

# Hospitality Solution for new & existing hotel rooms

## HOTEL ROOM ENERGY SAVING KIT WIRELESS RETROFIT

EXISTING hotel room

## GUEST ROOM MANAGEMENT SYSTEM BUS INSTALLATION

NEW hotel room

# Hotel

## You'll feel right at home

**iNELS solution for guest room management is designed to help create an environment that allows guests to feel as if they were at home. The hotel room always welcomes guests with a pleasant temperature and the controls offer a very simple to use option for creating the atmosphere currently wished for.**

Every detail contributes to the overall satisfaction rating and the first element, with which the host comes into contact with, is the RFID card reader for entry into the room offered in an attractive glass design. Readers come in a sleek black or white design. To set the desired atmosphere in the room a touch panel is available with a very intuitive user interface for the control of temperature, lighting, shading, or setting the music scenes. Scenes can also be activated automatically upon entering the room. The iNELS solution is the subject of guest comfort, but it also strives for the effective management of all technologies, which significantly contributes to saving energy consumption.



### Check In/Out

Thanks to integration into a hotel system, it is possible to create a light scene in the room when a guest registers.



### Master Off

When the guest then leaves, the system automatically disconnects all electrical appliances and saves on both heating and cooling costs.



### Do Not Disturb

Guests can very easily signal if they want the room cleaned, or do not want to be disturbed.





## Comfort

The combination of automatic illumination based on motion and central control of the room.



## Design

Through their timeless design, the control unit with display or glass touch unit will complement any interior.



## Versatility

The system is suitable for installing in large and small lodging facilities alike.

# **NEW** room – GRMS

## Comfort

In a new hotel, smart is not only standard but a necessity. Every detail contributes to the overall satisfaction rating and the first element, with which the host comes into contact with, is the RFID card reader for entry into the room offered in an attractive glass design. Readers come in a sleek black or white design. To set the desired atmosphere in the room a touch panel is available with a very intuitive user interface for the control of temperature, lighting, shading, or setting the music scenes.

- “master OFF” button – one push when leaving room or falling asleep to switch off all lights
- smooth dimming, brightness adjustment as needed, scene settings (sleep, wake-up, work)
- Music & radio with the LARA switch – music/bathroom distribution
- the ability to control and cast music from a smartphone application
- signalling: “Do Not Disturb” and “Make Up Room”

## Savings

- fixed temperature limits – min. (for air-conditioning) max. (for heating) – Window opening suspends A/C & heating
- dimming and master off, occupancy sensor
- LED light sources = savings of 30 %
- smart card holder – works only with the correct card – not everyone's!

## Design

- wide range of colours and frames
- glass variants of controllers in different colours
- customization: icons, logo...
- configurable bedside panel as required

## Safety

- occupancy sensor detects the presence of person(s)
- integration with the door access system
- the doorbell bell increases the guest's safety

## Flexibility

- possibility to adjust the control functionality
- control and supervision from reception



## **BUS** installation

### Control

- standard controllers
- frames of natural materials (wood, glass, metal, stone)
- glass controllers
- touch panel (EHT)
- application from a smartphone

### Audio/Video

- LARA – music & radio player with intercom
- TV control via application (must be used eLAN IR)
- device control via TV (hospitality TV with eLAN RF)

### Integration

- GRMS (MUR, DND, Laundry)
- connection with BMS (Building Management System)
- connection with PMS (Property Management System)
- connection with door locks systems

### Others

- variability – change controllers place
- navigation for Hotel guests



# EXISTING room – RETROFIT



## Comfort

Thanks to the wireless communication with devices (sensors and actuators), the retrofit of an existing hotel room can be performed with minimal time consumed. Controllers can be attached anywhere and require no cables at all. The actuators are installed directly into the cabinet or in to the luminaire. The advantage (cost and installation) is that the LED bulb is directly dimmable, i.e. just place it in the main light or lamp. Wireless motion detectors and window openers further extend the possibilities of the entire system.

- “master OFF” button – one push when leaving room or falling asleep to switch off all lights
- smooth dimming, brightness adjustment as needed, scene settings (sleep, wake-up, work)
- Music & radio with the LARA switch – music/bathroom distribution
- the ability to control and cast music from a smartphone application



## Savings

- fixed temperature limits – min. (For air-conditioning) max. (For heating) – Window opening suspends A/C & heating
- dimming and master off, occupancy sensor
- LED light sources = 30% saving, plus built-in dimmer inside bulb (2 in 1)



## Design

- wide range of colours and frames
- fits to the interior, the controls can be placed anywhere – even bonded to the glass



## Safety

- occupancy sensor detects the presence of person(s)
- smoke detector – a fire or smoke from a cigarette
- the doorbell bell increases the guest's safety



## Flexibility

- the option to move controls in a variable way – even when not in the place of installation: at the bed, behind the door,...
- the possibility of additional changes or extensions



## WIRELESS installation

### Control

- standard controllers
- frames of natural materials (wood, glass, metal, stone)
- glass controllers
- touch panel (RF Touch)
- application from a smartphone (eLAN for every room)

### Audio/Video

- LARA – music & radio player with intercom (LAN cable or Wi-Fi)
- TV control via application (must be used eLAN IR)
- device control via TV (hospitality TV with eLAN RF)

### Integration

- GRMS (MUR, DND, Laundry)
- connection with BMS (Building Management System)
- connection with PMS (Property Management System)
- connection with door locks systems

### Others

- variability – change controllers place
- navigation for Hotel guests



# Comprehensive solution



## Restaurants & Bars

- Bill transfer
- Ordering via App



## Conference room

- Prebooking
- A/V control



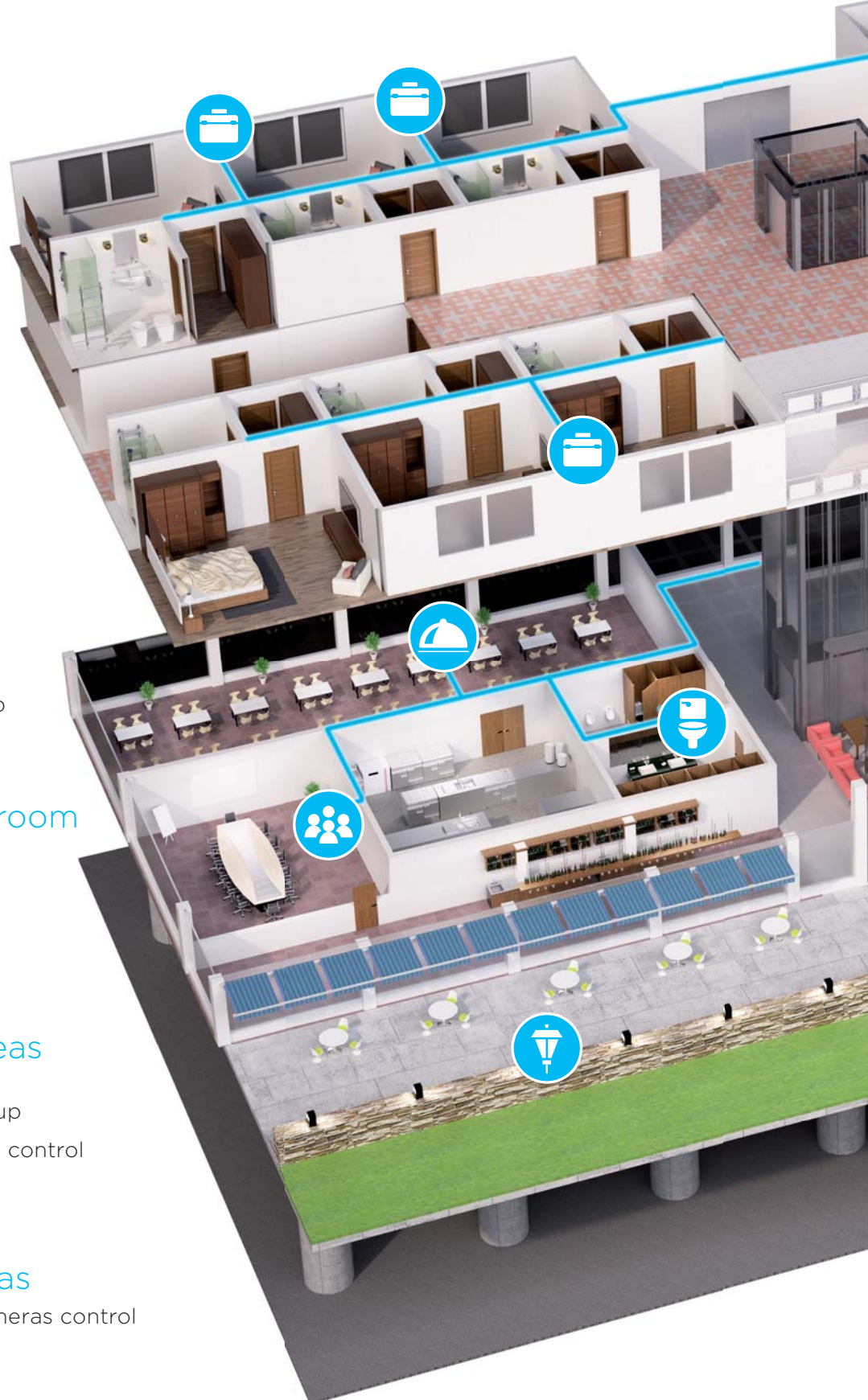
## Common areas

- Automatically environment setup
- Effective lighting control

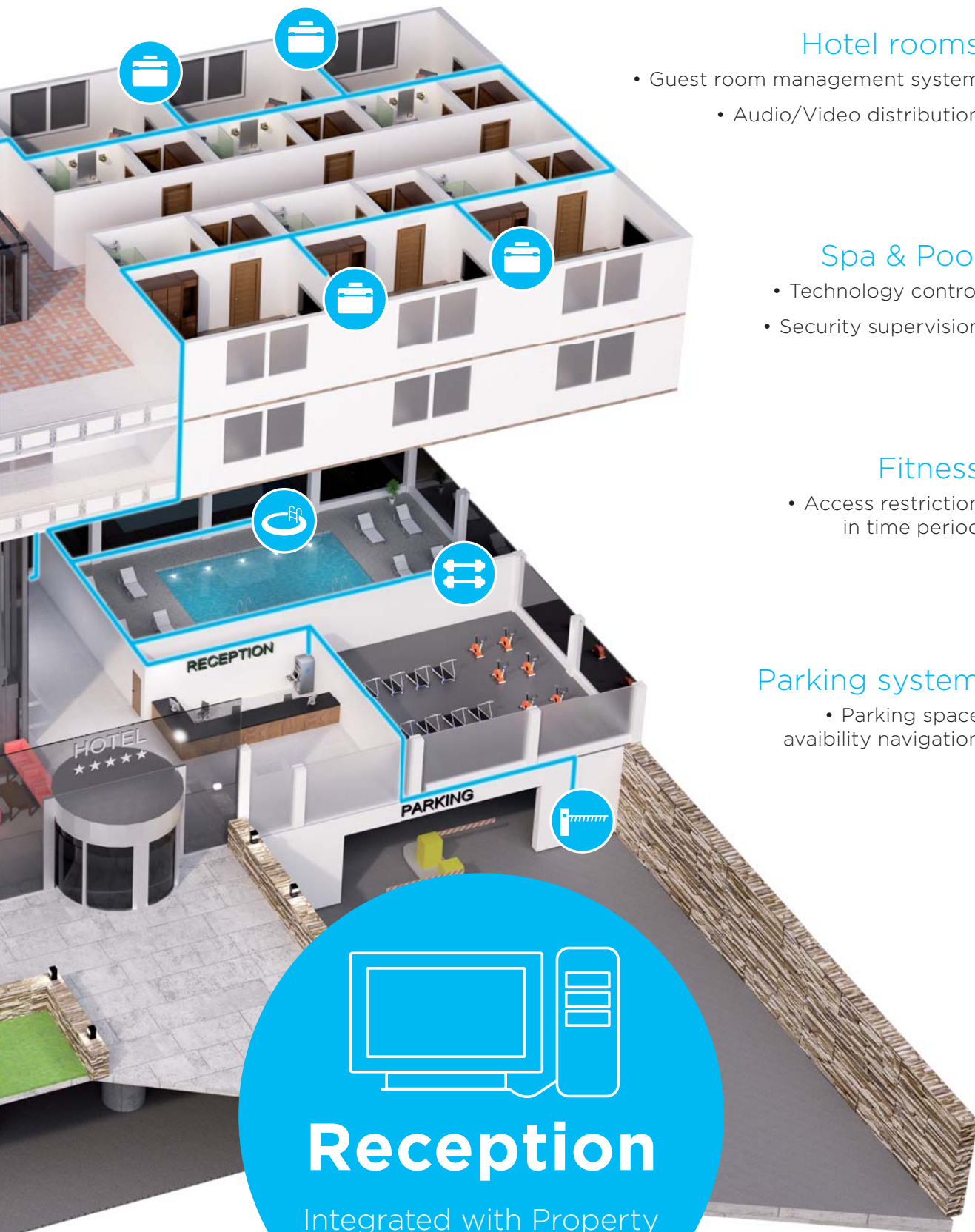


## Outdoor areas

- Security and cameras control
- Water gardening



# BUS/GRMS Solution



## Hotel rooms

- Guest room management system
- Audio/Video distribution



## Spa & Pool

- Technology control
- Security supervision



## Fitness

- Access restriction in time period



## Parking system

- Parking space availability navigation



## Reception

Integrated with Property Management System

FIDELIO

Opera

protel  
HOTEL SOFTWARE



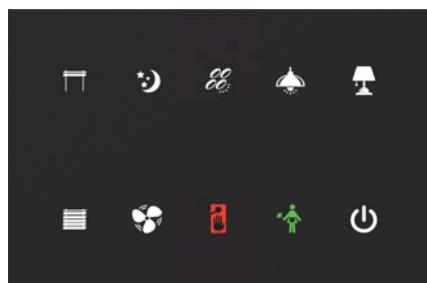
# NEW room

iNELS solution for guest room management is designed to help to create an environment that allows guests to feel as if they were at home. The hotel room always welcomes guests with a pleasant temperature and the controls offer a very simple to use option for creating the atmosphere which was currently wished for.



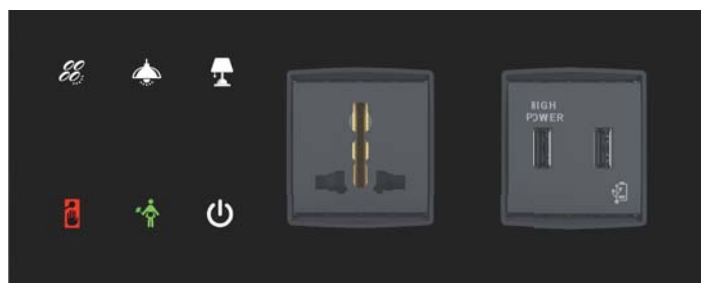
## Multifunctional Touch Panel

Fully configurable 3.5" touch screen with TFT display in variety frames design. Allows the control of all iNELS Hospitality features including multimedia. Configurable allowing of making of personalised screens for control lights, shutters, HVAC, audio, video and TV.



## Glass Switch Panel

Luxury glass touch control in three versions with four, six or eight buttons are available in elegant black and white. Switches also sense the ambient lighting and offer a choice of symbols.



## Glass Bedside Panel

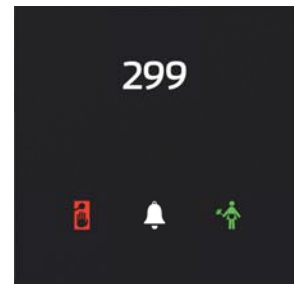
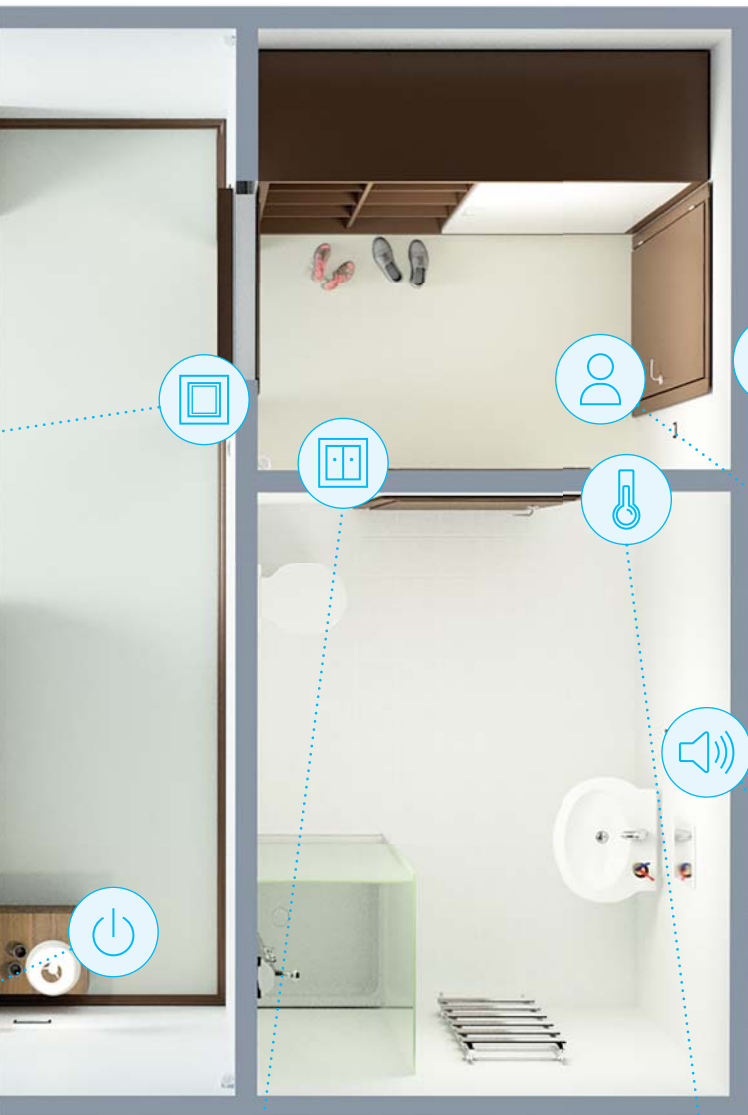
Important buttons for light, TV scenes, master switch and sockets, other sockets for equipment are available.



Configure bedside panel  
(see page 34)

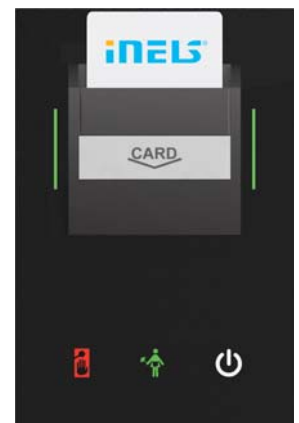


# BUS/GRMS Solution



## Glass Card Reader

The RFID card reader is a great design for the entrance to the rooms which also features a bell signal the "Do Not Disturb" and "Make Up Room" signs and backlit room number.



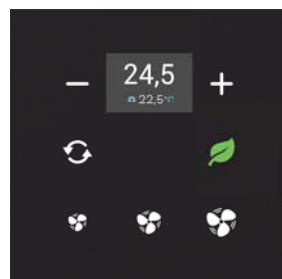
## Glass Card Holder

In-room smart card holder with RFID reader which detects correct card and eliminates fake cards.



## Wall Push Button

For scene control (lighting, music, and projection) it is also possible to use flat wireless switches, which thanks to customizable printing offers clear control.



## Thermoregulator

Temperature glass controller for simple temperature setup. Fan and mode control. OLED display with actual and setup temperature value.



## Audio Player

Provides many thousands of Internet radio channels from all over the World or share music from central storage. Integrated amplifier can feed compact loudspeakers or external ceiling or wall speakers.



## Multifunctional Touch Panel

Control whole room from one place

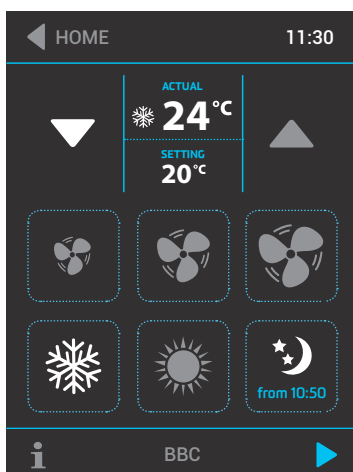
**Fully configurable 3.5" touch screen with TFT display in variety frames design. Allows the control of all iNELS Hospitality features including multimedia. Fully configurable allowing the making of personalised screens for control lights, shutters, HVAC, audio, video and TV.**

Make up rooms, do not disturb and laundry buttons included. Variable choice from the many frame designs and subframes under LOGUS<sup>90</sup> design (see page 37).



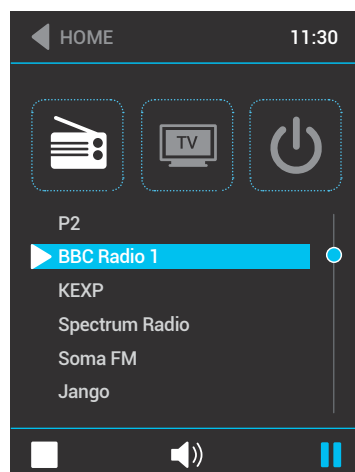
## Multifunctional Touch Panel

EHT3



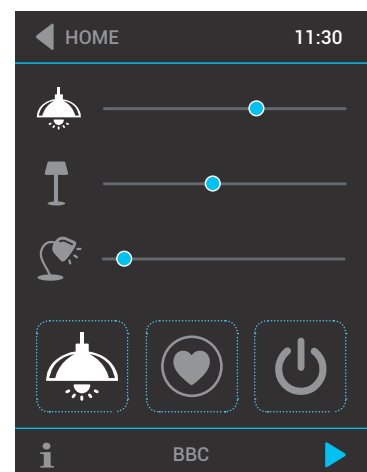
## HVAC Control

Actual / Setup temperature,  
Temperature up / down, fan speed.



## Multimedia

Radio and TV station, Music from  
storage or own source.



## Light/Scenes

Lights ON/OFF, dimm, scenes,  
Master off.





## Bedside Panel

Not reason to rise from bed

**Wide possibility of customization. Allowing the creation of bedside panels on request. Important buttons for light, TV scenes, master switch and sockets, other sockets for equipment are available.**

Glass finish with more colours (including smoke and white), and international sockets as options.





**6 buttons with  
indicator**

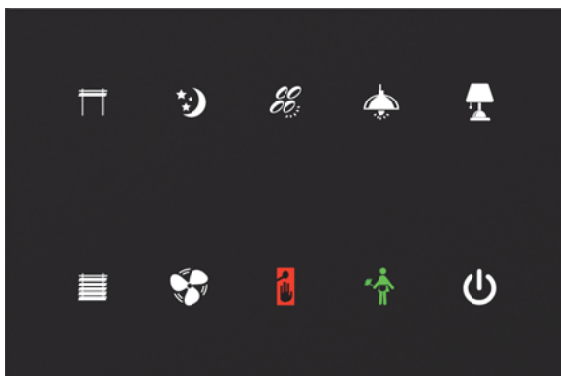
**AC power socket  
variable**  
(see page 34)

**2x USB sockets  
variable**  
(see page 34)

# Control Panels

## Wider range of room controllers in variable designs

Fully customisable controllers. Finished frames in glass or plastic. 4, 6, 8 and 10 buttons version available. Symbols and logo engraving by laser.

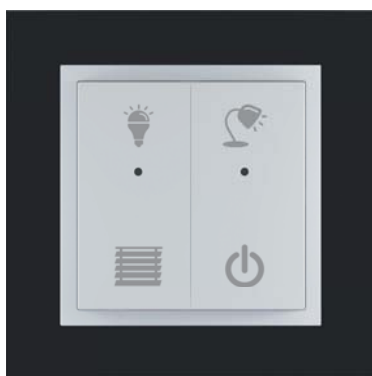


### Glass Switch Panel

GSP3-100/B

Luxury glass touch control with 10 buttons is available in elegant black and white. Switches also sense the ambient lighting and offer a choice of symbols.

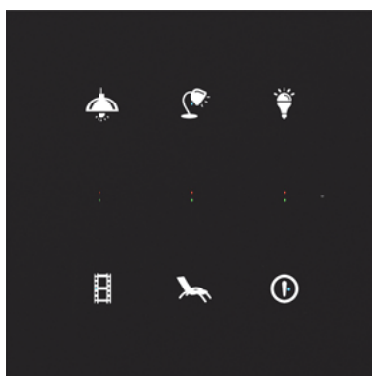




## Wall Switch Button

WSB3-20/WSB3-40

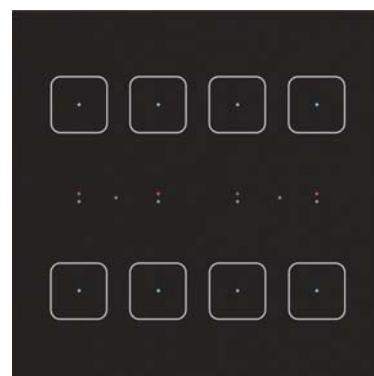
For scene control (lighting, music, and projection) it is also possible to use flat wireless switches, which thanks to customizable printing offers clear control.



## Glass Switch Button

GSB3-60/SB

Customizable touch control solution for lighting control and other technologies in different scenarios e.g. reading books, relaxing, watching TV, Master Off.



## Glass Switch Button

GSB3-80/B

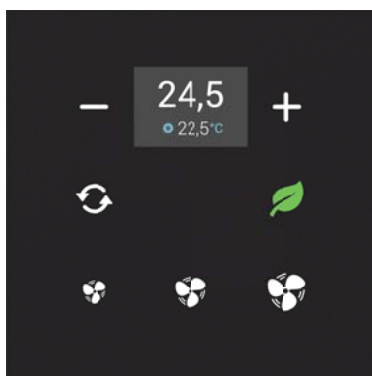
Luxury glass touch control in three versions with four, six or eight buttons are available in elegant black and white. Switches also sense the ambient lighting.



# Heating, ventilation & air-conditioning

## Keep yourself comfortable

With iNELS you have always more possibilities how to setup and control temperature in the room: digital thermostat, glass HVAC controller, App in phone or tablet or via TV.



## Glass Room Thermoregulator

GRT3-50/B

Temperature glass controller for simple temperature setup. Fan and mode control. OLED display with actual and setup temperature value.



## Thermoregulator

IDRT3-1

Digital wall temperature controller used to regulate the temperature in a room. Using the IDRT3-1, it is possible to correct the given heating/cooling circuit within a range of  $\pm 3$ ,  $\pm 4$  or  $\pm 5$  °C.



## Fan-coil Actuator

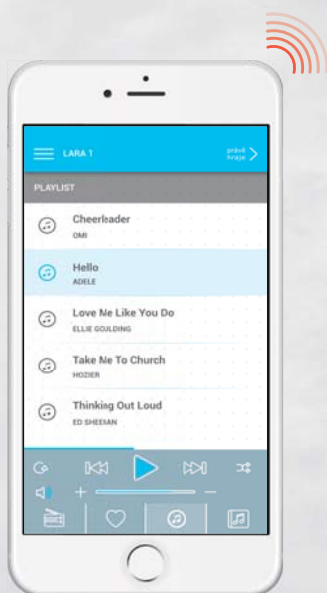
FA3-66M

Actuator is used to control fancoil's units via an analog/digital inputs. Analog inputs are for temperature measurement, voltage or current. Connection is to installation BUS.





**Music & Power Kit**



**App LARA Dio**



# Audio distribution

## Music in all corners

iNELS option allows you to share radio and music in the bathroom as well as the main room. Source of songs in central Connection Server or your own device – via cable or Wi-Fi.



## Radio & Music player

### LARA

Provides many thousands of Internet radio channels from all over the World or share music from central storage. Integrated amplifier can feed compact loudspeakers or external ceiling or wall speakers.

More info on [lara.inels.com](http://lara.inels.com)

# Room control via TV

## Everything you need in your hotel TV

TV programs, movies on demand, temperature level, lighting control, hotel bill, hotel activity offers – all these and more features can be controlled by you via hotel room TV.



Lights



Temperature  
control



Music



TV



Movie on  
demand



## Samsung Hospitality TV

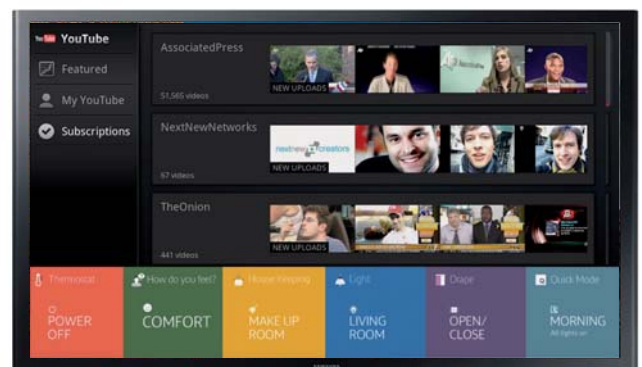
You can make your own song playlists, play radios or favorite movies. Via TV menu it is possible to control audiozones and the LARA music player.





## Room Control

Hotel managers can easily manage and arrange the channel mix for both analogue and digital channels without the need to adjust and edit channel lists by different TV systems. Channels can be reordered and renamed to the hotel's preference with channel mapping.



## My Channel/Multimedia

Enable guests to easily find and enjoy the programming of their choice without having to manually scroll through hundreds of TV channels. My Channel's quick search function allows guests to find channels suited to their tastes, by country and genre.



# Access control

## Clever access under top security

**iNELS Hospitality offer two ways for access to room and other hotel facilities.**

First option is our own door entrance panel with in built card reader, bell button, make up room and don't disturb indicators. Room number can be placed as well.

Second option is integrated VingCard (Assa Abloy) lockers which communicate wirelessly with hub and afterwards with iNELS Connection Server. This solution also provides information about locker activity to iNELS.



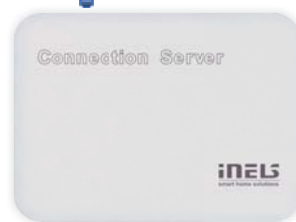
## Aperio

AH-40

Assa Abloy HUB



LAN



Connection Server

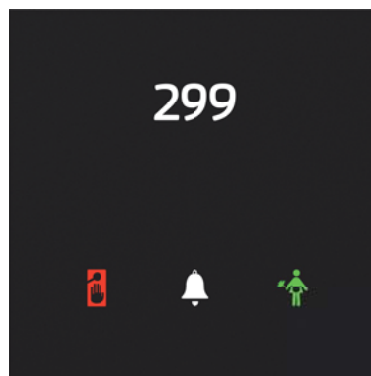
**ASSA ABLOY**



Integration with locker

Electronic Lock

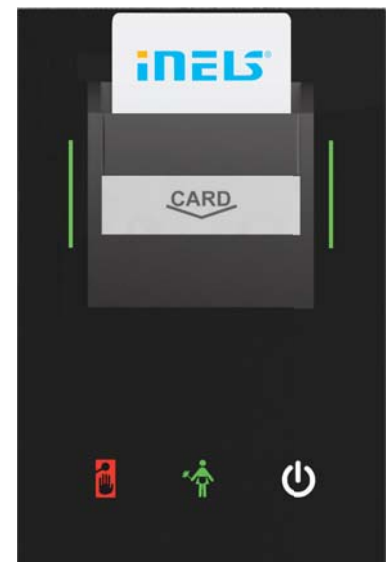
Wireless Assa Abloy locker



Glass Card Reader

GCR3-11/B

The RFID card reader is a great design for the entrance to the rooms which also features a bell signal the "Do Not Disturb" and "Make Up Room" signs and backlit room number. Thanks to the integrated relay it can control the door lock directly.



Glass Card Holder

GCH3-31/B

In-room smart card holder with RFID reader which detects correct card and eliminates fake cards. Optional 3 buttons: "Do Not Disturb", "Make Up Room" and "Master Off".





## Common areas

### Total supervision for reliable service

**iNELS enables management and control of each luminaire whether with your own the BUS, DALI or DMX.**

Lamps can be controlled by time, human presence, the intensity of outdoor (natural) light or only as needed (areas) – all these control methods can be combined together. For monitoring you can use a camera system that is part IMM and makes it possible to integrate resources for heating, air conditioning and recovery. iNELS also allows the measurement of energy, including monitoring of critical values and periodic reports.

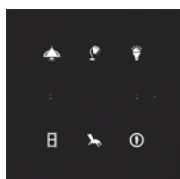


## Overview of the app

Receptionists will appreciate the fast control and supervision via tablet or touch panel. More common areas should be visualized on multiple screens.

# Product overview

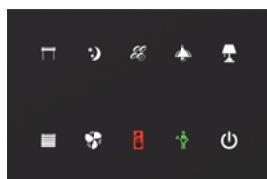
## Glass Touch Controllers



Glass Switch Button

GSB3-40, GSB3-60, GSB3-80

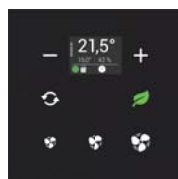
- Glass touch controllers with symbols
- All versions are in the size of the module (94x94 mm)
- Individual symbols can be illuminated in one of seven colours
- rated current 25—40 mA from BUS



Glass Switch Panel

GSP3-100/B, GSP3-100/W

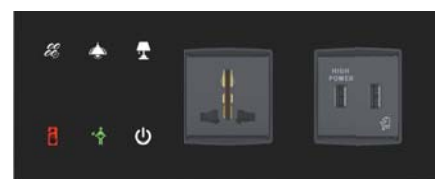
- Glass Touch Panel GSP3-100 is part of a comprehensive iNELS series of units for the management of the hotel rooms
- ten touch buttons
- rated current 25—65 mA from BUS



Glass Room Thermoregulator

GRT3-50/B, GRT3-50/W

- display for displaying the current room temperature
- GRT3-50 is also suitable for controlling fan-coils
- Thermo-regulator is equipped with an integrated temperature sensor



Glass Bedside Panel

GBP3-60/B, GBP3-60/W

- GBP3-60 panel is equipped with six customizable touch buttons
- control units for guest room management system

## Standard (plastic) Controllers



Wall Push Button

WSB3-20, WSB3-20H

- 2 push-buttons, design LOGUS<sup>90</sup>
- integrated temperature sensor
- one colors signalization LEDs
- rated current 25 mA from BUS



Wall Push Button

WSB3-40, WSB3-40H

- 4 push-buttons, design LOGUS<sup>90</sup>
- integrated temperature sensor
- two colors signalization LEDs
- rated current 25 mA from BUS



Thermoregulator

IDRT3-1

- digital thermo-regulator
- measures and controls temperature in room
- rated current 20 mA from BUS
- design LOGUS<sup>90</sup>

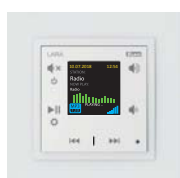


Bedside Panel

WSB3-40, Schuko, 2x USB supply unit

- design LOGUS<sup>90</sup>
- configure according to your request

## Audio



Music Player

LARA

- plays the stream of internet radios and music from NAS or external source or DLNA
- equipped with an internal amplifier 2x 10 W



LOGUS Speaker

Into a frame

- dimensions (mm): ø 50.8
- maximum output: 10 W
- impedance: 32 Ω
- design LOGUS<sup>90</sup>



Ceiling Speaker

Into a suspended ceiling

- dimensions (mm): ø 127
- maximum output: 30 W
- impedance: 8 Ω
- color: white



Wall Speaker

On the wall

- dimensions (mm): 270 x 183 x 37
- maximum output: 15 W
- impedance: 8 Ω
- color: white



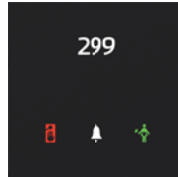
## Access Control



Multifunctional  
Touch Panel

EHT3

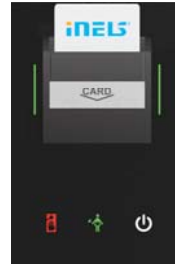
- touch screen panel with 3.5" display
- controls temperature, lighting, shading, scenes
- LOGUS<sup>90</sup> design
- rated current 150 mA from BUS



Glass Card Reader

GCR3-11/B, GCR3-11/W

- The RFID card reader is a great design for the entrance to the rooms which also features a bell signal the "Do Not Disturb" and "Make Up Room" signs.



Smart Card Holder

GCH3-31/B, GCH3-31/W

- In-room card holder with RFID reader which detects correct card and eliminates fake cards. Optional 3 buttons: "Do Not Disturb", "Make Up Room" and "Master Off".

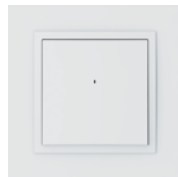
## Access Control



Multifunctional  
Touch Panel

EHT3

- touch screen panel with 3.5" display
- controls temperature, lighting, shading, scenes
- LOGUS<sup>90</sup> design
- rated current 150 mA from BUS



Wall Card Reader

WMR3-21

- RFID card reader 13.56 MHz
- NFC ready
- 2 push-buttons, LOGUS<sup>90</sup> design
- rated current 50 mA from BUS



Card Holder

90731 TBR

- After inserting hotel card to card switches it will activate automatic regulation of the lights in the room.

## Detectors



DALI Motion Detector

DMD3-1

- power: 27 V DC (iNELS BUS)
- combined detector
- used: motion detector, sensor luminescence



Motion Detector

MD-100

- power: 2x 1,5 V AA battery
- detection angle 105°
- shot length 12 m (13.12 yd)



DALI sensor

DLS3-1

- power: 27 V DC (iNELS BUS)
- the luminescence sensor
- DLS3-1 sensor is supplied in IP65

# Product overview

## System Units



### Central Unit

CU3-03M

- basic element of the system
- 2× BUS, 1× EBM BUS
- ethernet 100 Mbps
- 2× AI, 4× DI, 1× DO



### Guest Room Bundle

CU3-04M (CU3-03M & EA3-022M)

- manages DND/MUR, lighting, HVAC and shading in the guest room
- communicates with the BMS and PMS
- EA3-022M: not sold separately



### External Master

MI3-02M

- allows to expand the system
- 2× BUS
- communicates with the central unit via EBM

## Switching Actuators



### 2x Channels / DIN

SA3-02M

- 2× changeover contacts 16 A/AC1
- switching voltage 250 V AC1, 24 V DC
- controls sockets, shutters, lights, appliances etc.
- rated current 50 mA from BUS



### 4x Channels / DIN

SA3-04M

- 4× changeover contacts 16 A/AC1
- switching voltage 250 V AC1, 24 V DC
- controls sockets, shutters, lights, appliances etc.
- rated current 70 mA from BUS



### 6x Channels / DIN

SA3-06M

- 6× changeover contacts 8 A/AC1
- switching voltage 250 V AC1, 24 V DC
- controls thermostats, lights, appliances etc.
- rated current 60 mA from BUS



### 12x Channels / DIN

SA3-012M

- 12× NO contacts 8 A/AC1
- switching voltage 250 V AC1, 30 V DC
- controls thermostats, lights, appliances etc.
- rated current 20 mA/230 V AC

## Dimming Actuators



### 2x 400VA/R-L-C-LED

DA3-22M

- 2-channel universal dimming actuator
- load type: LED, ESL, resistive, inductive, capacitive
- maximum load: 400 VA for each channel
- rated current 10 mA from BUS



### 2x 0(1)–10 V

LBC3-02M

- two-channel actuator for fluorescent lamps
- analog outputs automatically control relays
- 2× 0(1)–10 V, 2× changeover contacts 16 A/AC1
- rated current 60 mA from BUS



### 3x LED Current

DCDA-33M

- three-channel actuator for LED controlled by variable current
- dimming load 12–24 V DC
- controlled via BUS, DALI or DMX



### 6x 150VA/R-L-C-LED

DA3-06M

- 6-channel universal dimming actuator
- load type: LED, ESL, resistive, inductive, capacitive
- maximum load: 150 VA for each channel
- rated current 10 mA from BUS

## HVAC Control

## Shutter Actuators



BUS Power Separator

BPS3-02M

- supply voltage: 27 V DC
- 2x BUS
- indication of output voltage outputs BUS LED



Fan-coils Actuator

FA3-66M

- analog outputs 0–10 V
- connection to BUS
- analog inputs for temperature, voltage or current measurement (Uref reference voltage can also be used)



9x Shutters Actuator

JA3-09M

- 9-channel shutter actuator
- controls shutters, blinds, awnings etc.
- switched voltage 250V AC
- maximum load 4 A/AC 15 for each channel
- rated current 60 mA from BUS



2x Shutters Actuator

JA3-02B/DC

- controls shutters, blinds, awnings etc.
- switched voltage 12–24 V DC
- maximum load 0,85 A
- rated current 60 mA from BUS



22x Channels / DIN

SA3-022M

- 12x NO contacts 6 A/AC1
- 4x NO contacts 10 A/AC1
- 4x SSR contactless 0,5 A/AC1
- equipped with 22 relay outputs
- switching lighting and socket circuits



1x Channel / BOX

SA3-01B

- 1x NO contact 16 A/AC1
- switching voltage 250 V AC1, 24 V DC
- controls sockets, thermos valves, lights, appliances etc.
- rated current 30 mA from BUS



2x Channels / BOX

SA3-02B

- 2x changeover contacts 8 A/AC1
- switching voltage 250 V AC1, 24 V DC
- controls shutters, lights, appliances etc.
- rated current 50 mA from BUS

## Converters



6x Analog Inputs

ADC3-60M

- integration of sensors with analog outputs
- 6x analog inputs
- supports voltage, current and resistance signals
- rated current 100 mA from BUS



4x Analog Outputs

DAC3-04B

- generates analog voltage signal
- 4x analogue output
- controls eg. RFDA-73M/RGB
- rated current 50 mA from BUS



4x Analog Outputs

DAC3-04M

- generates analog voltage signal
- 4x analog output
- controls e.g. RFDA-73M/RGB
- rated current 50 mA from BUS



## Use case 1: Central unit on EACH FLOOR

Room / **299**



# BUS/GRMS Solution

Capacity (with 10 devices in room):  
... up to **57 rooms per floor**  
... up to **64 floors**

## HOTEL

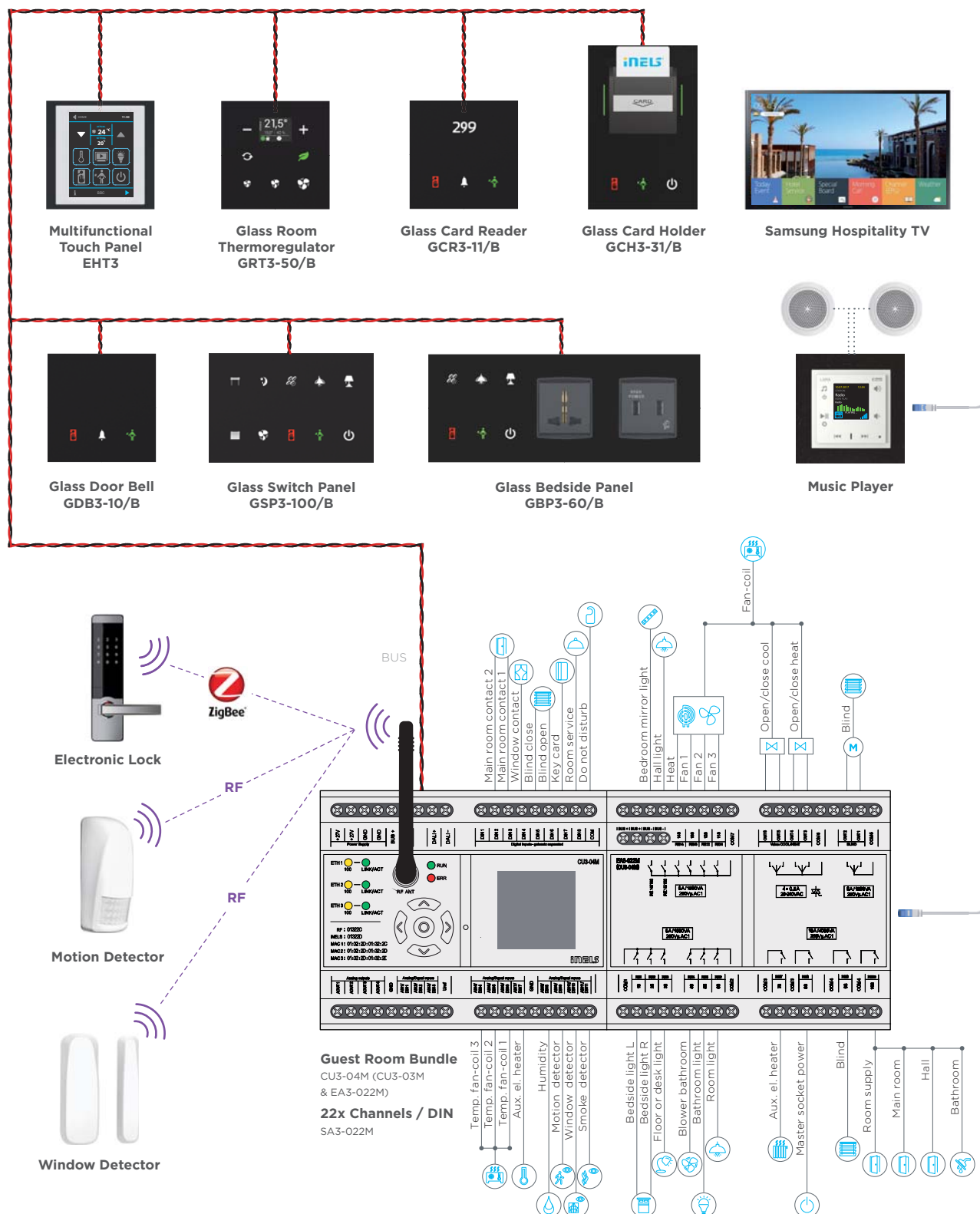


## RECEPTION



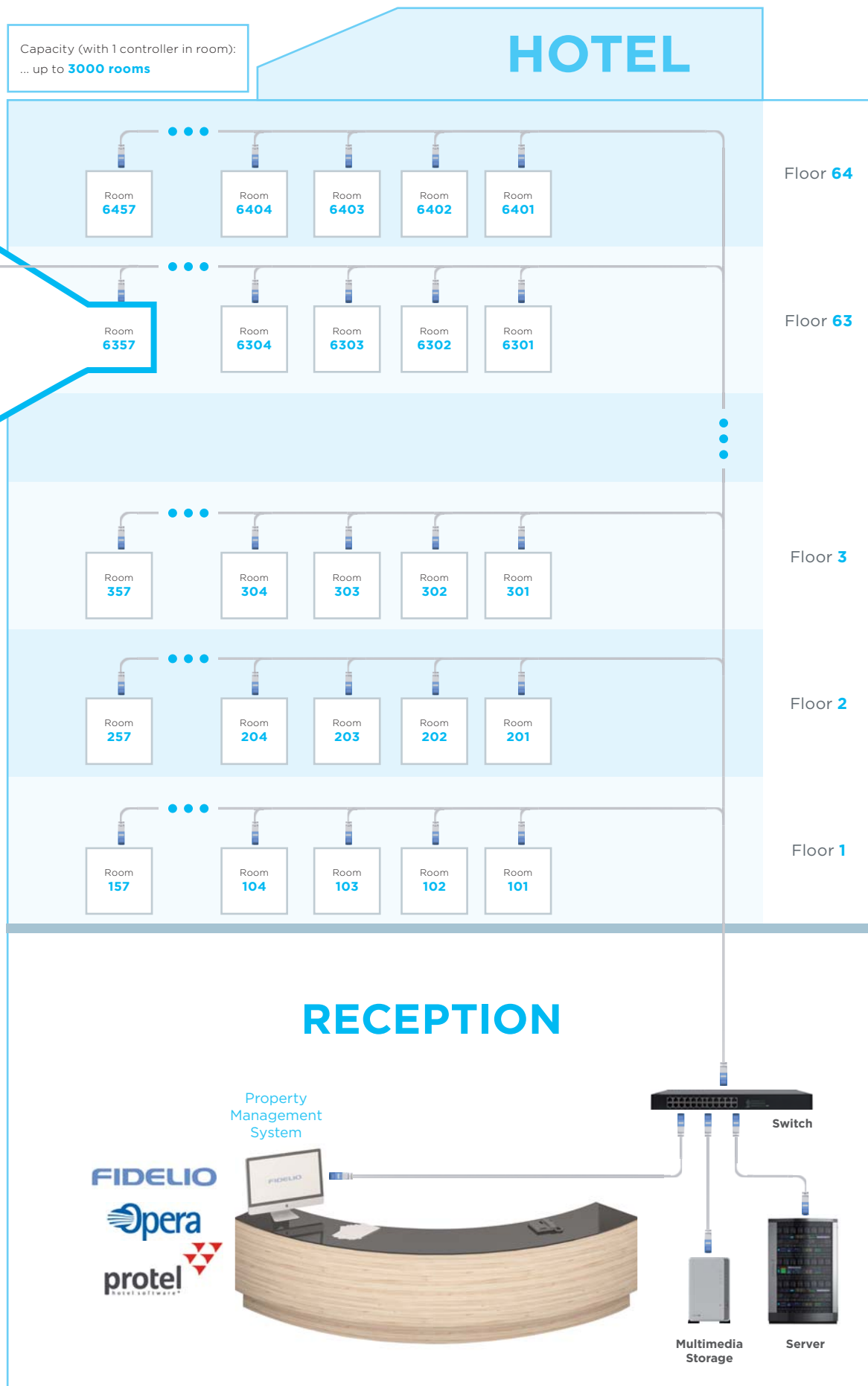
## Use case 2: Room controller on EACH ROOM

Room / **299**











# BUS/GRMS Solution



# Bedside panels configuration




## Socket

(Number in brackets is original Vimar product code.)

					
USA outlet	Multistandard outlet	Schuko outlet	French outlet	PIN outlet	British outlet
21B (20242)	26B (20257)	22B (20208)	23B (20212)	24B (20214)	25B (20219)
21W (20242.B)	26W (20257.B)	22W (20208.B)	23W (20212.B)	24W (20214.B)	25W (20219.B)

## Switch








(Number in brackets is original Vimar product code.)

		
One switch / 1M	One switch / 2M	Three switches
11B (20001)	12B (20001.2)	14B (20003)
11W (20001.B)	12W (20001.2.B)	14W (20003.B)

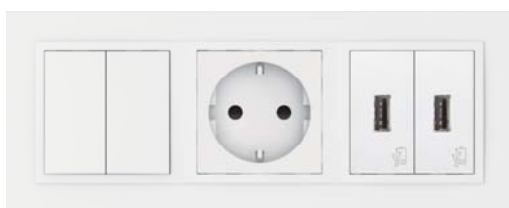
## Data & Audio/Video

(Number in brackets is original Vimar product code.)

		
USB power supply unit	TV-FM-SAT socket outlet	VGA connector
20B (20295)	31B (20303)	32B (20348)
20W (20295.B)	31W (20303.B)	32W (20348.B)

							
TV outlet	Phone outlet	A/V connectors	UTP outlet	USB supply unit	Switch (CBs)	HDMI connector	USB outlet
41B (20313)	42B (20320)	43B (20335)	44B (20337.6)	48B (20292)	46B (20405.06)	47B (20346.H)	45B (20345)
41W (20313.B)	42W (20320.B)	43W (20335.B)	44W (20337.6.B)	48W (20292.B)	46W (20405.06.B)	47W (20346.H.B)	45W (20345.B)

## Plastic Bedside Panel



Schuko



British



French



US

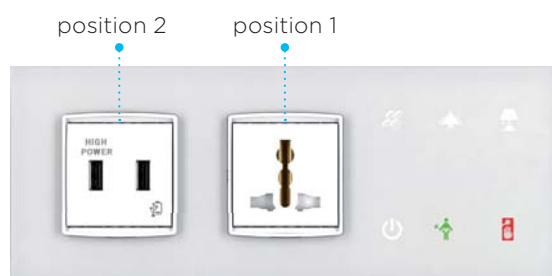


UNI

## Glass Bedside Panel

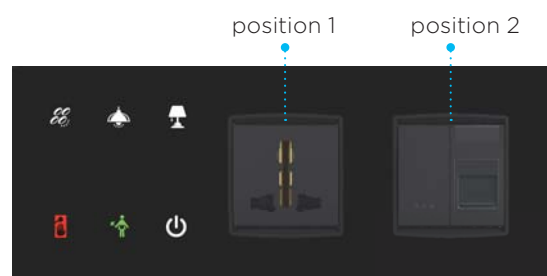
(Configure bedside panel according to your request.)

### L (left option)

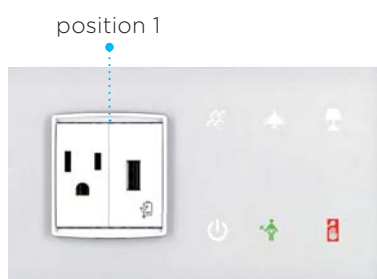


GBP3-60/WL/2F-26W-20W

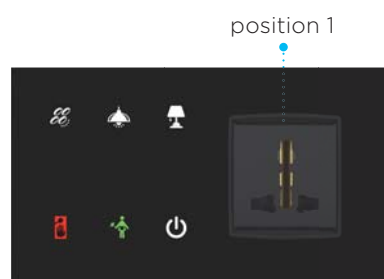
### R (right option)



GBP3-60/BR/2F-26B-11B44B

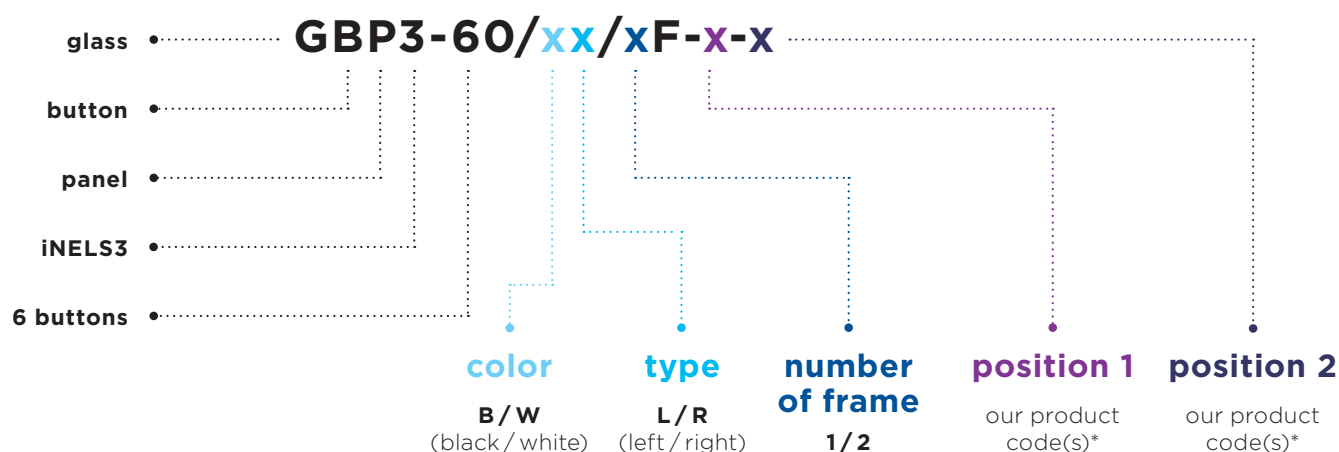


GBP3-60/WL/1F-21W45W



GBP3-60/BR/1F-26B

## Part number




\* In case of 1-module choice it is necessary to pick **2x** 1-module to fill up the 1 position, for example GBP3-60/WL-**21W45W**.






If you have any question contact our sales representative.  
For more information: [www.vimar.com/en/int/catalog/product](http://www.vimar.com/en/int/catalog/product)

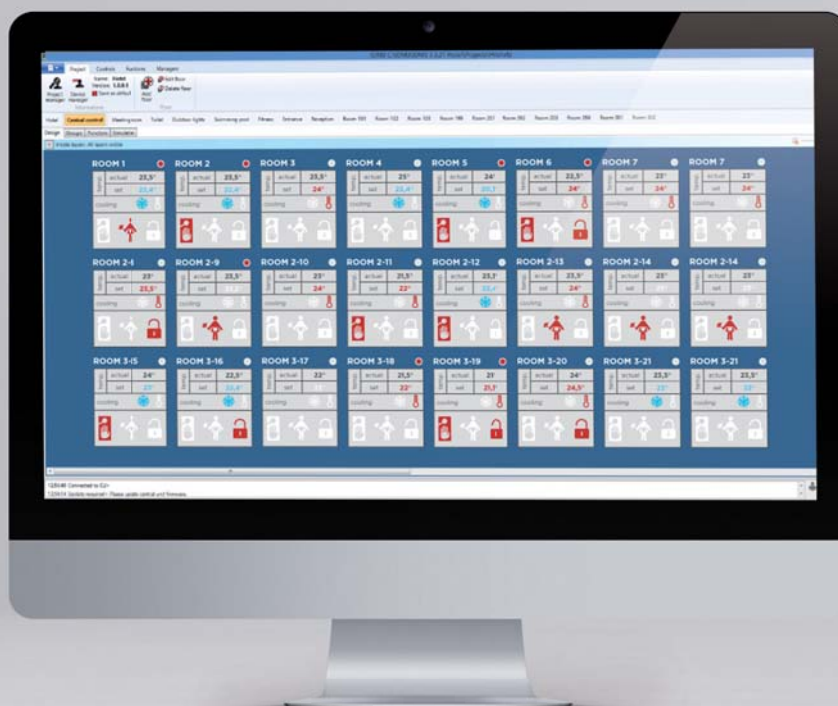
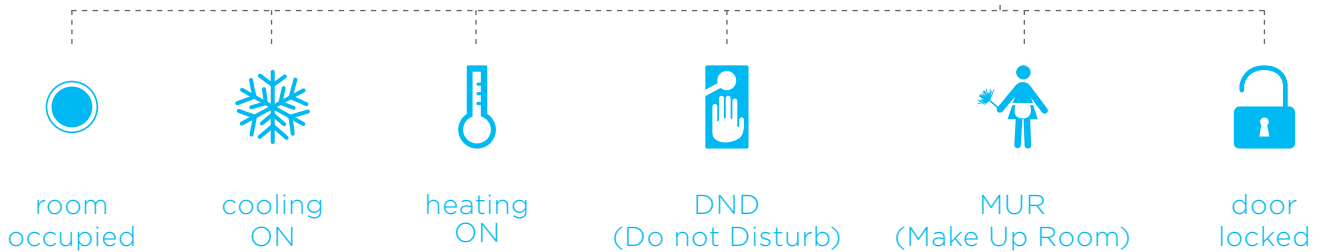
# Reception console

The iDM Hotel software configuration tool is used by the iNELS central units through which are controlled all the peripheral units such as wall controllers, thermostats or input unit on the one hand and output actuators on the other. iDM Hotel has been developed with the emphasis on user friendliness and ease of navigation even in large projects, commercial buildings and allows management of the system by remote access. iNELS central units are equipped with a universal protocol for communicating with superior BMS and PMS systems, and through iDM Hotel are exported all objects used in communication between BMS and iNELS.

## Room control/Indication

**ROOM 1** 

temp.	actual	23,5°
	set	22,4°
cooling		 
  		

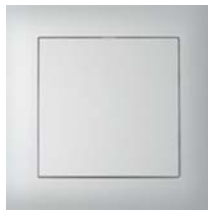




# Customization



Base  
Plastic



Aquarella  
Metallic plastic



Animato  
Color plastic



Animato  
Color plastic



Crystal  
Glass (W/B)



Metallo  
Metal



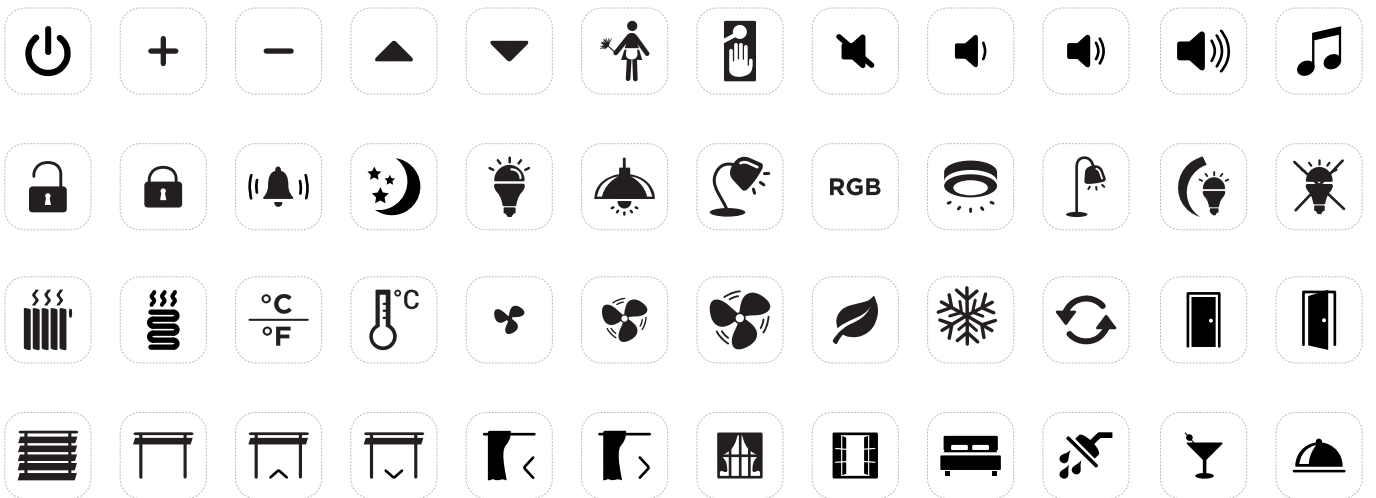
Metallo  
Metal



Arbore  
Wood

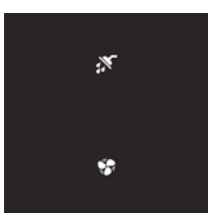
Arbore  
Wood

Petra  
Stone



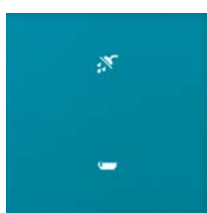
... other on request

## Glass color selection

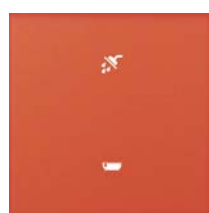


Black crystal

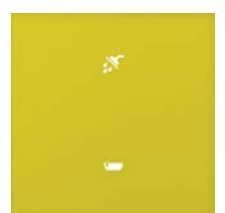
White crystal



Blue crystal



Red crystal



Yellow crystal

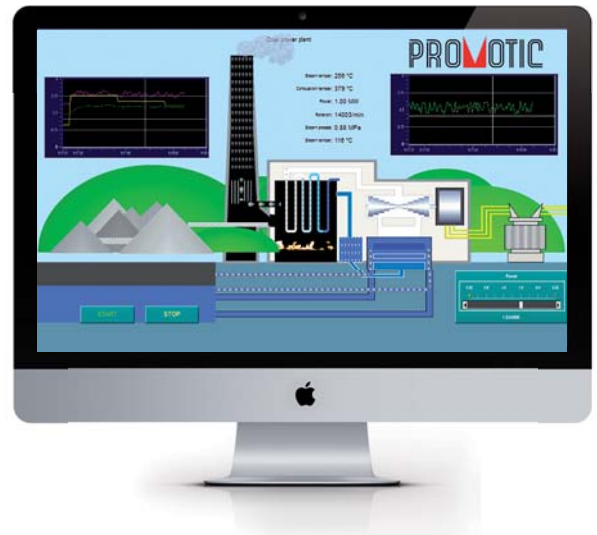
# Integration with BMS & PMS

BMS – Building Management System

PMS – Property Management System

Buildings today are equipped with an array of systems to control HVAC (heating, ventilation and air conditioning), lighting, shading, security, GRMS (Guest Room Management System), energy management, emergency lighting, fire alarms, CCTV, access control systems, elevators and other technologies. Effective integration and communication among the various systems in the building is critical to creating a comfortable environment for all users, to reduce building operation costs and reduce carbon dioxide emissions required for the operation of buildings.

iNELS is a great solution for a variety of jobs, particularly in the areas of lighting, shading and GRMS (Guest Room Management System), and thanks to its modular and flexible topology it is used in commercial projects of hotels, office buildings, restaurants, wellness centres or manufacturing plants and warehouses.



## AVAILABLE PROTOCOLS: \*



\* A complete list can be found on [www.inels.cz](http://www.inels.cz).

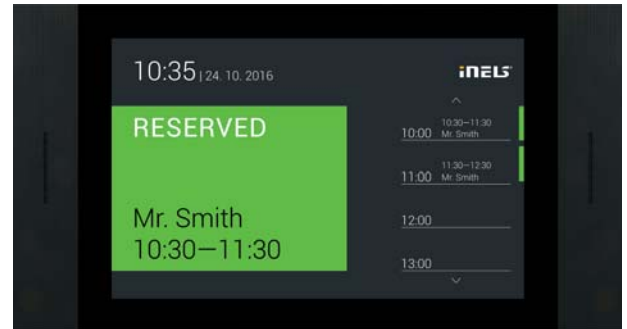


# Conference and office control

## Effective access control system

The system controlling entry to the building and to the individual zones is a key factor that affects the safety of people, property and information. Automated control technologies, such as lighting, HVAC and shading again provide the optimum working environment while efficiently using energy.

Installing RFID card readers, in elegant glass design, can ensure that only authorized persons entry into each zone. This event may also be associated with performing certain scenarios within the work place of the person, e.g. during morning arrival. A major theme is the automation of the various reservations of meeting rooms and the scenes in them for certain activities, such as, business meetings, lectures, videos, etc.).

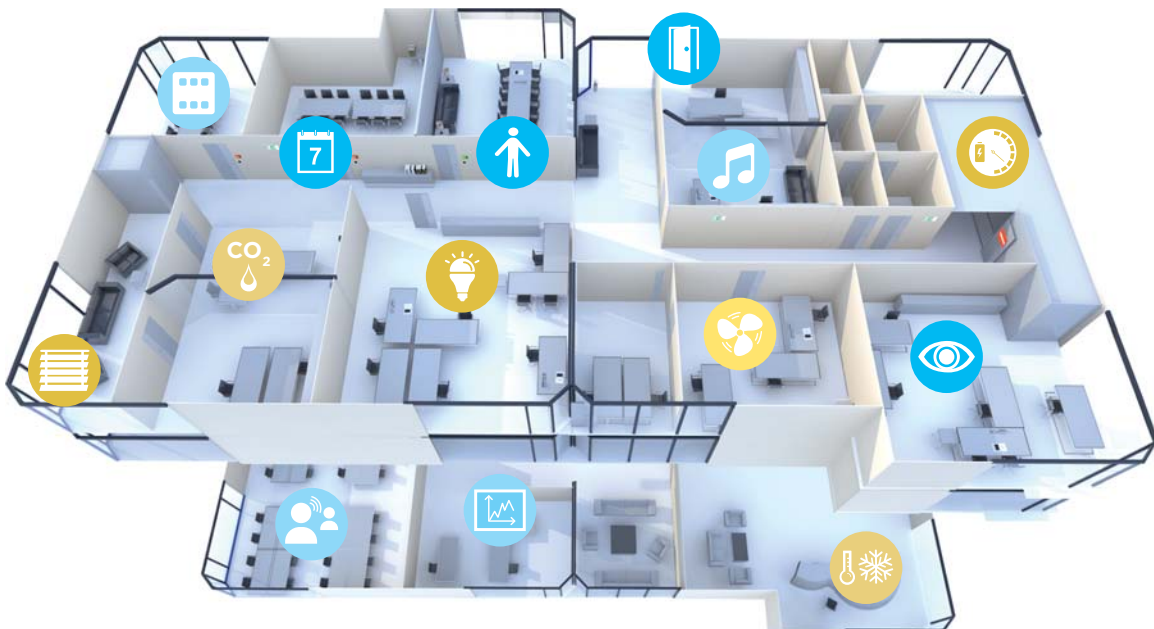


## Smart Office cares about

- ✓ The easiest user experience
- ✓ Unified management interface through sharing the workspaces
- ✓ Full integration of A/V techniques and environment management
- ✓ Audio and video available in every space

## What is important for office space „tomorrow“?

- |                       |                      |                |                   |
|-----------------------|----------------------|----------------|-------------------|
| ✓ Platforms for users | ✓ Internet of things | ✓ Data sharing | ✓ Conferencing    |
| ✓ Cloud services      | ✓ Money savings      | ✓ Safety       | and Collaboration |



## Shading



## Reservation systems



Dashboard



Audio/Video



## Controls



## Teleconferences



## Locating people



## Measuring & energy savings



## Air Quality



## Security systems

## Ventilation



Heat / Cold

# EXISTING hotel room

This is the automatic control of lighting, which is controlled by a combination of sensors (motion / door) and a switching component. Operation is fully automatically or via a wireless controller, which is beyond the basic functions (ON/OFF). Additionally MASTER OFF function (one touch turns off all the lights). Can control not only the main room lighting, but also a lamp in the corner of the room, curtains/blinds or can disable all/some of the socket circuits. This combination of detector and the switching component provides hoteliers savings in lighting costs and customer ease of use.



## Motion Detector

Combination of detectors and Master switching unit bring automatic lighting control.



## Door/Window Open Detectors

Combination of door/window open detectors and Master switch unit bring automatic thermoregulation.



RGB



WHITE

## Wireless Dimmable LED

Dimming is one of the basic characteristics of a smart home. Dimmers not only render a pleasant atmosphere, but also save on electricity. iNELS offers dimmers in various designs (box, flush, DIN rail mounted, socket) for all types of light sources including today's popular LEDs.

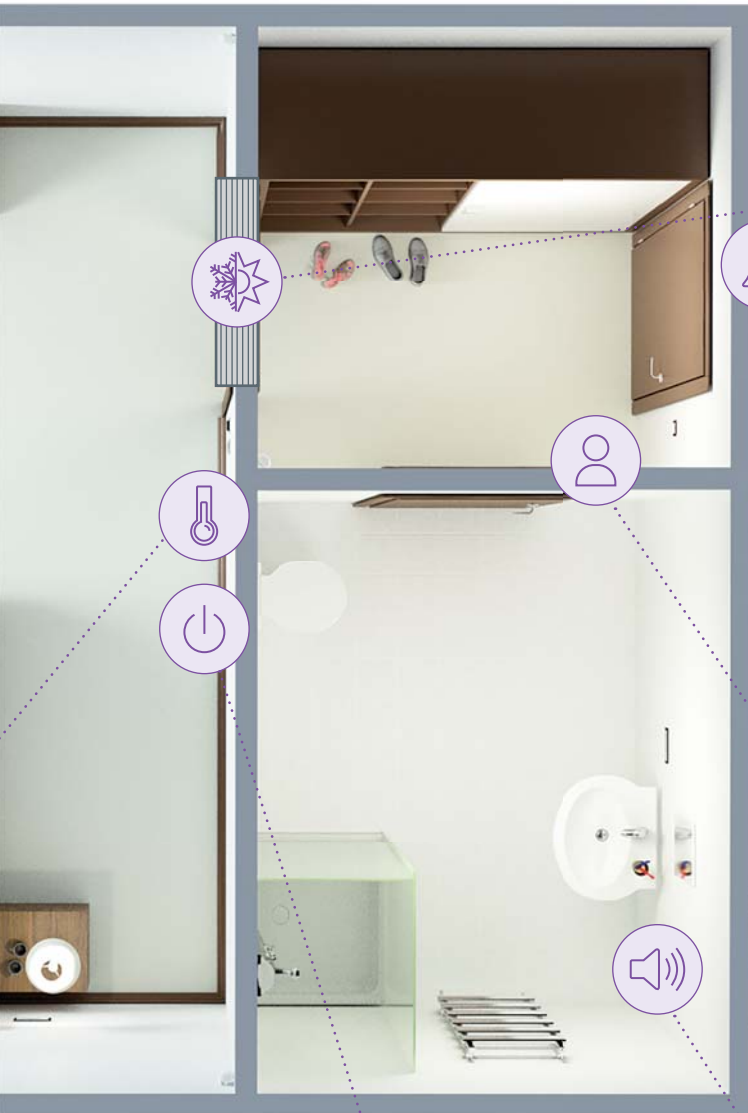


## Thermoregulator

Combination of digital thermoregulator RFTC-150/G and switching unit RFSA-166M is used for fan coil temperature control in the room. Regulator can change the standard temperature modes of heat and cool and it has three stages speed mode - low, medium, high.

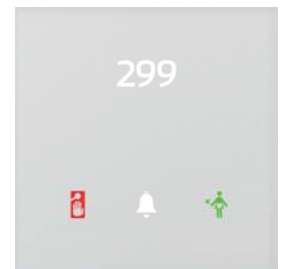


# WIRELESS RETROFIT



## Fan-coil Controller

Wireless actuator for fan-coils control. It can switch motor speed in three speeds and heating / cooling mode. DIN rail box for panel mounting, cooperation with RFTC-150/G thermoregulator.



## Multifunctional in front of Controller

Wireless bell button for a flexible placing to any place in front of a room door. Call for buzzer or piezo inside of RFSA-166M unit (if used).



## 4 Buttons Controller

Thanks to the flat base of wireless switch is easy to put it on the nightstand, wall or glass wall. Wireless switch has a function MASTER OFF. When the button is pressed it will turn off all the lights and a fan in the room, curtains close.



## Radio & Music Player

LARA is a choice if you want to listen to music in a room. LARA is an internet radio, player of your favorite music from your smartphone or hotel central storage of music.



## Smart Card Holder

After inserting a hotel card to card switches it will activate automatic regulation of lights in the room. If guest is leaving the room and closing the door where is installed door detector RFWD-100 then it sends a command „delay OFF“ and the light turns off .

# Product overview

## Controllers



Wall Buttons

RFWB-20/G, RFWB-40/G

- power: 3 V CR 2032 battery
- 2 channels/4 channels
- scenes function
- command LED indication
- switching with a micro-button



Door Bell

RFWB-20/G

- power: 3 V CR 2032 battery
- 2 channels
- command LED indication
- switching with a micro-button



RF Touch

Wall (surface), Flush

- power: 100–230 V AC, from the side 12 V DC
- setting with up to 40 units + 30 detectors
- central unit with autocontrol
- colored TFT LCD display, 3.5"



Remote Controller

RF Pilot

- power: 2x 1,5 V AAA batteries
- setting with up to 40 units
- inbuilt temperature sensor
- scene function
- status visualization
- color OLED display

## Switches & Dimmers



Universal Dimmer

RFDEL-71B

- type of load: R, L, C, LED, ESL
- control from external button
- light scenes function
- minimum brightness setting
- overheat protection
- operated from 32 channels



HRESK Switch Unit

RFSAI-161B

- load: 16 A
- special function for master off and unblock with PIR and door detectors
- operated from 32 channels (of controllers)
- terminal for control from existing button



Switch Unit

RFSA-62B

- load: 16 A
- time-functions (2 s.–60 min.)
- operated from 32 channels (of controllers)
- terminal for control from existing button

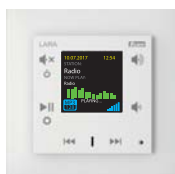


Switch Unit

RFSA-66M

- power: 110–230 V AC/50–60 Hz
- load: 6x 8 A
- 6 independent channels
- time-functions (2 s.–60 min.)
- operated from 32 channels (of controllers)
- option of connecting an external antenna

## Audio Distribution



Music Player

LARA

- plays the stream of internet radios and music from NAS or external source
- equipped with a digital internal amplifier 2x10 W
- power over Ethernet, design LOGUS<sup>90</sup>



LOGUS Speaker

Into a frame

- dimensions (mm): ø 50.8
- maximum output: 10 W
- impedance: 32 Ω
- design LOGUS<sup>90</sup>



Ceiling Speaker

Into a suspended ceiling

- dimensions (mm): ø 127
- maximum output: 30 W
- impedance: 8 Ω
- color: white



Wall Speaker

On the wall

- dimensions (mm): 270 x 183 x 37
- maximum output: 15 W
- impedance: 8 Ω
- color: white

# WIRELESS RETROFIT

## HVAC Units



Smart Wi-Fi RF Box

eLAN-RF-Wi-003

- power: 10–27 V DC/200 mA SELV
- setting with up to 40 units
- LAN or Wi-Fi connection
- managing accounts/backup of projects via web interface
- routing/repeater function
- IOS and ANDROID compatibility



HRESK Controller

RFSTI-111B

- over and under temperature control
- in combination with door and window detectors
- temperature range: 15 to 35°C
- load: 16 A
- ext. input for temp. sensor



Fan-coil Controller

RFSA-166M

- motor control in 3 speeds
- heating/cooling mode switch
- master on/off in combination with door/window detectors
- power: 110–230 V AC/50–60 Hz
- load: 6x 8 A
- option of connecting an external antenna



Temperature Controller

RFTC-150/G

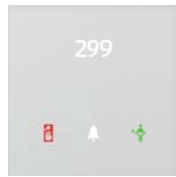
- heating/cooling mode switch
- in build preset combination with RFSA-166M
- power: 2x 1,5 V AAA battery
- temperature range: 0 to +55°C
- weekly programming
- integrated sensor
- design LOGUS<sup>90</sup> (glass, metal, wood, stone)

## Access Control

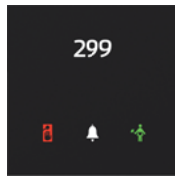


Multifunctional in front of Controller

RFPCR-31/G  
Logus<sup>90</sup>



RFGCR-31/W  
glass/white



RFGCR-31/B  
glass/black

- Multifunctional in front of controller included: RFID card reader, bell button, "Do Not Disturb" and "Make Up Room" signalling
- Available in LOGUS<sup>90</sup> colors and frames design
- Available in glass black & white colors as well
- power supply: AC 230 V
- communication: wireless 868 MHz (INELS RF)



Card Switch

21031 & 90731  
Logus<sup>90</sup>

- A standard card switch should be connected in to the RFPCR-31/G
- Available in LOGUS<sup>90</sup>



Smart Card Holder

RFGCH-31/W glass/white  
RFGCH-31/B glass/black

- Card holder with RFID reader
- allows detect fake card
- "Do Not Disturb", "Make Up Room" signalling "Master OFF" button
- glass black & white colors
- power supply: AC 230 V
- communication: wireless 868 MHz

## Detectors



Smoke Detector

RFSD-100

- power: 4x 1,5 V AA battery
- smoke detection: optical light scattering
- autotest



Motion Detector

RFMD-100

- power: 2x 1,5 V AA battery
- detection angle 105°
- shot length 12 m (13.12 yd)



Window/Door Detector

RFWD-100

- power: 1x 3 V CR2032 battery
- opened window/door detection
- battery status indication

## LED Bulbs



Wireless LED Bulb

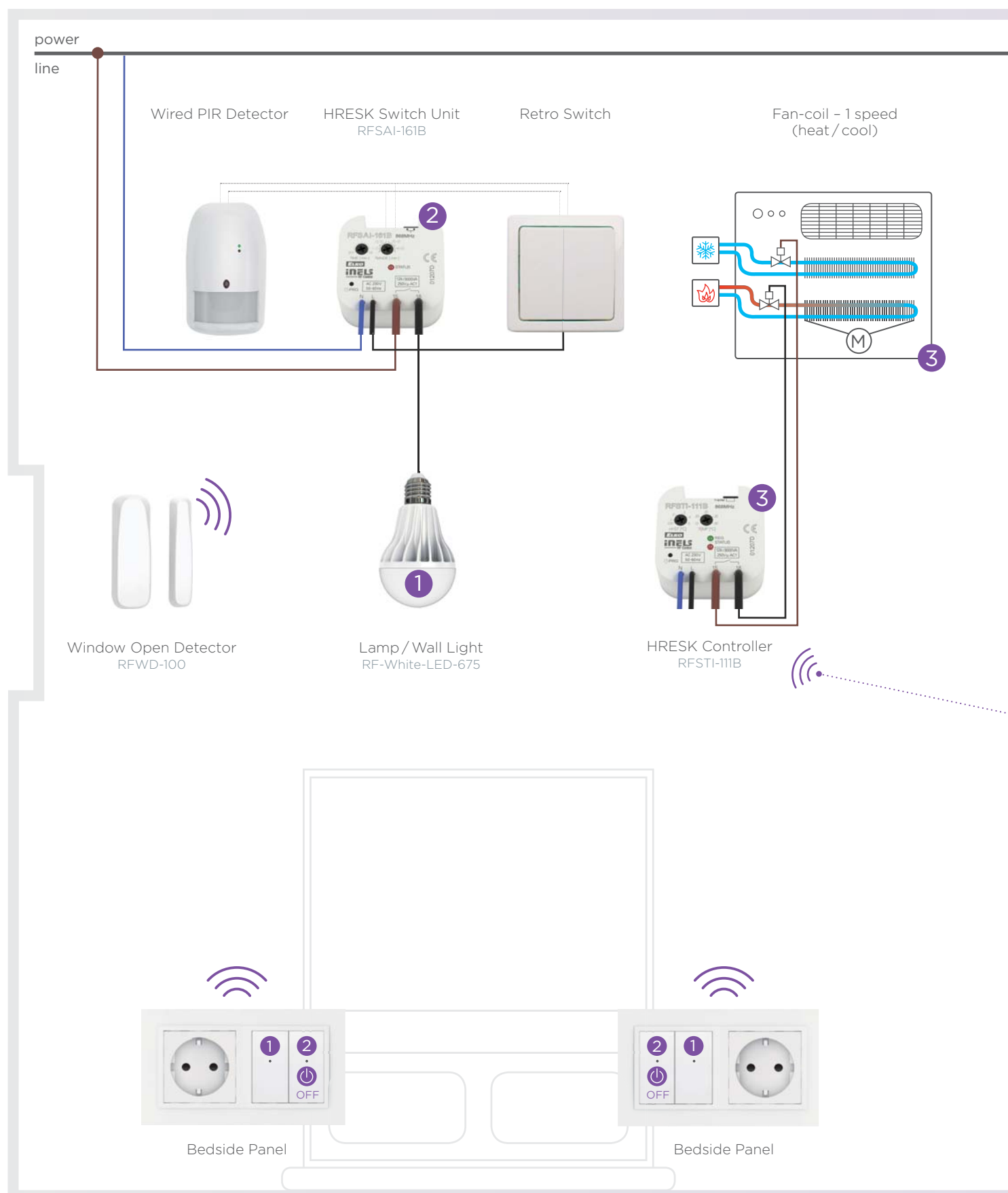
RF-RGB-LED-550 /  
RF-White-LED-675

- power: 100–240 V AC 50/60 Hz
- luminous flux: 550 lm / 675 lm
- brightness regulation: 0–100%
- compatible base: E27
- durability: 30 000 h.

## Use case 1: SIMPLE RETROFIT

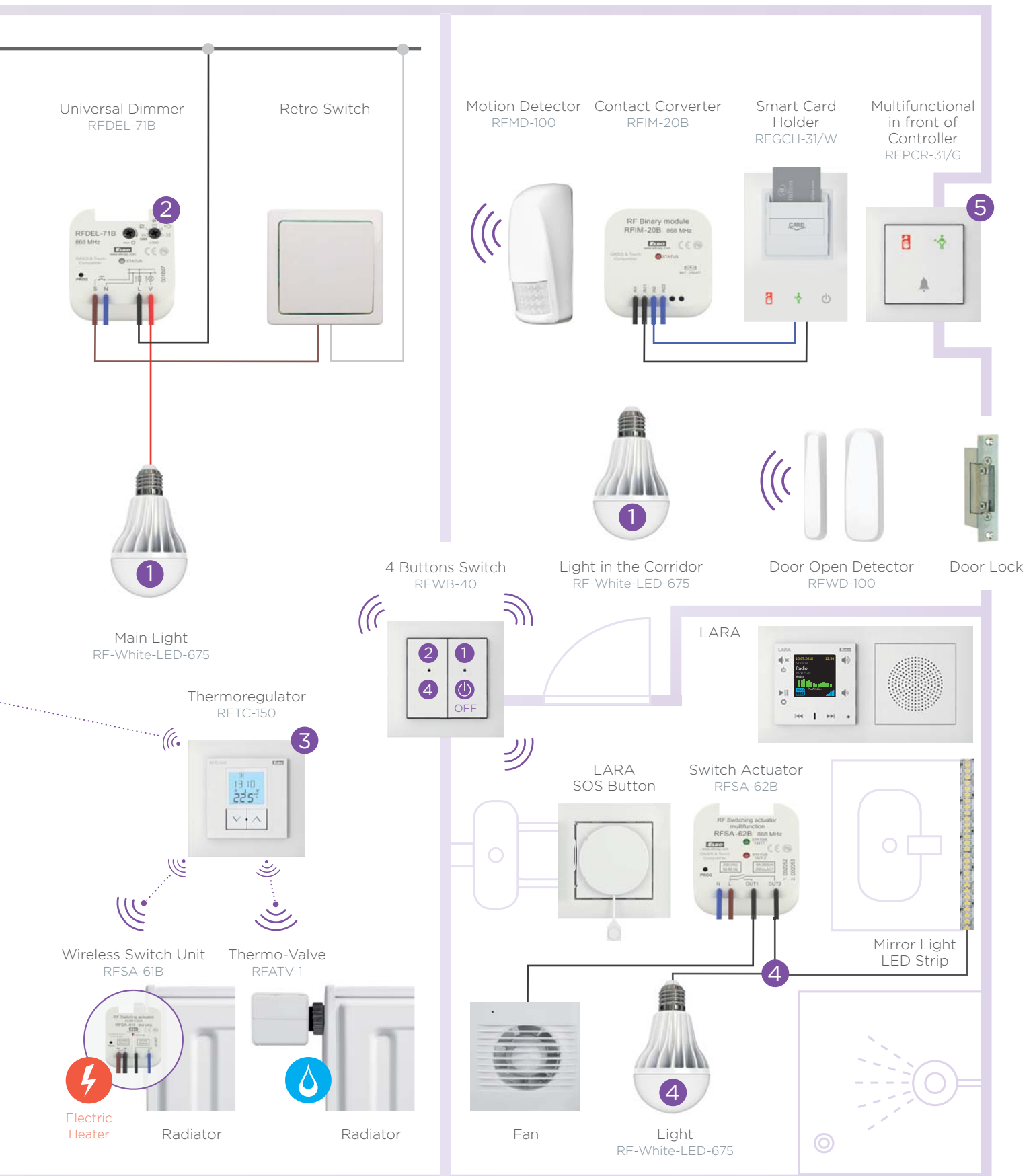
### Combination of existing switch with wireless controllers

- control local HVAC system with 1 speed fan-coil



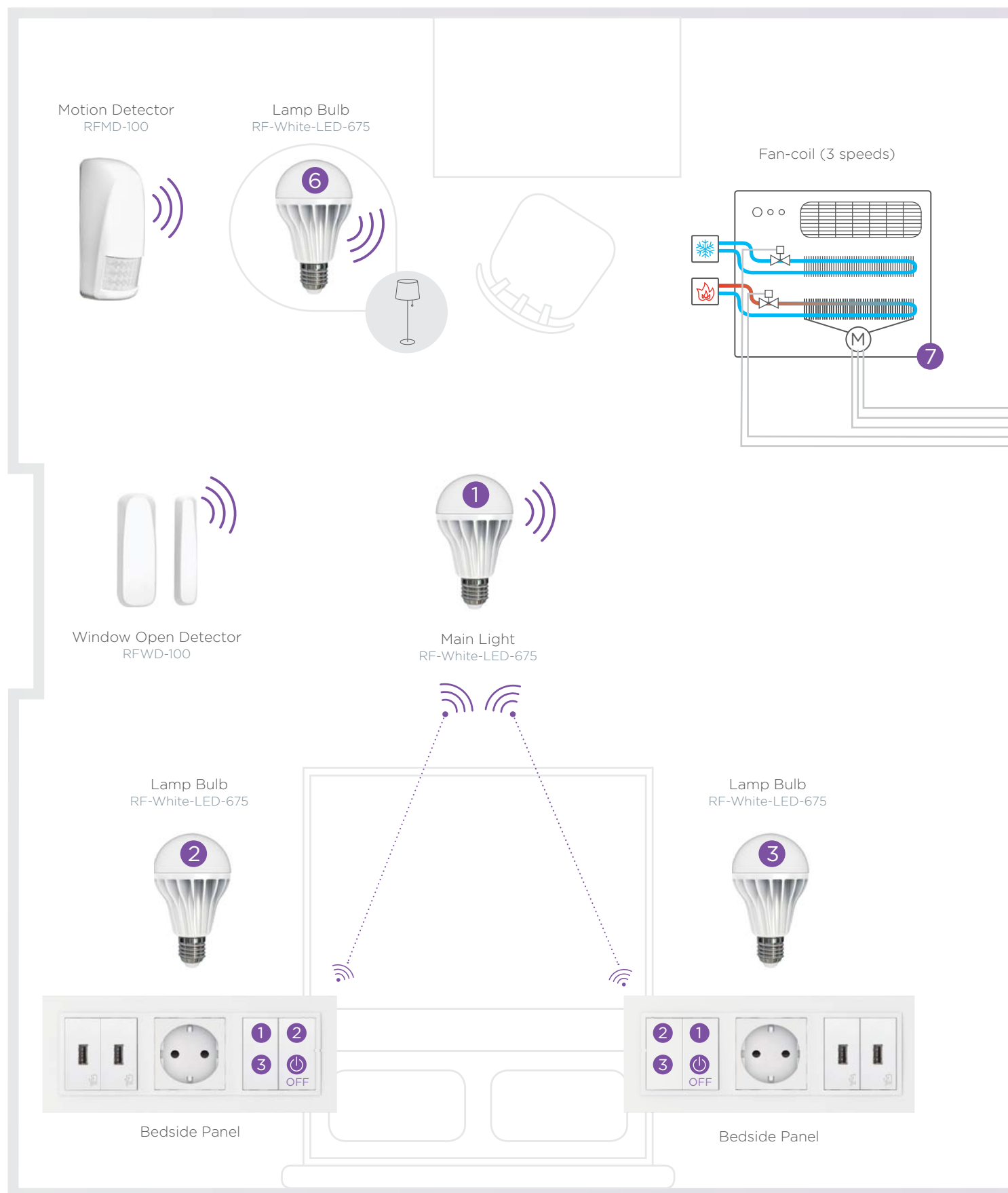


# WIRELESS RETROFIT

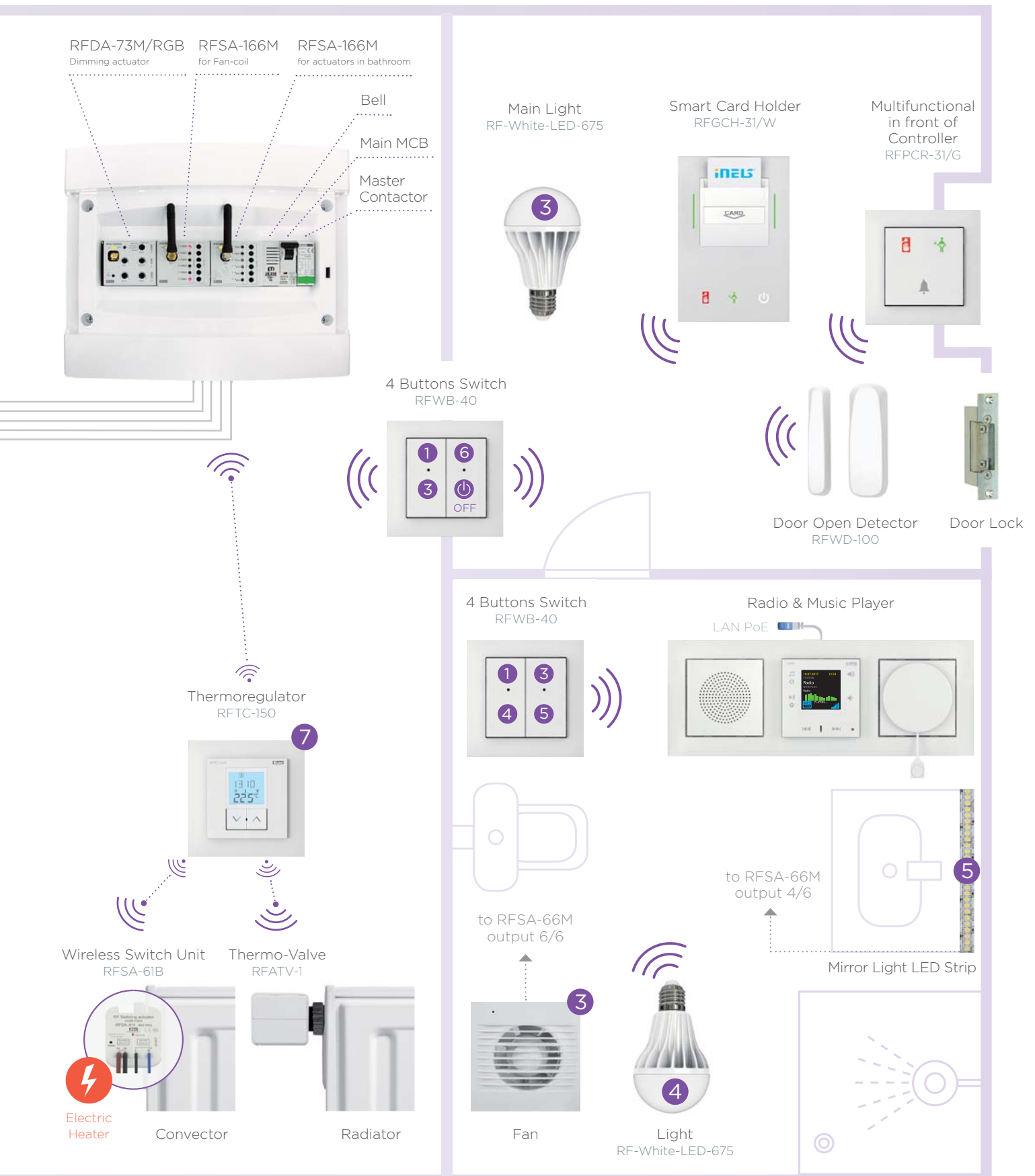


## Use case 2: FULL RETROFIT

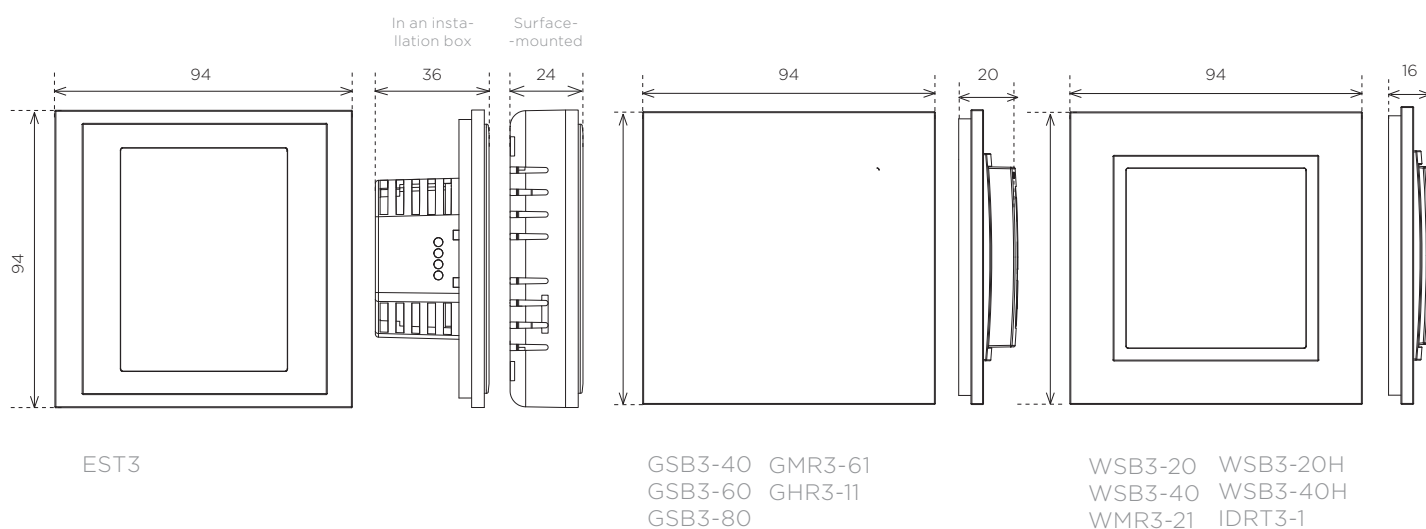
### All devices are fully wireless



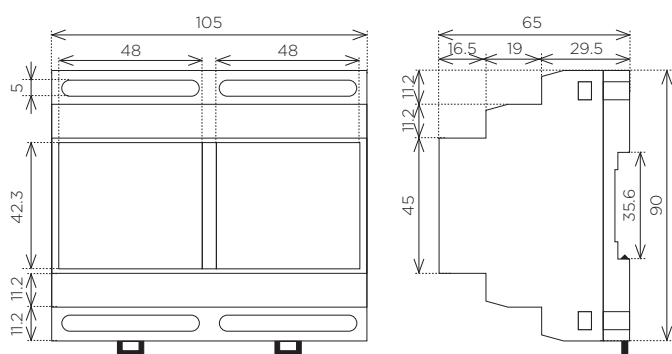
# WIRELESS RETROFIT



# Product dimensions

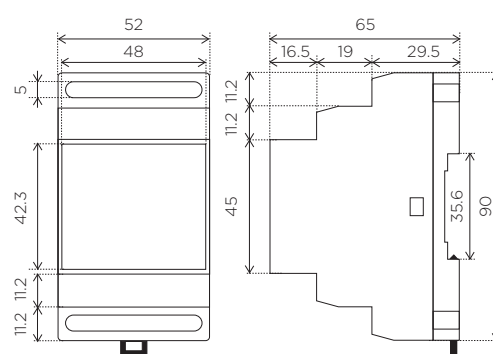


## 6 Modul



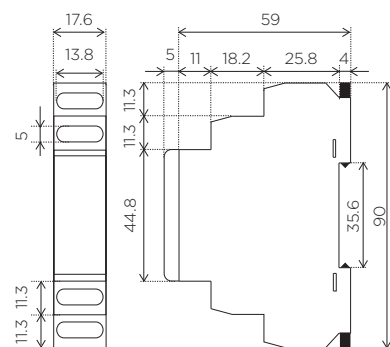
CU3-01M PS3-100/iNELS  
 CU3-02M SA3-012M

## 3 Modul



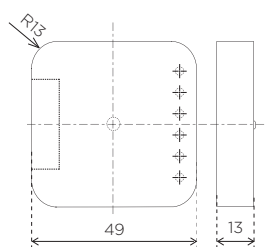
EMDC-64M SA3-06M DCDA-33M TI3-60M  
 GSM3-01M DA3-22M RFDA-73M ADC3-60M  
 SA3-04M LBC3-02M IM3-140M DAC3-04M

## 1 Modul



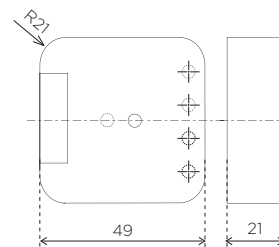
MI3-02M BPS3-01M  
 SA3-02M BPS3-02M

## MINI



JA3-02B/DC TI3-10B  
 IM3-20B TI3-40B  
 IM3-40B DAC3-04B  
 IM3-80B

## MINI



SA3-01B  
 SA3-02B



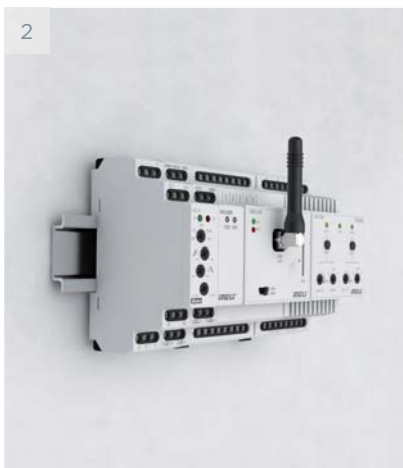
# Installation possibilities



## 1) Flush mounted

Units are installed into installation box with spacing of 65 mm.

EST3	WSB3-20
GSB3-40	WSB3-40
GSB3-60	WSB3-20H
GSB3-80	WSB3-40H
GMR3-61	IDRT3-1
GHR3-11	
WMR3-21	



## 2) DIN Rail mounted

On DIN rail according to EN 60715.

SA3-02M	DCDA-33M	LBC3-02M
BPS3-01M	EMDC-64M	CU3-01M
BPS3-02M	GSM3-01M	CU3-02M
MI3-02M	IM3-140M	SA3-012M
SA3-04M	TI3-60M	DAC3-04M
SA3-06M	ADC3-60M	
DA3-22M	PS3-100/iNELS	

## 3) Mounted to or in the cover of appliance

SA3-01B	SA3-02B
---------	---------



## 4) Mounted to or in the installation box

In an installation box or built in to the device.

SA3-01B	DAC3-04B
SA3-02B	IM3-80B
IM3-20B	TI3-10B
IM3-40B	TI3-40B
JA3-02B/DC	

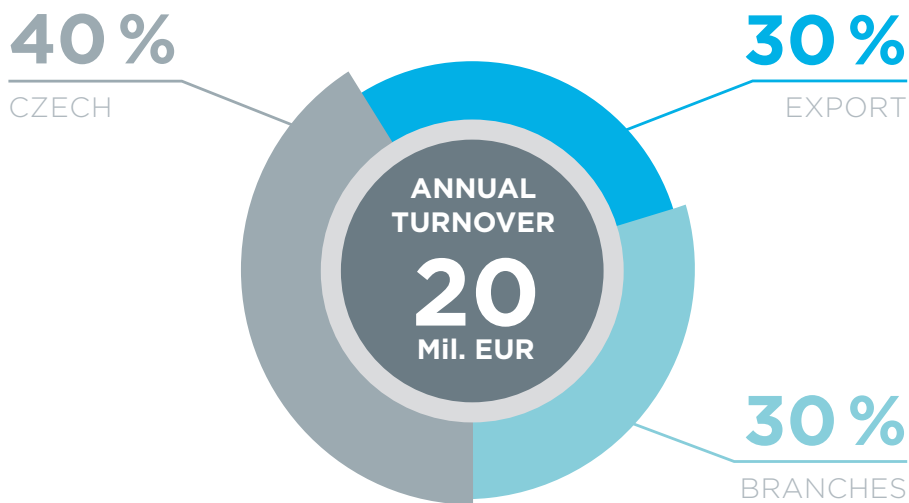
# ELKO EP, Holding

The company ELKO EP has been one of the leading European players in the field of residential and industrial electrical devices for more than 25 years. Since 2007, the company has been developing and producing its own system of Smart Home & Building Solutions called iNELS.

At present, ELKO EP employs nearly 240 people, exports to 70 countries around the world and already has 16 foreign branches. The company is justly proud to produce it's own components, and to have its own development and innovation of new products. It is also able to offer its customers instantaneous distribution and rapid, flawless service. The company became the Company of the Year in 2012 and earned it's place as one of the TOP 100 Czech companies.



# Facts and Stats



**16**  
BRANCHES  
OVER THE WORLD

**70**  
EXPORTING  
COUNTRIES

**240**  
EMPLOYEES

**5 000**  
INELS INSTALLATION

**12 000 000**  
MANUFACTURED PRODUCTS



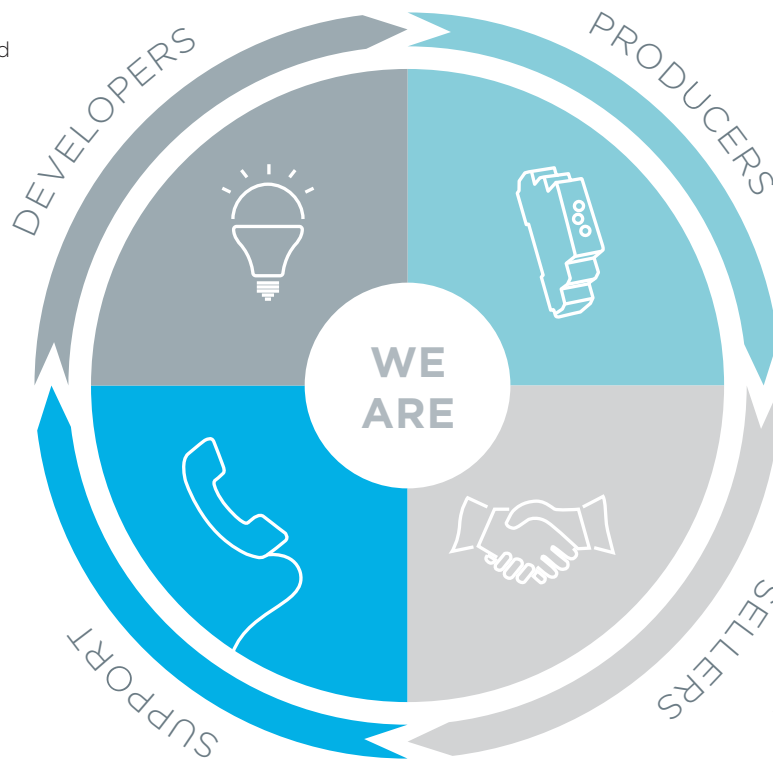
# Everything under one roof

## Research & development

In the new R&D center, more than 30 engineers develop new products and extend the functionality of existing products.

## Manufacturing

Modern antistatic spaces,  
2x fully automated SMD  
production lines,  
2 shift operations.



## Support

24 hours/7 days/360 days  
we not only provide technical  
support but also logistics.

## Sales

Personal access to more  
than 70 sales representatives  
in ELKO EP Holding  
provides impeccable services  
and superior products at  
an affordable price.

## High-level technology...

- more than 85 % share formed by SMD components
- 2x fully automated Samsung SMD production lines
- capacity: 35.000 components/hour
- the minimum chip size is 01005 (0.4x0.2 mm), the maximum size is qfp 55x55 mm





# References



## Kempinski Hotel Bayterek

Almaty / Kazakhstan

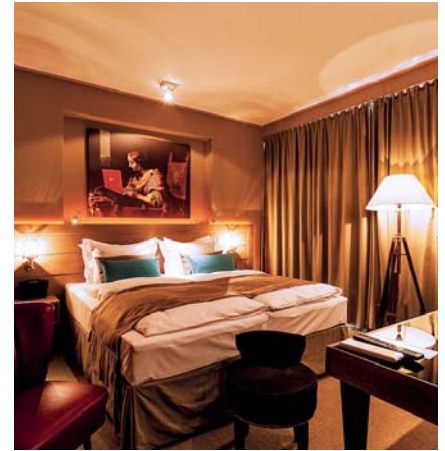
- 5-star hotel in Almaty Kazakhstan
- lighting control in public areas
- more than 15 000 lighting are control through the DALI protocol
- setup scenes



## Marriot Marquis

Doha / Qatar

- 5-star hotel in the Doha City center
- 44 floors, 397 rooms, 182 suites, 18 meeting rooms
- lighting control
- HVAC control
- master switch OFF



## Baltazár Boutique

Budapest / Hungary

- access card control
- lighting scenes in the restaurant
- supervision from BMS
- app available for any guest



## Movenpick

Dubai / UAE

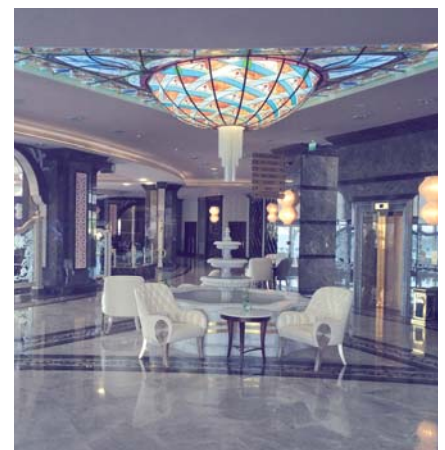
- 255 rooms, 230000 sq, 530 units, 1600 light circuits
- control appliances, lights
- HVAC control
- garage doors, sockets



## Wyndham Grand

Istanbul / Turkey

- lighting control in each room, the common areas, conference rooms and other spaces
- 3000 lighting circuits are controlled through the DALI protocol
- EMDC units



## Merit Royal Premium

Kyrenia / Cyprus

- 125 rooms
- complete management of hotel rooms
- scenes: arrival / departure and day / night
- Guest Room Management System

# References



## Meydan

Dubai / UAE

- lighting control
- crystal chandelier
- starry night sky control
- audio/video system



## Cal Reiet Santanyi

Mallorca / Spain

- swimming pool technology control
- fountain control
- Guest Room Hotel Management System



## Farm Motel

Poříčí / Czech Republic

- lights scenes
- heating control
- blinds



## Best Western Premier

Brno / Czech Republic

- 4-star Hotel Internacional in Brno
- lighting scenes in the restaurant, reception, wine shop and exterior
- app available for any guest



## Three sons and daughter

Skhidnycya / Ukraine

- 5-star hotel
- 179 fully automated rooms powered on iNELS
- automation of lighting, heating, cardreaders
- in every room there is SA3-012M, IM-140M, WSB3-40



## Living Showroom

Prague / Czech Republic

- designed residential showroom about 36 m<sup>2</sup>
- control units are part of the interior
- stage connection with projection and visitor needs



# References



## Pest-Buda Bistro & Hotel

Budapest / Hungary

- 10 rooms with unique luxury equipment with unique copper lamps and unique heating & air-condition



## Alexandrovskiy

Odessa / Ukraine

- 25 rooms with fully automation and dispatching
- integration with Samsung central conditioning



## Building XENEX

Žilina / Slovakia

- lighting control
- heating control, HVAC
- access control system, cameras, alarm



## Lord's Palace

Kyrenia / Cyprus

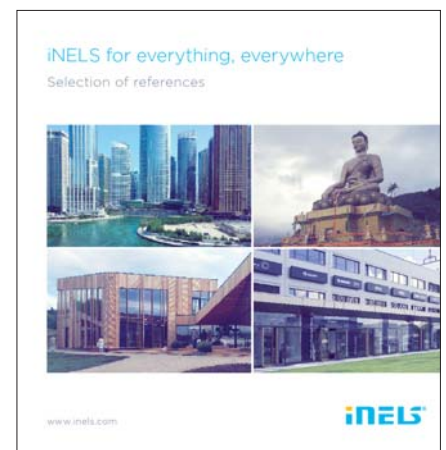
- 5-star hotel
- lighting control in the restaurant, conference hall, parking, wellness and corridors



## Rocks Hotel & Casino

Kyrenia / Cyprus

- 5-star hotel
- located close to historical city Kyrenia
- The lights are controlled in iNELS system via light panel, USB socket, glass thermostats



## Brochure

Selection of References

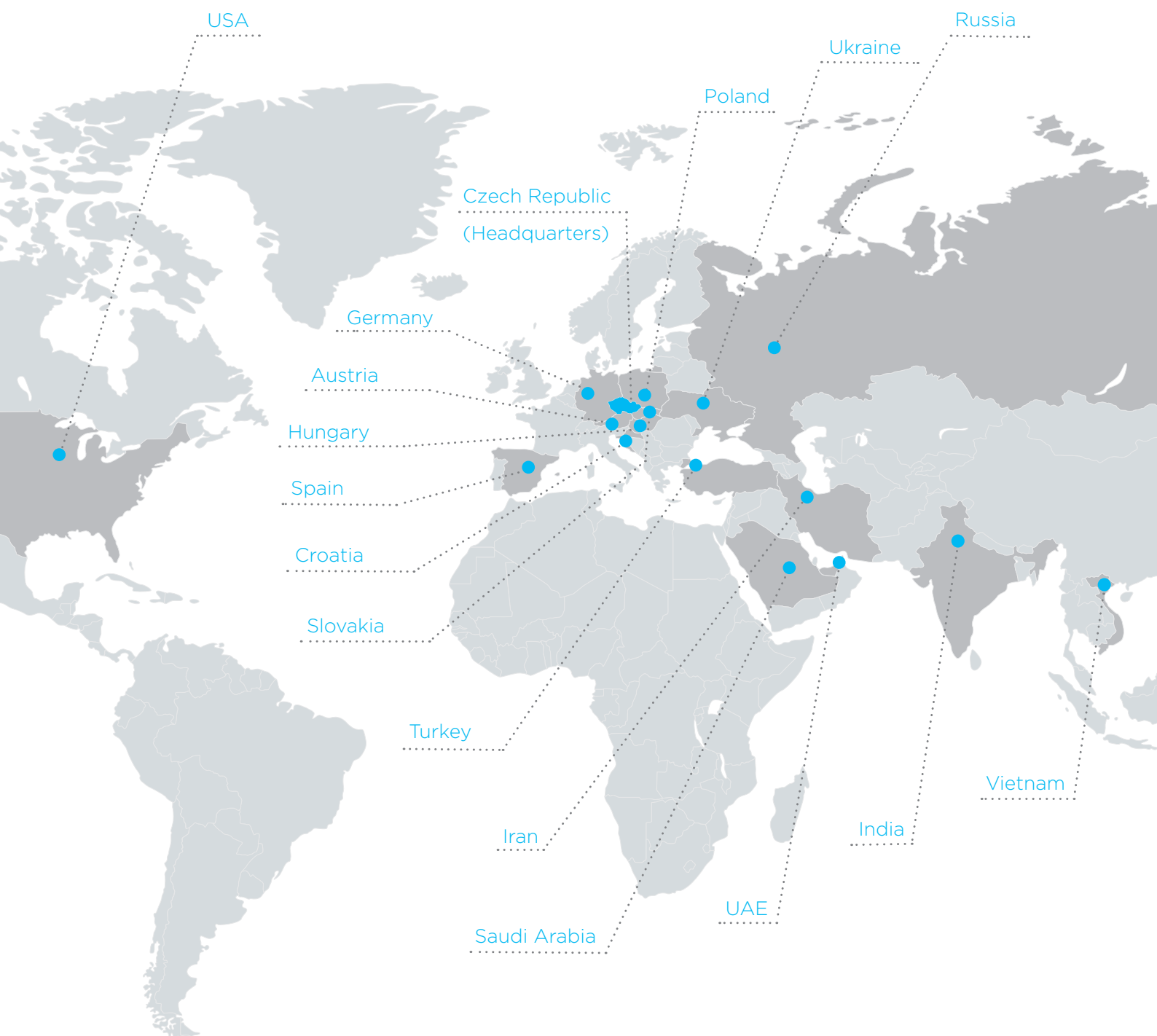


- [elkoep.com/download/references](http://elkoep.com/download/references)

More on:

[www.inels.com](http://www.inels.com)

# ELKO EP Holding



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