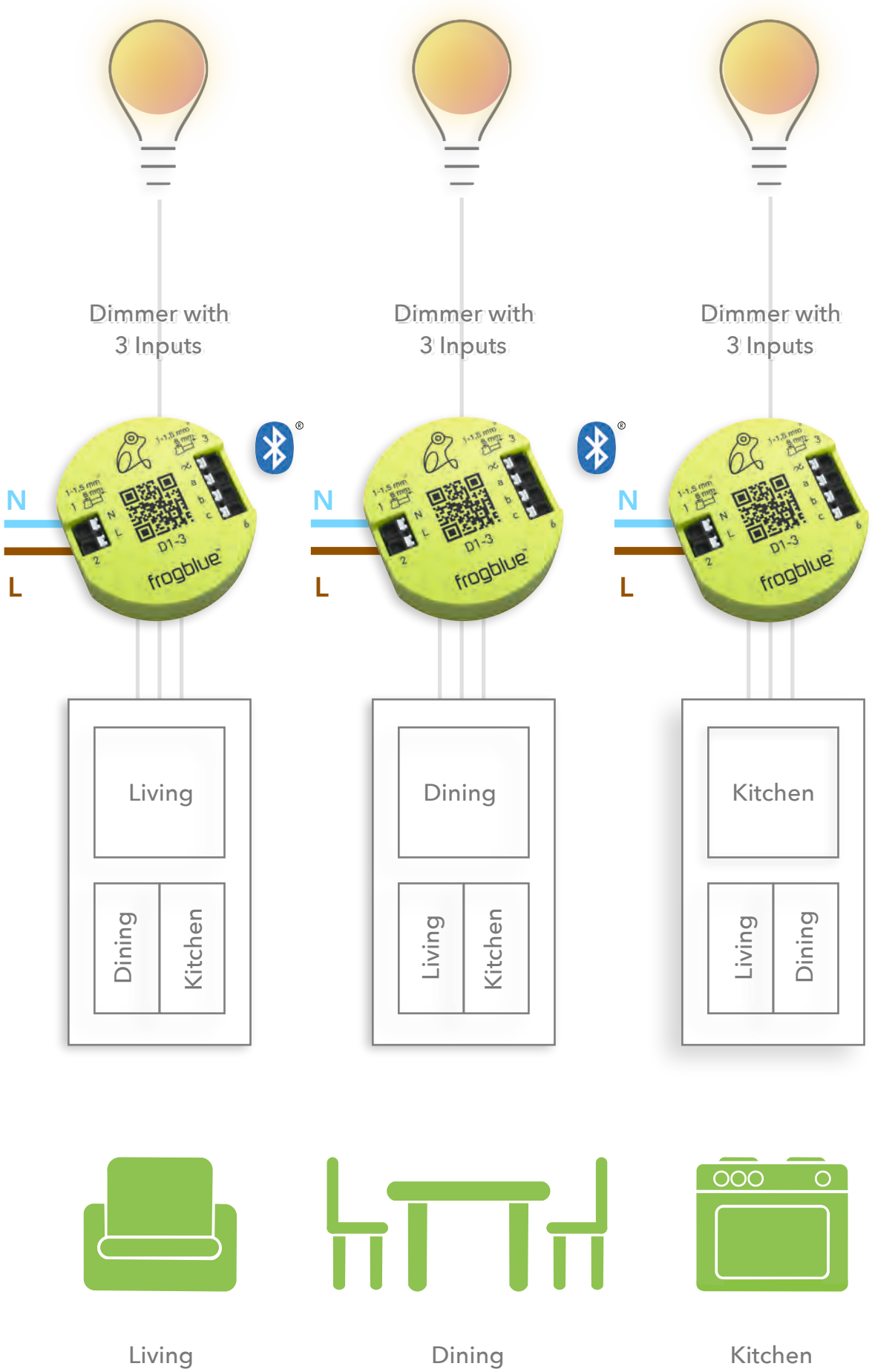
The following example of a circuit switching across three lights demonstrates the simplicity of the installation without control wiring. Since our dimmers have three freely programmable inputs, the three lights can be directly controlled from any switch panel.

In a studio, the lights in the living, dining, and kitchen areas can each be assigned to a frogDim1-3. Light switches from all leading manufacturers can be directly connected to the dimmer inputs.

Light switches can be assigned additional functions, such as lighting scenarios or building-wide central functions, "saving switches" through various button actions, e.g., a double-click.

For instance, a double-click could be configured to turn on all three rooms centrally from any or from select switches. A short or long press could set the light to 50% brightness.

Solution for approx. 500€



Smart Remote Control

*A single "button" we call **frogKey**, controls lights, blinds, and doors in a frogblue installation, always targeting the door directly in front of where it is being operated.*

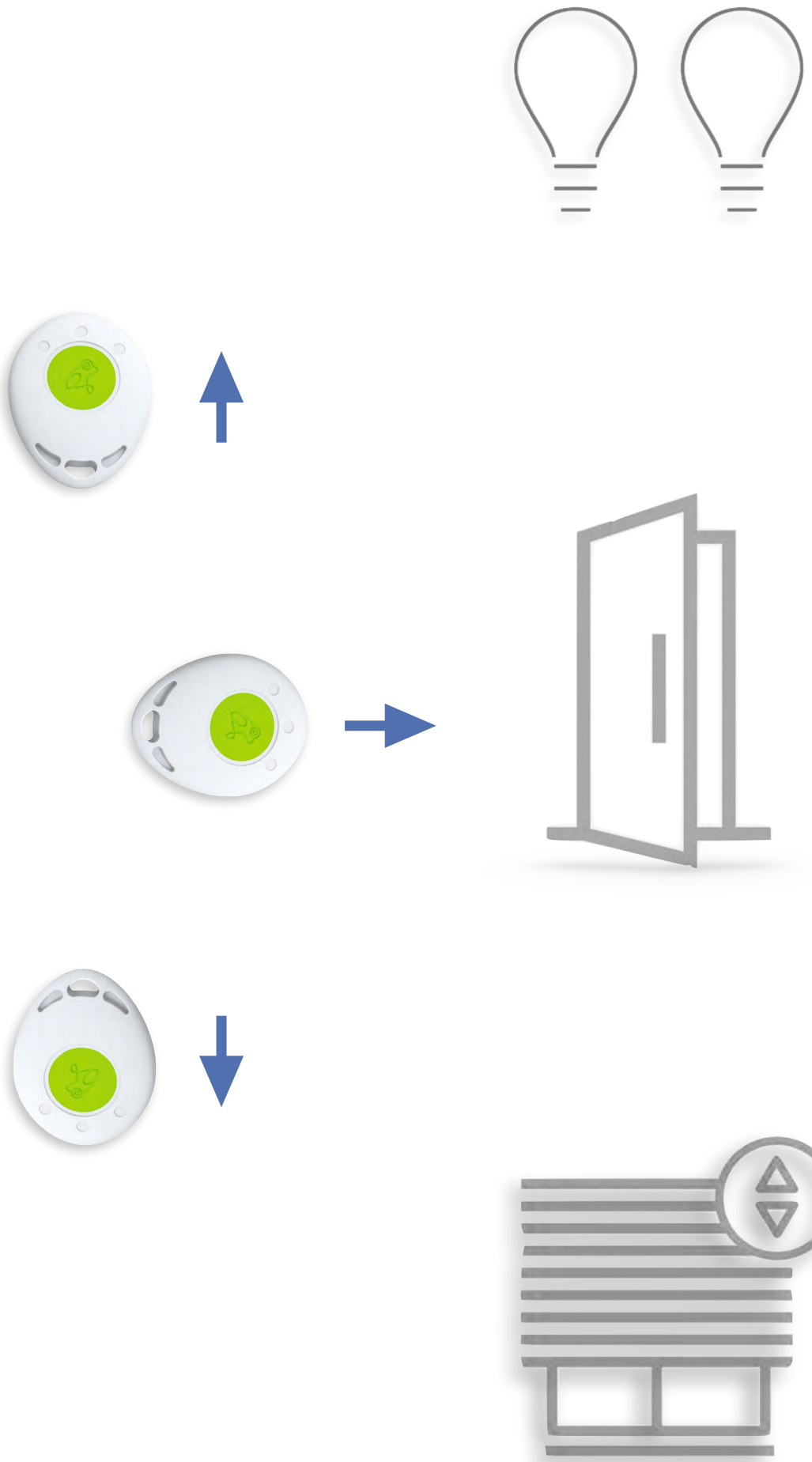
*Thanks to it's built in **gyro position sensor**, tilting up can operate lights and dimming, while pointing down operates blinds, and aiming horizontally forwards opens doors.*

With room recognition activated, frogKey only triggers the lights, blinds, and doors for the room it's currently in.

Double-clicks or long presses can activate additional functions, such as building- wide central off or scenes.

A frogKey only transmits when within its designated project; encrypted and timestamped, security assured.

==> with frogblue, a single press of our "key fob" brings the entire house under control.



Central Blind Control

With frogblue, blinds and sunshades across facades can be positioned individually or by group to any height or slat angle.

Scene control is highly flexible, enabling extensive facade management, accessible from any light switch, weekly schedule, or smartphone.

The astro function allows blinds to automatically adjust with sunrise, dusk, or sunset. Wind guards and lux switches can also be integrated.

Our frogRelay2-2 with two outputs detects the stop position, and its two inputs directly control the blinds via buttons. Single-button operation of all functions is also possible.

==> frogblue controls blinds and sun protection building-wide by schedule or at the push of a button.


Elemente wählen
Weiter
Büro
Kinderzimmer
Küche
Schlafzimmer
Wohnzimmer
frogblue

Notifications and Alarms

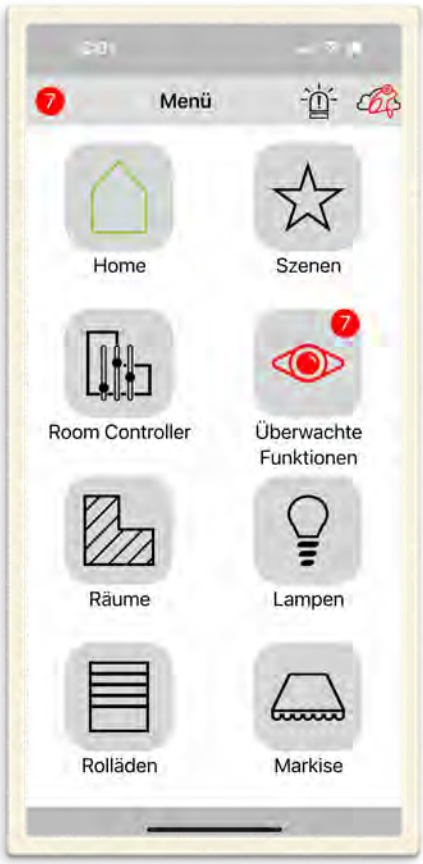
Frogblue monitors motion detectors, doors, and windows. Opening and closing automatically reports to your ***smartphone via push notifications****.*

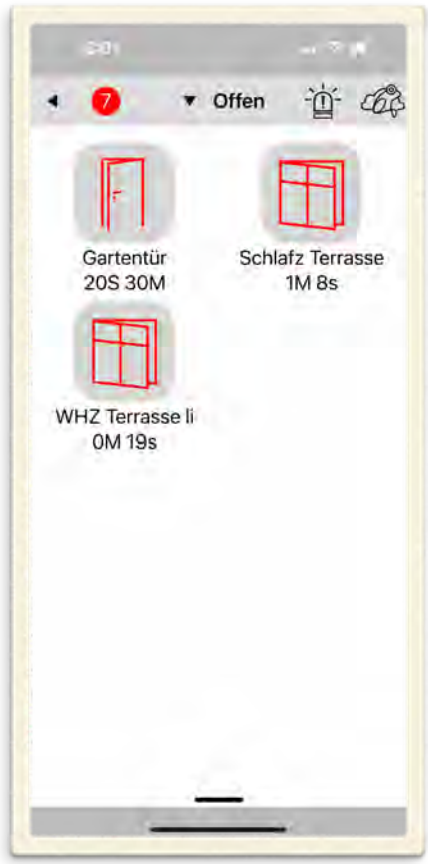
Monitored elements, such as patio or front doors, can be grouped to activate a red LED on the wall display when left open, quickly indicating an unsecured status.

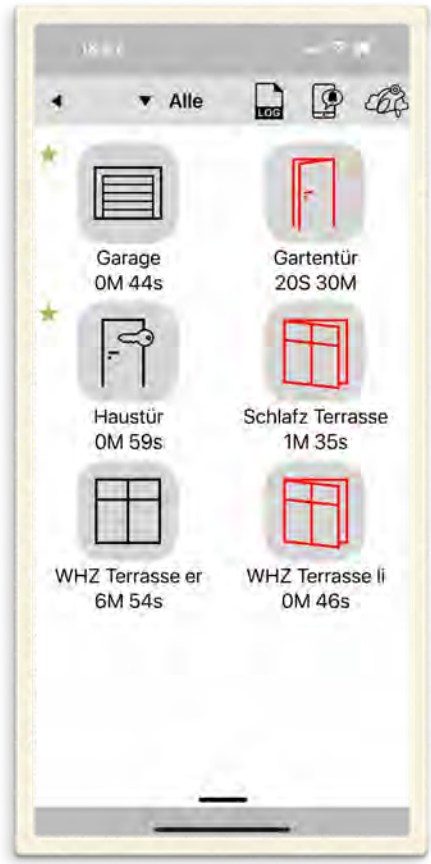
An ***event log*** *records all changes, enabling reviewing from anywhere in the world with a smartphone, e.g. when windows were opened or lights were switched.*

Set alarms are communicated ***via phone calls with voice messages*** *or email. Should these alarms go unacknowledged, an additional contact can be notified.*

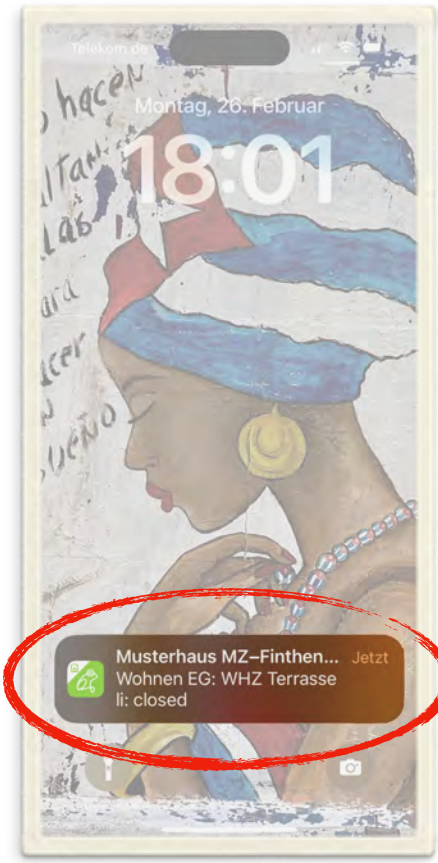
==> with frogblue, alarm systems and smartphone notifications are standard features.

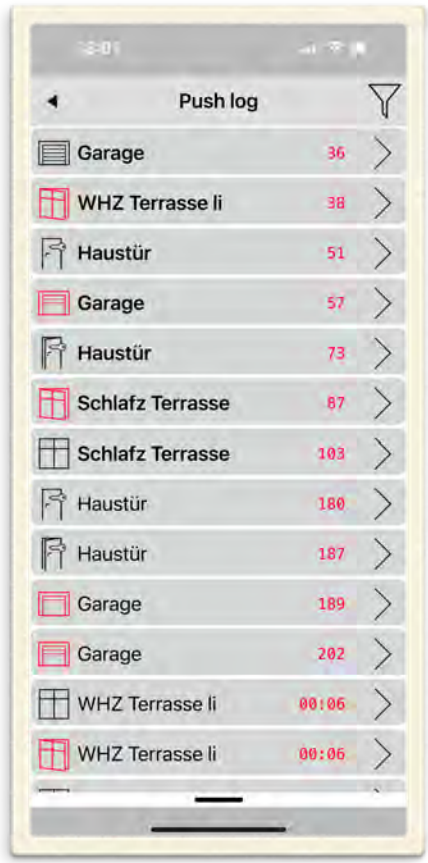


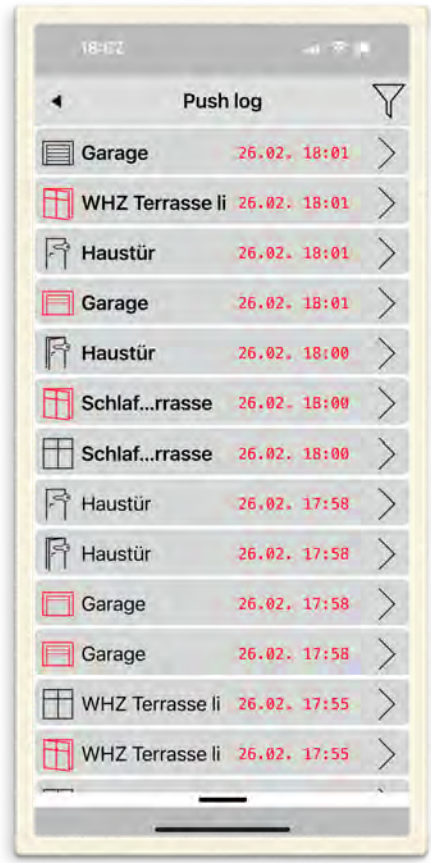




Push notifications are automatically sent to the smartphone: all Watch Group functions ('Eye Tile') send a message to the smartphone on opening or closing the set windows or doors. Additionally, a red LED on the internal display directly indicates this 'unsecured' state.







Automatic Documentation

*During configuration a frogblue system is **topologically structured into zones and rooms**. As such, all functions can be addressed by room, by zone, or as the entire building with a single command.*

*Each input and output of a frogblue module is assigned a **function type**, such as lighting, shading, ventilation, light switch, window contact, etc., and is so directly assimilated into the documentation.*

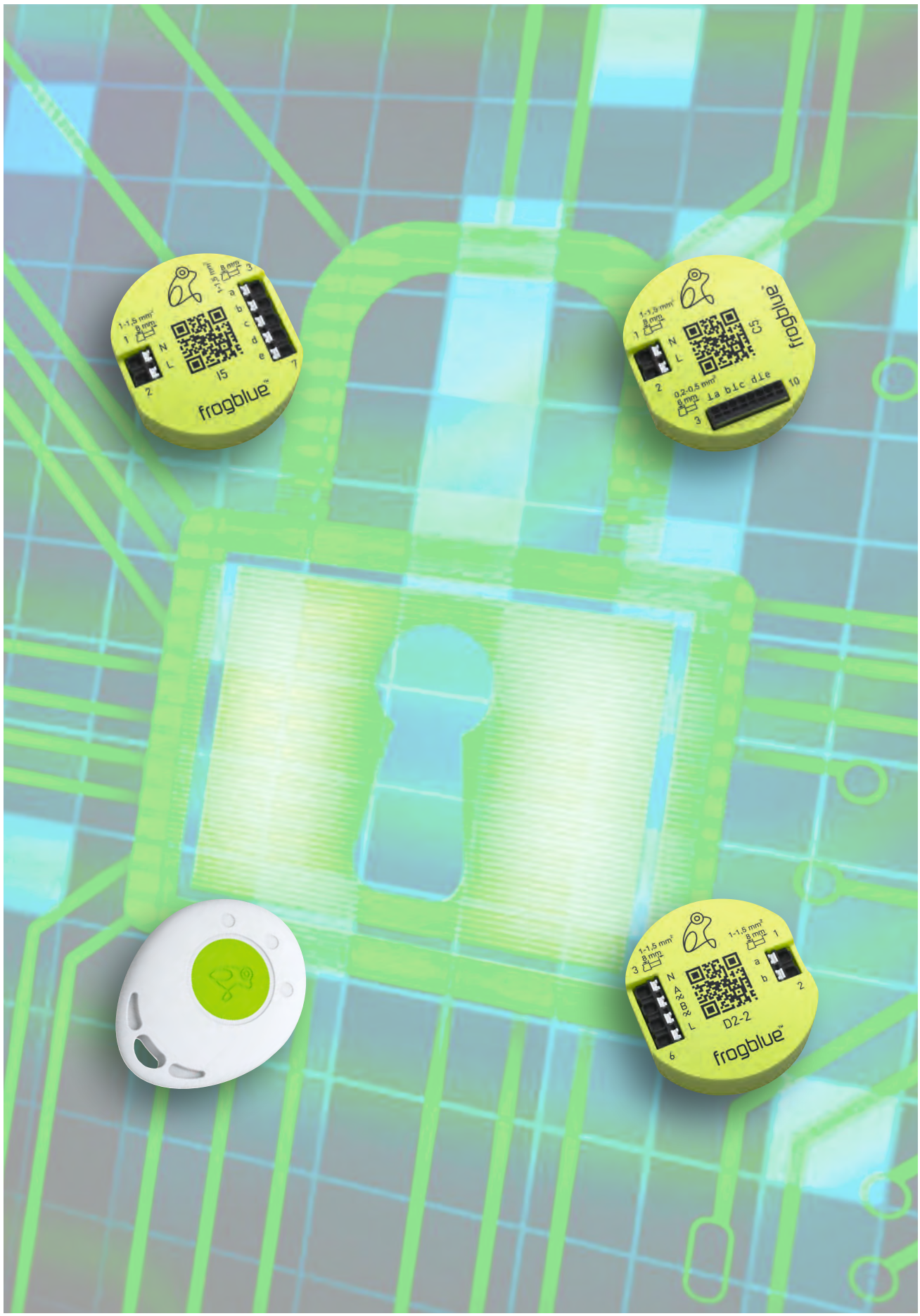
*The major strength of frogblue lies in the **direct integration into the user interface** of assigned names for rooms and areas, as well as functions.*

*This compels installers to configure the project cleanly, thereby ensuring **efficient long-term maintenance**.*

*The **project documentation** is also automatically generated.*

Error-prone assignment and linking of numerical data points are completely eliminated with frogblue.

==> A frogblue system remains clear and comprehensible, even years later, ensuring streamlined maintenance.


frogblue™
I5
frogblue™
C5
frogblue™
D2-2

Why Bluetooth LE?

*Bluetooth® technology requires **no technical infrastructure**. As such, a smartphone can directly control the frogblue system, via its built-in Bluetooth.*

WiFi-based controls, like radio solutions, require a base station (Access Point) for communication. In such systems, if the WiFi or a base station fails, building control is no longer possible.

*In contrast, our frogblue Bluetooth Mesh is **extremely robust towards interference**, as each message is transmitted, **like an "avalanche", multiple times on various paths and frequencies**.*

In addition, Bluetooth-LE® has a 10 times lower transmit power compared with WLAN, and emits significantly lower radiation.

==> Bluetooth-LE® is the Secure, Robust, and Fail-Safe - Future-Proof Technology; Since 2015, frogblue already committed to this robust fail-safe communication system.


Wohnzimmer
Beleuchtung
Jalousie
Heizung
Alarm
frogblue
frogblue
frogblue
frogblue
D2-2

Fail-safe Redundancy

*A frogblue project is exceptionally **robust and fail-safe**, as it does not rely on central control systems or servers. From switch to light to blind, simultaneous multi-path communication ensures seamless connectivity.*

After a power outage, the system is operational within a second, with state preserved. And as such, upon restoration of power, the lighting automatically reverts to its previous state.

*Thanks to the **redundant communication** of the Bluetooth Mesh, partial component failures do not affect the core system communication.*

*The parallel **3-path communication** from smartphones via Bluetooth, Wi-Fi, and Cloud ensures high reliability & speed.*

==> even with complete loss of Wi-Fi, mobile data, and internet connectivity, local building control and door access with a smartphone is always possible.

frogCloud optional

Cellular

Internet

DSL

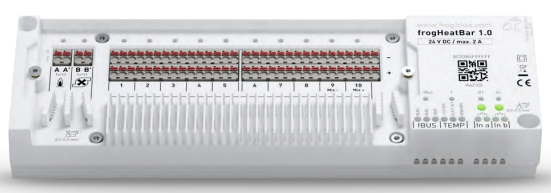
LTE-Mesh via cloud

WiFi-Mesh

frogDisplay

Bluetooth®-Mesh

frogs



Heating control

What differentiates frogblue:

(1) Frogblue offers a decentralised install without the need for control cables or switch cabinets, making it easily and ever expandable. We use Bluetooth Mesh for redundant, and highly encrypted wireless communication.

(2) Frogblue controls all building systems from a single app, including lighting, shading, ventilation, heating, window monitoring, alarms, etc. without requiring a cloud connection.

(3) Frogblue boasts high fail-safety since communication does not require a server or IT infrastructure. In this way the smartphone always works, as it directly controls all components locally via Bluetooth®.

(4) The frogblue video SIP intercom system facilitates a decentralised access control solution with card and PIN, from multi-tenant scenarios to large-scale properties.

(5) Frogblue requires no programming skills. The semantic (Function) topological (Location) nature of the configuration directly generates the building control user interface for both the Display and Smartphone.

(6) The documentation is generated automatically, as such a frogblue system is manageable and understandable even years later.

(7) With one-click our frogCloud connects your smartphone & building worldwide, via QR code.

Made in Germany

frogblue™

SMART BUILDING TECHNOLOGY GERMANY

We wirelessly link lights, blinds, fans, windows, doors, heating, intercoms, and standard light switches via **Bluetooth®**.

Our frogs are installed behind conventional light switches/outlets and only require 110..240V mains. Control wiring is not required as connections are made virtually.

A single app controls the entire house, either locally via Bluetooth® or worldwide from a smartphone. Frogblue is effortlessly installed without a server or switch cabinet and is child's play to configure.

Our intercom, **frogTerminal**, supports the universal SIP telephony standard, making it fully multi-tenant capable. Together with the integrated RFID reader and a PIN, it enables a decentralised access solution with 3-factor authentication.

Our major strengths are the **reliability and security** of a mature system that can be adapted to the users needs even years later.

Remark: User interfaces of wall display, frogTerminal and apps are available in more than twenty languages!

Costs for a typical single-family home:

- frogblue products for lighting, heating, and blind control, plus a video intercom: approximately 8,000 EUR (net).
- About 80% cost reduction in cable installation compared to wired central systems.
- Configuration time for functions and the structure of the user interfaces for the installer: about one day.
- Total energy consumption: only about 0.03 kW per hour.

The German Experts in Smart, Energy-Efficient Building Solutions and Communication

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