Hospitality Solution
for new & existing hotels

HOTEL ROOM ENERGY SAVING KIT
WIRELESS RETROFIT

EXISTING hotel room

GUEST ROOM MANAGEMENT SYSTEM
BUS INSTALLATION

NEW hotel room

iNELS®

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.
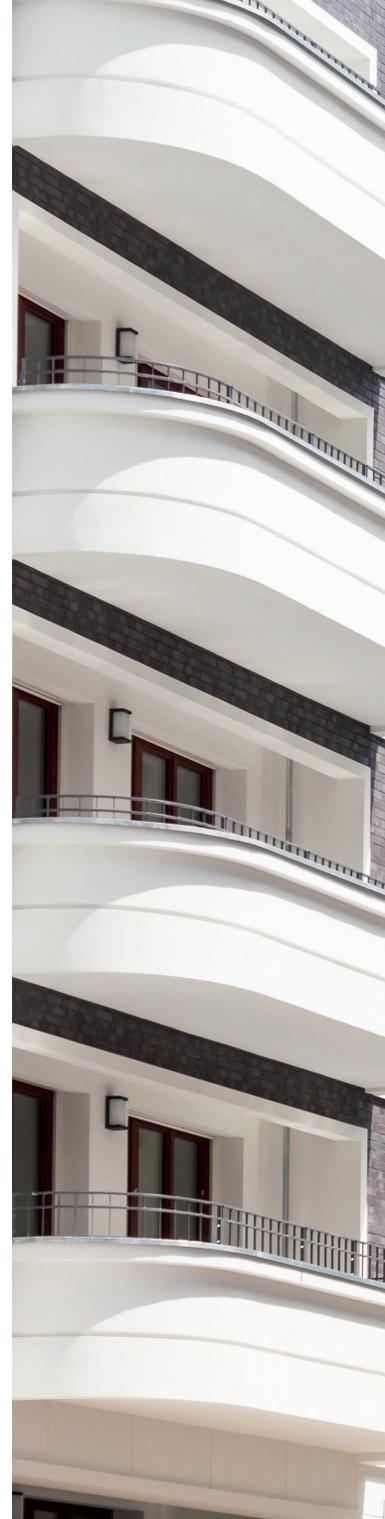
Check In/Out

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

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.

Comfort

• "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 from natural materials (wood, glass, metal, stone) ●
• glass controllers ●
• touch panel (EHT) ●
• smartphone application ●

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 X
• navigation for Hotel guests ●

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.

Comfort

- "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 from natural materials (wood, glass, metal, stone)	●
• glass controllers	●
• touch panel (RF Touch)	●
• smartphone application (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)	X
• connection with PMS (Property Management System)	X
• connection with door locks systems	X

Others

• variability – change controllers place	●
• navigation for Hotel guests	X

Comprehensive solution
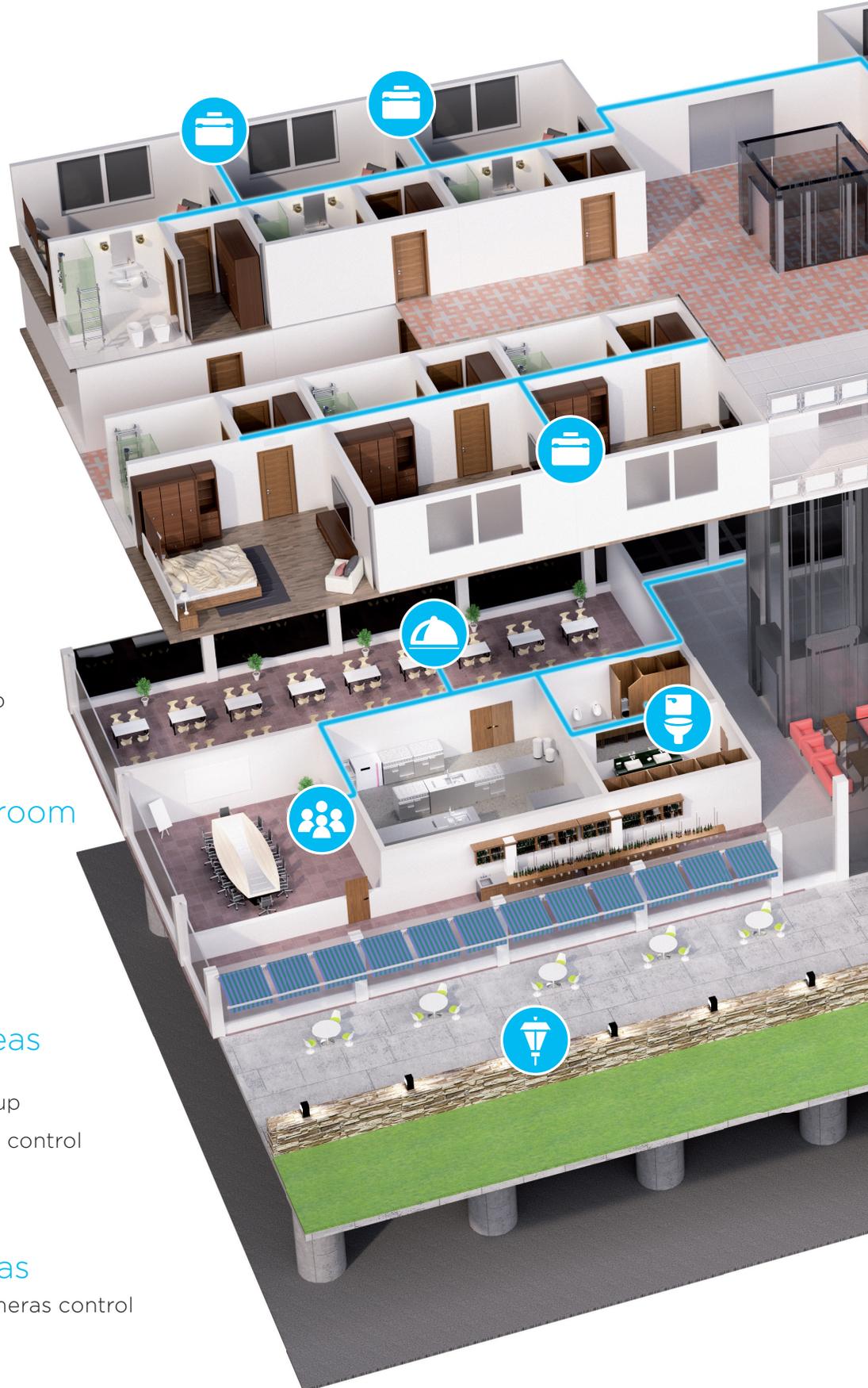
Restaurants & Bars
- Bill transfer
- Ordering via App

Conference room
- Prebooking
- A/V control

Common areas
- Automatic environment setup
- Effective lighting control

## Outdoor areas
- Security and cameras control
- Garden watering

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

Opera

protel
hotel software®

... and other Property Management System softwares via API

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.
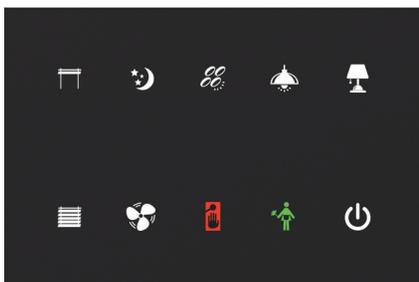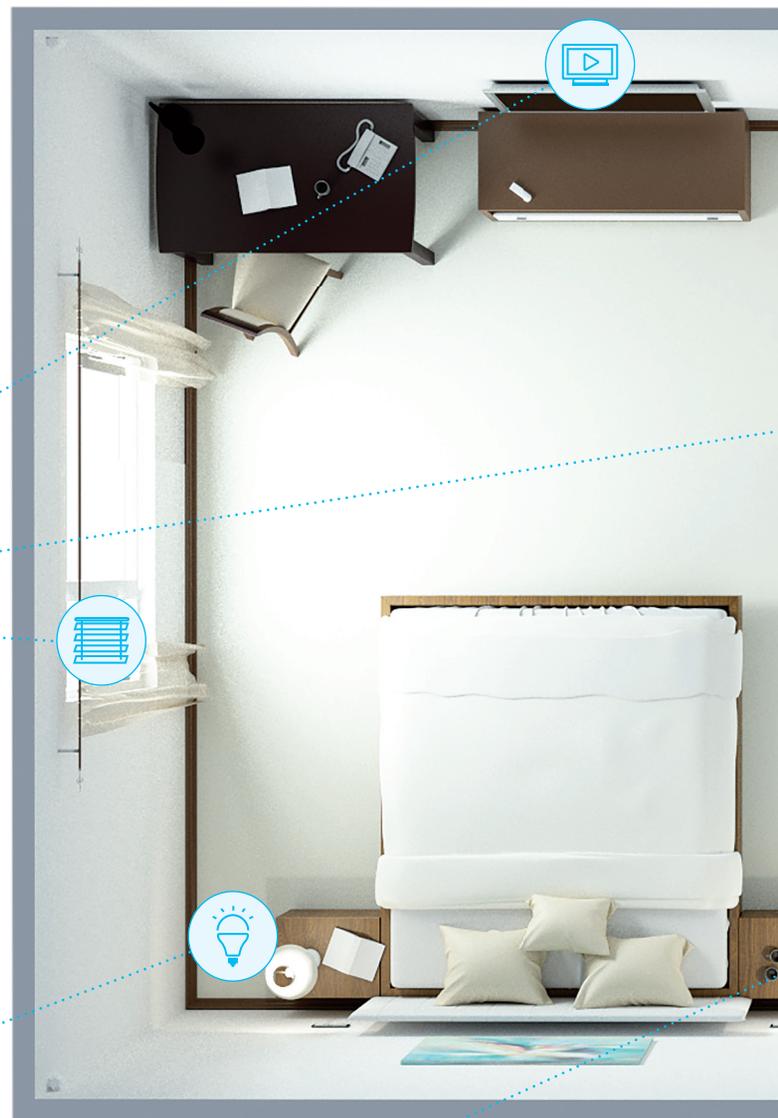
Glass Touch Panel

Luxury glass touch control in four versions with 2, 4, 6 and 10 buttons in various backlight colours is available in elegant glass design. Switches also sense the ambient lighting and offer a choice of symbols.
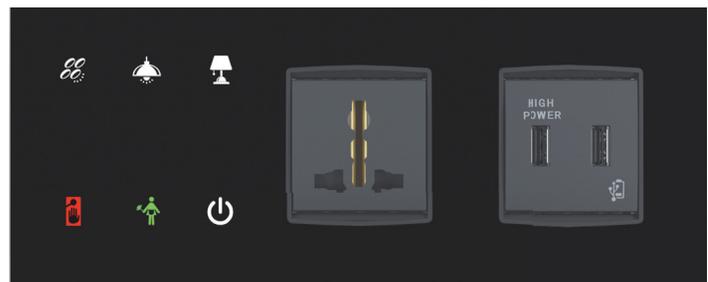
Glass Bedside Panel

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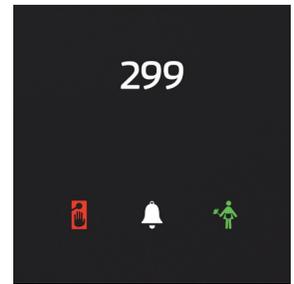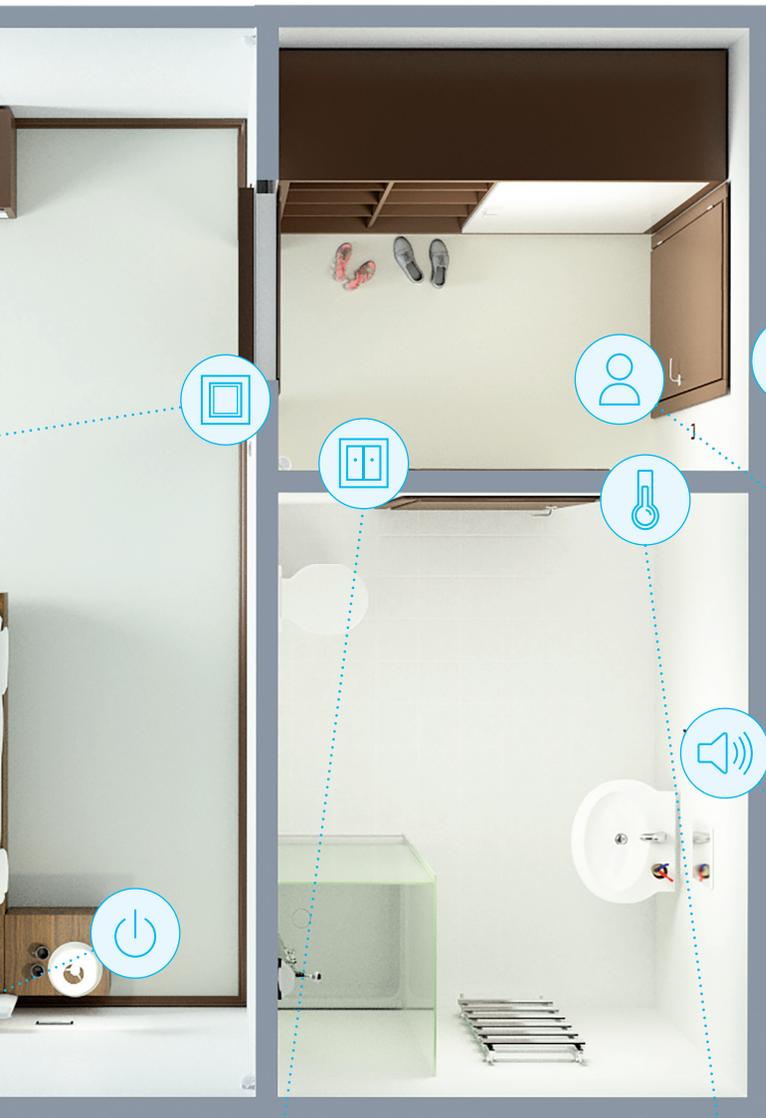
Glass Card Reader

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 backlighted room number.

Smart Card Holder

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

Wall Group Controller

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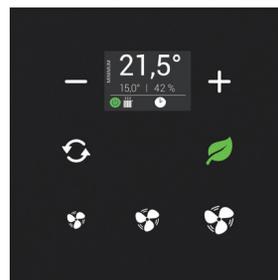
Glass Room Thermoregulator

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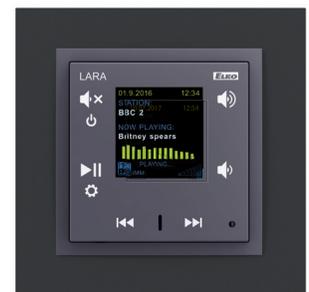
Audio Player

Provides many thousands of Internet radio channels from all over the world or share music from central storage. Integrated amplifier can feed compact loudspeakers, external ceilling 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 and audio.

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

Multifunctional Touch Panel

EHT3
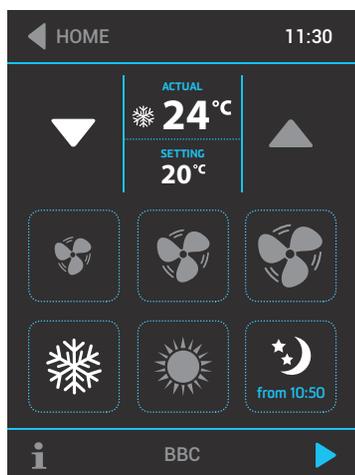
HVAC Control

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

Multimedia

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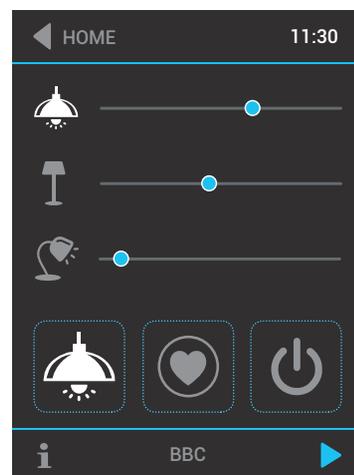
Light/Scenes

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

2x USB sockets

HIGH POWER

For more options & configuration see **page 34-35**

Control Panels

Wider range of room controllers in variable designs

Fully customisable controllers. Finished frames in glass or plastic. 2, 4, 6, 8 and 10 buttons version available. Symbols and logo engraving by laser.
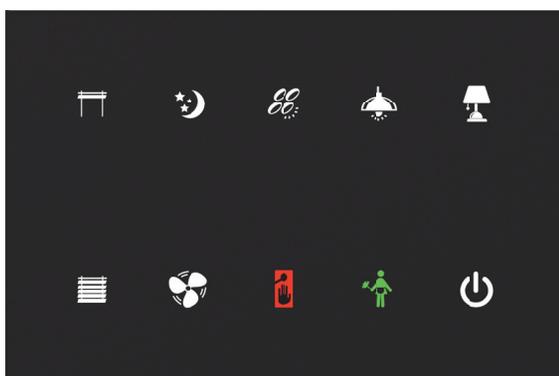
Glass Switch Panel

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.
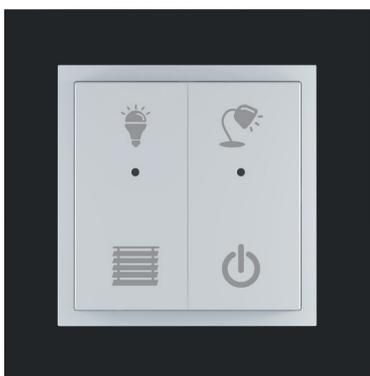
Wall Switch Button

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.
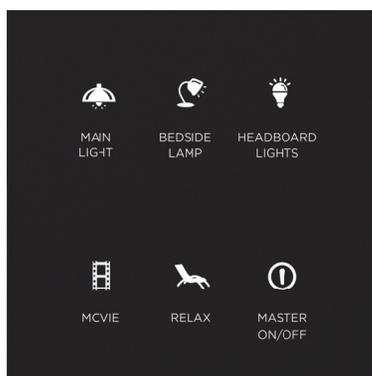
Glass Switch Button (with symbols)

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.
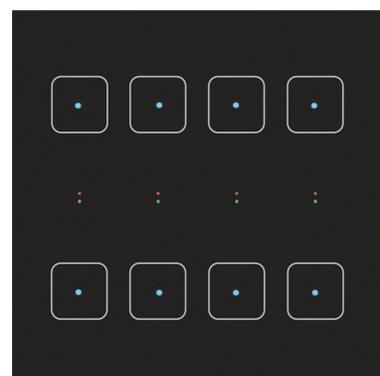
Glass Switch Button

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.

MAIN LIGHT   BEDSIDE LAMP   HEADBOARD LIGHTS

MCVIE   RELAX   MASTER ON/OFF

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 smartphone, table or via TV,
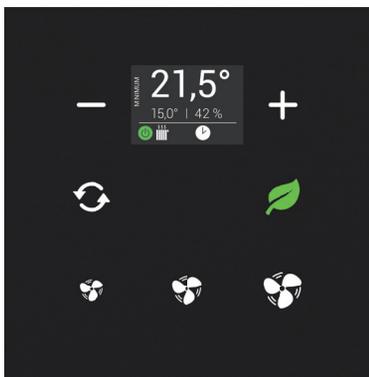
Glass Room Thermoregulator

GRT3-50/B

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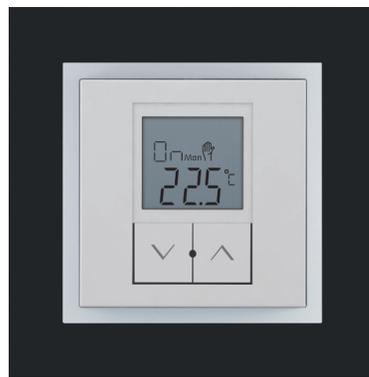
Digital Room Thermoregulator

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 ±3, ±4 or ±5 °C.

Fan Coil Control Actuator

FA3-612M

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.

Bathroom Music & Power Kit

Wi-Fi
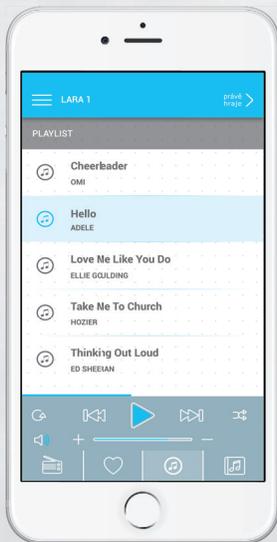
Wireless RFIO[2]

App LARA Dio
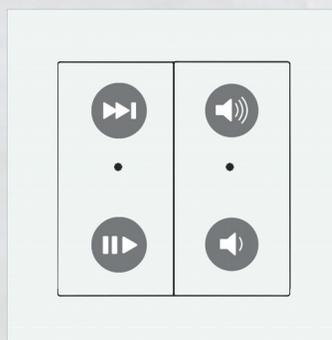
Additional Control Button

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 NAS Server or your own device – via cable or Wi-Fi.

Stereo Amplifier Inside

LARA
10.07.2018   12:54
STATION:
Radio
NOW PLAY:
Radio
MP3 128   PLAYING ...

dlna

Radio & Music player

LARA

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

More info on **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

Hospitality TV App

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.
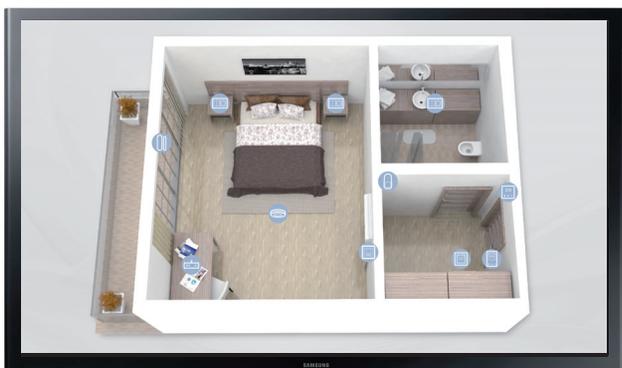
Room Control

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.

ASSA ABLOY VingCard®
SALTO inspiredaccess dormakaba
Saflok SA

LAN

Wireless

IP integration

Connection Server

iNELS smart home solutions

Integration with locker

BUS integration

NFC

iNELS Digital Key

Room **299**

UNLOCKED

TAP TO UNLOCK YOUR ROOM

299

Hilton

Insert and remove keycard.
When green light appears,
press floor number.

hilton.com

CARD

iNELS Digital Key

This smartphone app with a digital key)IDK) is another smart way how to unlock you room if you don´t have a card with you.
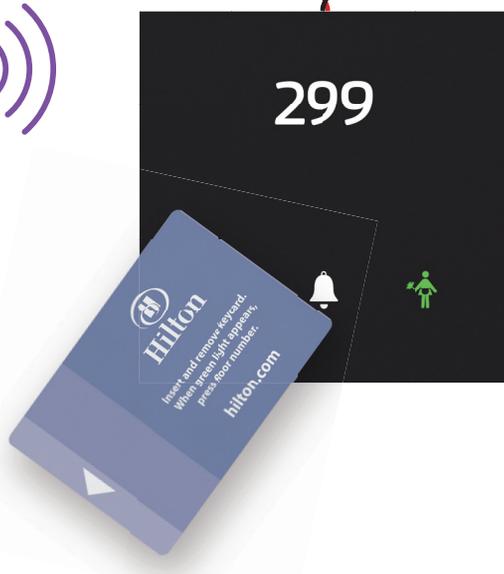
Glass Card Reader

GCR3-11/B, RFGCR-31/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 backlighted room number. Thanks to the integrated relay it can control the door lock directly.
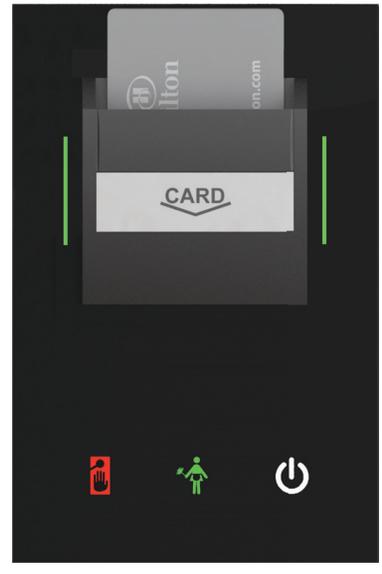
Smart Card Holder

GCH3-31/B, RFGCH-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". When card is inserted lights on the side changes from red to green.

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, iMM is 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.

Glass Touch Controllers

Glass Switch Button (without symbols)

GSB3-20/S
GSB3-40/S
GSB3-60/S

- Glass touch controllers with individual symbols
- All versions are in the size of the module (94x94 mm)
- Individual symbols can be illuminated in one of several colours
- glass colour: white (W) or black (B)

Glass Switch Button (with symbols)

GSB3-20/B
GSB3-40/B
GSB3-60/B

- Glass touch controllers without symbols
- All versions are in the size of the module (94x94 mm)
- vibration touch feedback
- acoustic touch feedback
- glass colour: white or black
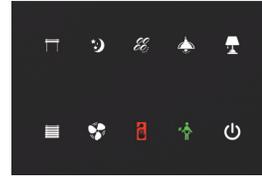
Glass Touch Panel

GSP3-100/B (black glass)
GSP3-100/W (white glass)

- Glass Touch Panel GSP3-100 is part of a comprehensive iNELS series of units for the management of the hotel rooms and other areas
- ten touch buttons

Glass Room Thermoregulator

GRT3-50/B
GRT3-50/W

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

Access Control
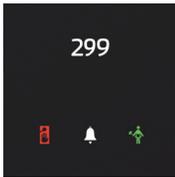
Glass Card Reader

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.
- protocol: NFC
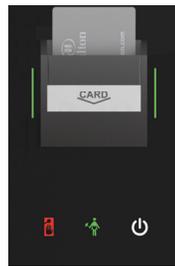
Smart Card Holder

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".
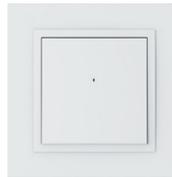
Wall Card Reader

WMR3-21

- RFID card reader 13.56 MHz
- NFC ready
- 2 push-buttons, LOGUS90 design
- rated current 50 mA from BUS

Card Switch

90731 TBR

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

Audio

Music Player

LARA Radio

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

LOGUS Speaker

Into a frame

- dimensions (mm): ø 50.8
- maximum output: 10 W
- impedance: 32 Ω
- design LOGUS90

Ceiling Speaker

Into a suspended ceiling

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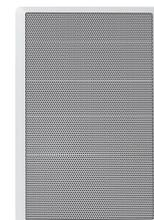
Wall Speaker

On the wall

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

Glass Bedside Panel 1 fold

GBP3-60/BR/1F

- GBP3-60 panel is equipped with six customizable touch buttons
- control units for guest room management system
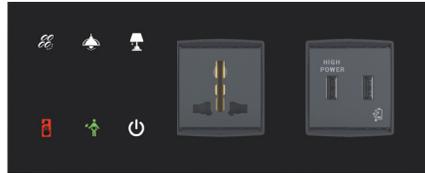
Glass Bedside Panel 2 fold

GBP3-60/BR/2F
GBP3-60/WL/2F

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

Multifunctional Touch Panel

EHT3

- touch screen panel with 3.5" display
- controls temperature, lighting, shading, scenes
- LOGUS⁹⁰ design
- rated current 150 mA from BUS
- configurable screen from IOM

Standard (plastic) Controllers

Wall Switch Button

WSB3-20

- 2 push-buttons, design LOGUS⁹⁰
- integrated temperature sensor
- one colour signalization LEDs
- rated current 25 mA from BUS

Wall Switch Button

WSB3-40

- 4 push-buttons, design LOGUS⁹⁰
- integrated temperature sensor
- two colours signalization LEDs
- rated current 25 mA from BUS

Digital Room Thermoregulator

IDRT3-1

- digital thermo-regulator
- measures and controls temperature in room
- rated current 20 mA from BUS
- design LOGUS⁹⁰

Bedside Panel

WSB3-40, Schuko, 2x USB supply unit

- design LOGUS⁹⁰
- configure according to your request

Detectors

Ocupancy sensor

DMD3-1

- power: 27 V DC
- combined detector
- detect: motion and luminescence
- temperature and humidity sensor

Motion Detector

RFMD-100

- connected to RF
- detection angle 105°
- shot length 12 m (13.12 yd)
- wireless RFIO[2]
- detect: motion

Product overview

System Units

Central Unit

CU3-03M

- basic element of the system
- 1× BUS, 1× EBM BUS
- 3x ethernet 100 Mbps
- 8x DIN GS
- 4x DIN
- 7x AIN

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 | MI3-02M/EHT

- allows to expand the system 2× BUS
- communicates with the central unit via EBM (MI3-02M) or via Ethernet (MI3-02M/EHT)

BUS Power Separator

BPS3-01M | BPS3-02M
1x BUS   2xBUS

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

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 thermovalves, lights, appliances etc.
- rated current 60 mA from BUS

12x Channels / DIN

SA3-012M

- 12x NO contacts 8 A/AC1
- switching voltage 250 V AC1, 30 V DC
- controls thermovalves, 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
- rated current 350 mA from BUS

6x 150 VA

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

BUS/GRMS Solution

HVAC Control

Fan-Coil Control Actuator

FA3-612M

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

Shutter Actuators

9 Channels

JA3-018M

- 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

1 Channel

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

6x Analog Inputs

ADC3-60M

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

4x Analog Outputs

DAC3-04B | DAC3-04M

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

Input Modul

IM3-20B, IM3-40B | IM3-80M IM3-140B

- are used for connecting of devices with potential free contacts
- contact of device ca be NO or NC
- 2x, 4x, 8x, 14x digital input
- rated current 20 mA from BUS

Room / **299**

Multifunctional Touch Panel EHT3

Glass Room Thermoregulator GRT3-50/B

Glass Card Reader GCR3-11/B

Smart Card Holder GCH3-31/B

Glass Door Bell GDB3-10/B

Glass Touch Panel GSP3-100/B

Glass Bedside Panel (2 fold) GBP3-60/B/2F

BUS

Ocupancy sensor

Window detector

Dimming Actuator DA3-22M

Switching Actuator SA3-022M

...up to 6x fan-coil

...up to 5x lights

...1x blinds

BUS/GRMS Solution

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

HOTEL

BUS

| Room **6457** | Room **6404** | Room **6403** | Room **6402** | Room **6401** | **CU3-03M** | Floor **64** |

BUS

| Room **6357** | Room **6304** | Room **6303** | Room **6302** | Room **6301** | **CU3-03M** | Floor **63** |

BUS

| Room **357** | Room **304** | Room **303** | Room **302** | Room **301** | **CU3-03M** | Floor **3** |

BUS

| Room **257** | Room **204** | Room **203** | Room **202** | Room **201** | **CU3-03M** | Floor **2** |

BUS

| Room **157** | Room **104** | Room **103** | Room **102** | Room **101** | **CU3-03M** | Floor **1** |

RECEPTION

Property
Management System

Opera   protel

Opera

**LAN
infrastructure**

powered by
niagara
framework

**BMS
Controller**

**Multimedia
Server**

Room controller on EACH ROOM

Room / **299**

Multifunctional Touch Panel EHT3

Glass Room Thermoregulator GRT3-50/B

Glass Card Reader GCR3-11/B

Smart Card Holder GCH3-31/B

Samsung Hospitality TV

Glass Door Bell GDB3-10/B

Glass Touch Panel GSP3-100/B

Glass Bedside Panel (2 fold) GBP3-60/B

Music Player

Electronic Lock

Motion Detector

Window Detector

GND
+27 V
from PS3-100/iNELS

DALI Master interface (optional)

GATE7   GATE6   GATE5

N
L1
0V/N
24 - 230V AC
0V/N
24 - 230V AC/DC

BUS+   BUS-

ZigBee

RF ANT

RUN
ERR

CU3-04M

EA3-022M (CU3-04M)

RF : 01320C
iNELS : 01320D
MAC1 : 01:32:2D:01:32:2C
MAC2 : 01:32:2D:01:32:2D
MAC3 : 01:32:2D:01:32:2E

ETH 1, 2, 3

GATE1   GATE2   GATE3   GATE4

L2
L3
N

CU3-03M	EA3-022M
central unit	22 Channel Switching Actuator
CU3-04M bundle	

BUS/GRMS Solution

Capacity (with 1 controller in room):
... up to **3000 rooms**

HOTEL

Floor **64**				
Room **6457**	Room **6404**	Room **6403**	Room **6402**	Room **6401**

Floor **64**

Room **6357**	Room **6304**	Room **6303**	Room **6302**	Room **6301**

Floor **63**

Room **357**	Room **304**	Room **303**	Room **302**	Room **301**

Floor **3**

Room **257**	Room **204**	Room **203**	Room **202**	Room **201**

Floor **2**

Room **157**	Room **104**	Room **103**	Room **102**	Room **101**

Floor **1**

RECEPTION

Property Management System

Opera

protel

LAN infrastructure

powered by niagara framework

BMS Controller

Multimedia Server

33

Bedside panels configuration

Socket
(Number in brackets is original Vimar product code.)

VIMAR

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.)

Data & Audio/Video
(Number in brackets is original Vimar product code.)

One switch / 1M	One switch / 2M	Three switches	USB power supply unit	TV-FM-SAT socket outlet	VGA connector
11B (20001)	12B (20001.2)	14B (20003)	20B (20295)	31B (20303)	32B (20348)
11W (20001.B)	12W (20001.2.B)	14W (20003.B)	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

LOGUS 90

Schuko	French	EURO - USA	British
Mechanism 21130 Cover 90632 TBR	Mechanism 21110 Cover 90652 TBR	Mechanism 21140 Cover 90842 TBR	Device 90184

Glass Bedside Panel

(Configure bedside panel according to your request.)

L (left option)

position 2   position 1
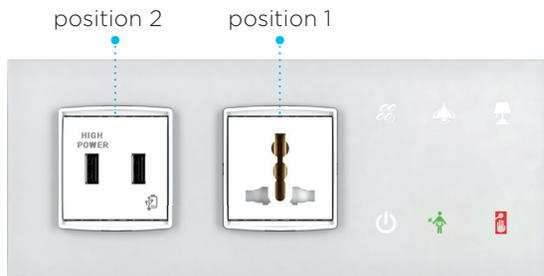
GBP3-60/WL/2F-26W-20W

R (right option)

position 1   position 2

GBP3-60/BR/2F-26B-11B44B
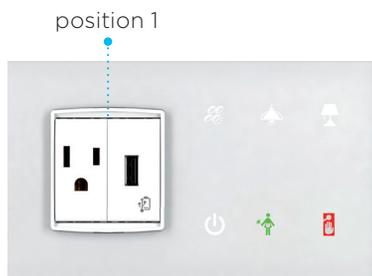
position 1

GBP3-60/WL/1F-21W45W

position 1

GBP3-60/BR/1F-26B

Part number

glass •⋯⋯⋯
button •⋯⋯
panel •⋯⋯
iNELS3 •⋯⋯
6 buttons •⋯⋯

GBP3-60/xx/xF-x-x

color
B / W
(black / white)

type
L / R
(left / right)

number of frame
1 / 2

position 1
our product code(s)*

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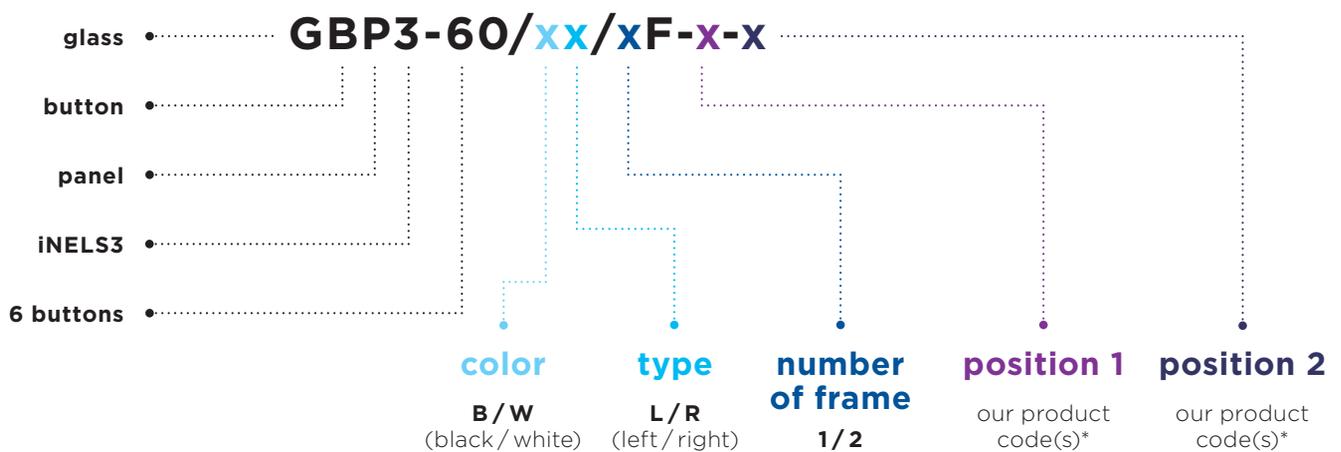
* In case of 1-module choice it is necessary to pick **2x** 1-module to fill up the 1 position, for example GBP3-60/WL-**21W45W.**

If you have any question contact our sales representative.
For more information:
https://download.vimar.com/irj/go/km/docs/z_catalogo/DOCUMENT/B_C17013Eikon_inglese.76173.pdf

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		

room occupied	cooling ON	heating ON	DND (Do not Disturb)	MUR (Make Up Room)	door locked

Broad selection of color variations (design LOGUS⁹⁰)

Base Plastic	**Aquarella** Metallic plastic	**Animato** Colour plastic	**Animato** Colour plastic	**Crystal** Glass (W/B)
Metallo Metal	**Metallo** Metal	**Arbore** Wood	**Arbore** Wood	**Petra** Stone

Standard symbols for laser on plastic key and glass panel

... other on request

Glass colour selection

Black crystal	White crystal	Blue crystal	Red crystal	Yellow crystal

... and other colours

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: *

ASHRAE **BACnet**™   **LonWorks**   **Modbus**   **M-Bus**   **Opera**   **KNX**
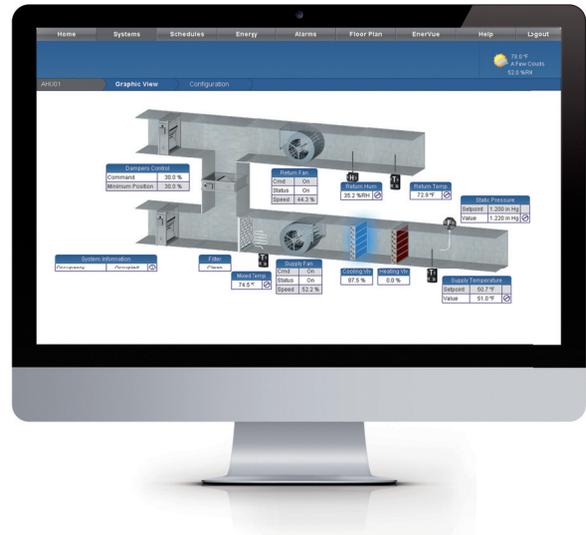
* A complete list can be found on www.inels.cz.

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 provide the optimum working environment while efficiently using energy.

Installing RFID card readers, in elegant glass design, can ensure that only authorized persons are allowed 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.).

Control system cares about

✓ The easiest user experience
✓ Unified management interface through sharing the spaces
✓ 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
✓ Cloud services

✓ Internet of Things
✓ Money savings

✓ Data sharing
✓ Safety

✓ Conferencing 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.

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.
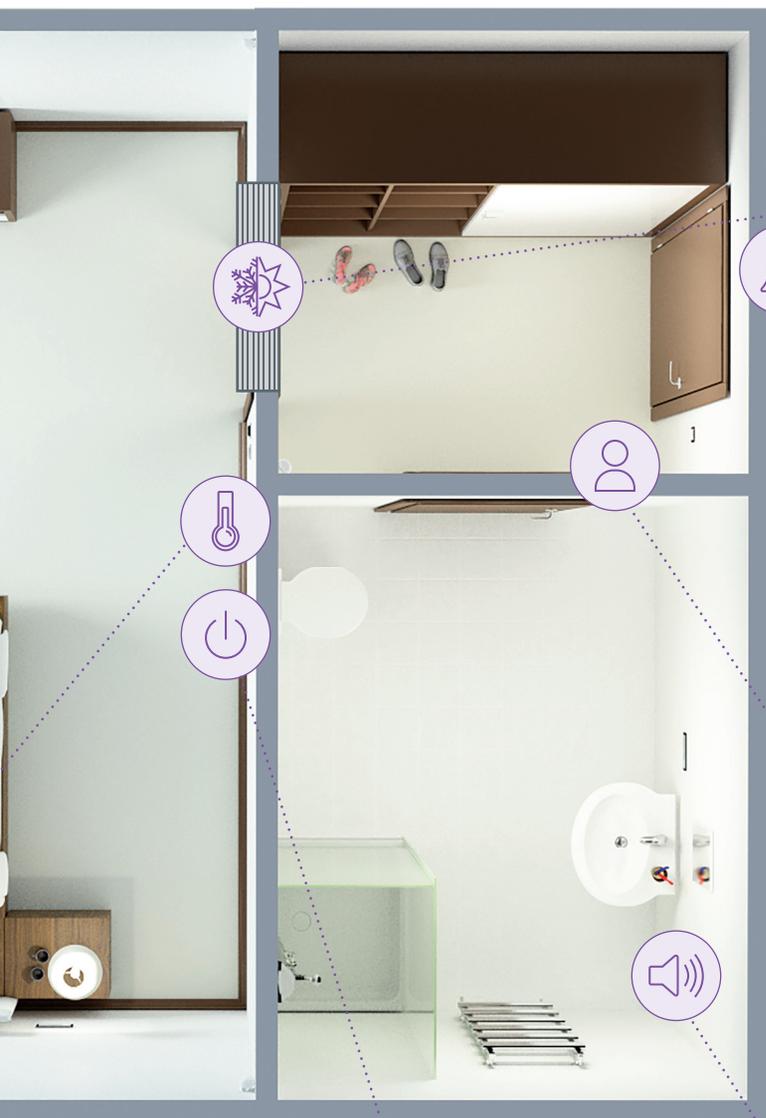
Fan-coil Controller

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.
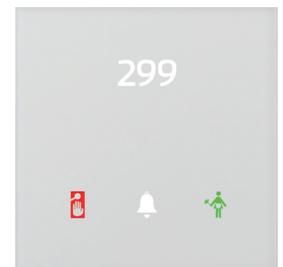
Multifunctional in front of Controller

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
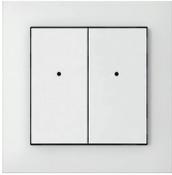
Wireless wall controller

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
- coloured 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
- colour OLED display

Switches & Dimmers

Universal Dimmer

RFDEL-71B

- type of load: R, L, C, LED, ESL
- control from external button
- light scenes function
- minimum brighteness 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

Audio Player

LARA

- plays the stream of internet radios and music from NAS or external source
- equipped with a digital internal amplifi er 2x10 W
- power over Ethernet, design LOGUS90

LOGUS Speaker

Into a frame

- dimensions (mm): ø 50.8
- maximum output: 10 W
- impedance: 32 Ω
- design LOGUS90

Ceiling Speaker

Into a suspended ceiling

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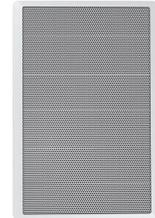
Wall Speaker

On the wall

- dimensions (mm): 270 x 183 x 37
- maximum output: 15 W
- impedance: 8 Ω
- colour: 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 LOGUS90 (glass , metal, wood, stone)

Access Control

Multifunctional in front of Controller
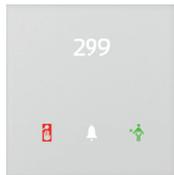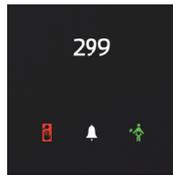
RFPCR-31/G   RFGCR-31/W   RFGCR-31/B
Logus90   glass/white   glass/black

- Multifunctional in front of controller included: RFID card reader, bell button, "Do Not Disturb" and "Make Up Room" signalling
- Available in LOGUS90 colors and frames design
- Available in glass black & white colour as well
- power supply: AC 230 V
- communication: wireless 868 MHz (iNELS RF)

Card Switch

21031 & 90731
Logus90

- A standard card switch should be connected in to the RFPCR-31/G
- Available in LOGUS90

Smart Card Holder
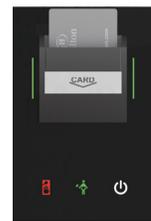
RFGCH-31/W   RFGCH-31/B
glass/white   glass/black

- Card holder with RFID reader
- allows detect fake card
- "Do Not Disturb", "Make Up Room" signalling "Master OFF" button
- glass black & white colour
- 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 Bulb

Wireless LED Bulb

RF-RGB-LED-550

- 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.

Combination of existing switch with wireless controllers

• control local HVAC system with 1 speed fan-coil

power
line

Wired PIR Detector

HRESK Switch Unit
RFSAI-161B

Retro Switch

Fan-coil – 1 speed
(heat / cool)

Window Open Detector
RFWD-100

Lamp / Wall Light
RF-RGB-LED-550

Switch unit
RFSA-166M

Bedside Panel

Bedside Panel

Universal Dimmer
RFDEL-71B

Retro Switch

Motion Detector
RFMD-100

Contact Converter
RFIM-20B

Smart Card Holder
RFGCH-31/W

Multifunctional in front of Controller
RFPCR-31/G

Main Light
RF-RGB-LED-550

4 Buttons Switch
RFWB-40

Light in the Corridor
RF-RGB-LED-550

Door Open Detector
RFWD-100

Door Lock

Thermoregulator
RFTC-150

LARA

LARA SOS Button

Switch Actuator
RFSA-62B

Mirror Light LED Strip

Wireless Switch Unit
RFSA-61B

Thermo-Valve
RFATV-1

Radiator

Radiator

Fan

Light
RF-RGB-LED-550

All devices are fully wireless

Motion Detector
RFMD-100

Lamp Bulb
RF-RGB-LED-550

Fan-coil (3 speeds)

Window Open Detector
RFWD-100

Main Light
RF-RGB-LED-550

Lamp Bulb
RF-RGB-LED-550

Lamp Bulb
RF-RGB-LED-550

OFF

OFF

Bedside Panel

Bedside Panel

RFDA-73M/RGB
Dimming actuator

RFSA-166M
for Fan-coil

RFSA-66M
for actuators in bathroom

Bell

Main MCB

Master Contactor

Main Light
RF-RGB-LED-550

Smart Card Holder
RFGCH-31/W

Multifunctional
in front of
Controller
RFPCR-31/G

4 Buttons Switch
RFWB-40

Door Open Detector
RFWD-100

Door Lock

Thermoregulator
RFTC-150

Wireless Switch Unit
RFSA-61B

Thermo-Valve
RFATV-1

Convector

Radiator

4 Buttons Switch
RFWB-40

Radio & Music Player

LAN PoE

to RFSA-66M
output 6/6

to RFSA-66M
output 4/6

Mirror Light LED Strip

Fan

Light
RF-RGB-LED-550

Product dimensions

In an installation box   surface

94   36   24   94   94   16   20

94   94

EST3

GSB3-40   GMR3-61
GSB3-60   GHR3-11
GSB3-80

WSB3-20   WSB3-20H   RFWB-20/G
WSB3-40   WSB3-40H   RFWB-40/G
WMR3-21   IDRT3-1   RFTC-50/G

6 Module

105
48   48
5
42.3
11.2 11.2
11.2

65
16.5   19   29.5
11.2 11.2
45   35.6   90

CU3-01M   PS3-100/iNELS   DA3-06M
CU3-02M   SA3-012M   JA3-09M
CU3-03M   SA3-022M

3 Module

52
48
5
42.3
11.2 11.2
11.2

65
16.5   19   29.5
11.2 11.2
45   35.6   90
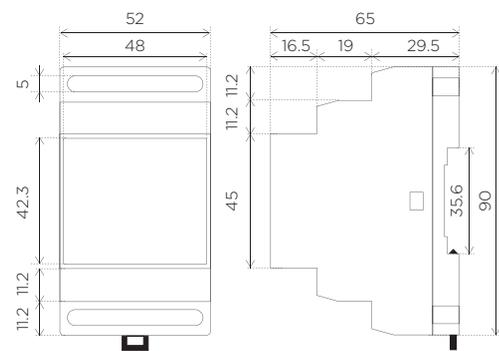
EMDC-64M   LBC3-02M   ADC3-60M
GSM3-01M   DCDA-33M   DAC3-04M
SA3-04M   RFDA-73M   RFSA-66M
SA3-06M   IM3-140M   RFDEL-71M
DA3-22M   TI3-60M   RFDA-73M/RGB
RFPM-2

1 Module

17.6
13.8
5

59
5   11   18.2   25.8   4
11.3 11.3
11.3
44.8   35.6   90
11.3 11.3
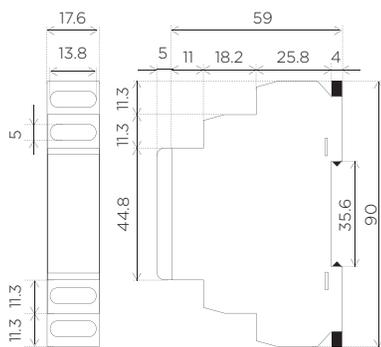
MI3-02M   BPS3-02M
SA3-02M   RFSA-61M
BPS3-01M

MINI

R13

49   13
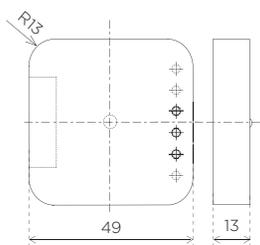
JA3-02B/DC   TI3-10B
IM3-20B   TI3-40B
IM3-40B   RFTI-10B
IM3-80B   RFSF-1B
DAC3-04B

MINI

R21

49   21
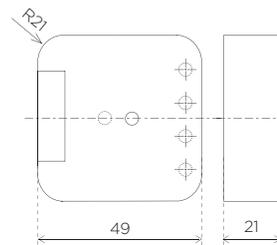
SA3-01B   RFSA-62B
SA3-02B   RFSAI-61B
RFDEL-71B   RFJA-12B/230V

1) Surface mounted

Wall mounted or in an installation box with spacing of 65 mm.

RFSD-100	RFMD-100
RFWB-20/G	RFTC-50/G
RFWB-40/G	RF Touch

2) Flush mounted

RF Touch-B	EST3	WSB3-20
RFSTI-11/G	GSB3-40	WSB3-40
RFTC-100/G	GSB3-60	WSB3-20H
RFDW-71	GSB3-80	WSB3-40H
	GMR3-61	IDRT3-1
	GHR3-11	
	WMR3-21	
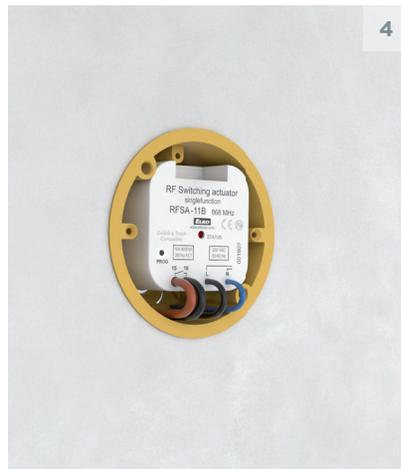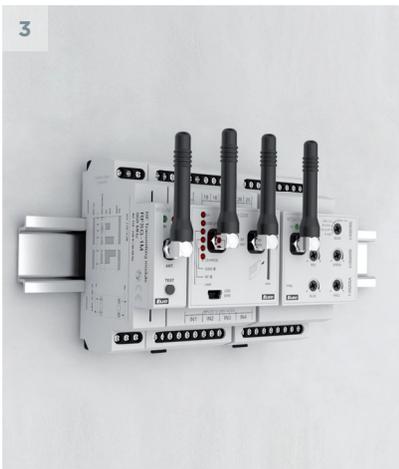
3) DIN Rail mounted

On DIN rail according to EN 60715.

RFSG-1M	ADC3-60M	IM3-140M
RFGSM-220M	BPS3-01M	JA3-09M
RFPM-2M	BPS3-02M	LBC3-02M
RFDA-73M/RGB	CU3-01M	MI3-02M
RFDEL-71M	CU3-02M	PS3-100/iNELS
RFSA-61M	CU3-03M	SA3-02M
RFSA-66M	DA3-06M	SA3-04M
RFSA-166M	DA3-22M	SA3-06M
	DAC3-04M	SA3-012M
	DCDA-33M	SA3-022M
	EMDC-64M	TI3-60M
	GSM3-01M	

4) Mounted to or
in the installation box

RFIM-20B	RFJA-12B	DAC3-04B
RFIM-40B	RFJA-32B	IM3-20B
RFDAC-71B	RFSF-1B	IM3-40B
RFDEL-71B	RFSTI-11B	IM3-80B
RFSA-11B	RFTI-10B	JA3-02B/DC
RFSA-61B	RFSAI-161B	SA3-01B
RFSA-62B	RFSTI-111B	SA3-02B
RFSAI-61B		TI3-10B
		TI3-40B

5) Mounted into the cover
of appliance

RFDAC-71B	RFSAI-61B
RFDEL-71B	RFJA-12B
RFSA-11B	RFJA-32B
RFSA-61B	RFSAI-161B
RFSA-62B	RFSTI-111B

6) Surface mounted

RFSOU-1	RFSD-100
RFUS-61	RFMD-100
RFTM-1	RFWD-100
RFSF-1B	

ELKO EP

We are traditional, innovative and purely Czech development manufacturer of electronic devices and we have been your partner in the field of electroinstallations for 26 years.

ELKO EP employs about 330 people, exports its products to more than seventy countries, and has representatives in thirteen foreign branches. Company of the Year of the Zlín Region, Visionary of the Year, Global Exporter of the Year, Participation in the Czech TOP 100, these are just some of the awards received. Still, we are not finnished. We are constantly striving to move forward in the field of innovation and development. That's our primary concern.

Millions of relays, thousands of satisfied customers, hundreds of our own employees, twenty six years of research, development and production, thirteen foreign branches, one company. ELKO EP, innovative- a purely Czech company based in Holešov, where development, production, logistics, service and support go hand in hand. We primarily focus on developing and manufacturing systems for building automation in the residential, commercial and industrial sector, a wide range of Smart city facilities and the so-called Internet of Things (IoT).

Facts and stats

30 %
EXPORT

ANNUAL TURNOVER
20
mil. EUR

40 %
CZECH

30 %
BRANCHES

13
BRANCHES OVER THE WORLDS

70
EXPORTING COUNTRIES

330
EMPLOYEES

10 000
iNELS INSTALLATION

12 000 000
MANUFACTURED PRODUCTS

2nd position
in Europe
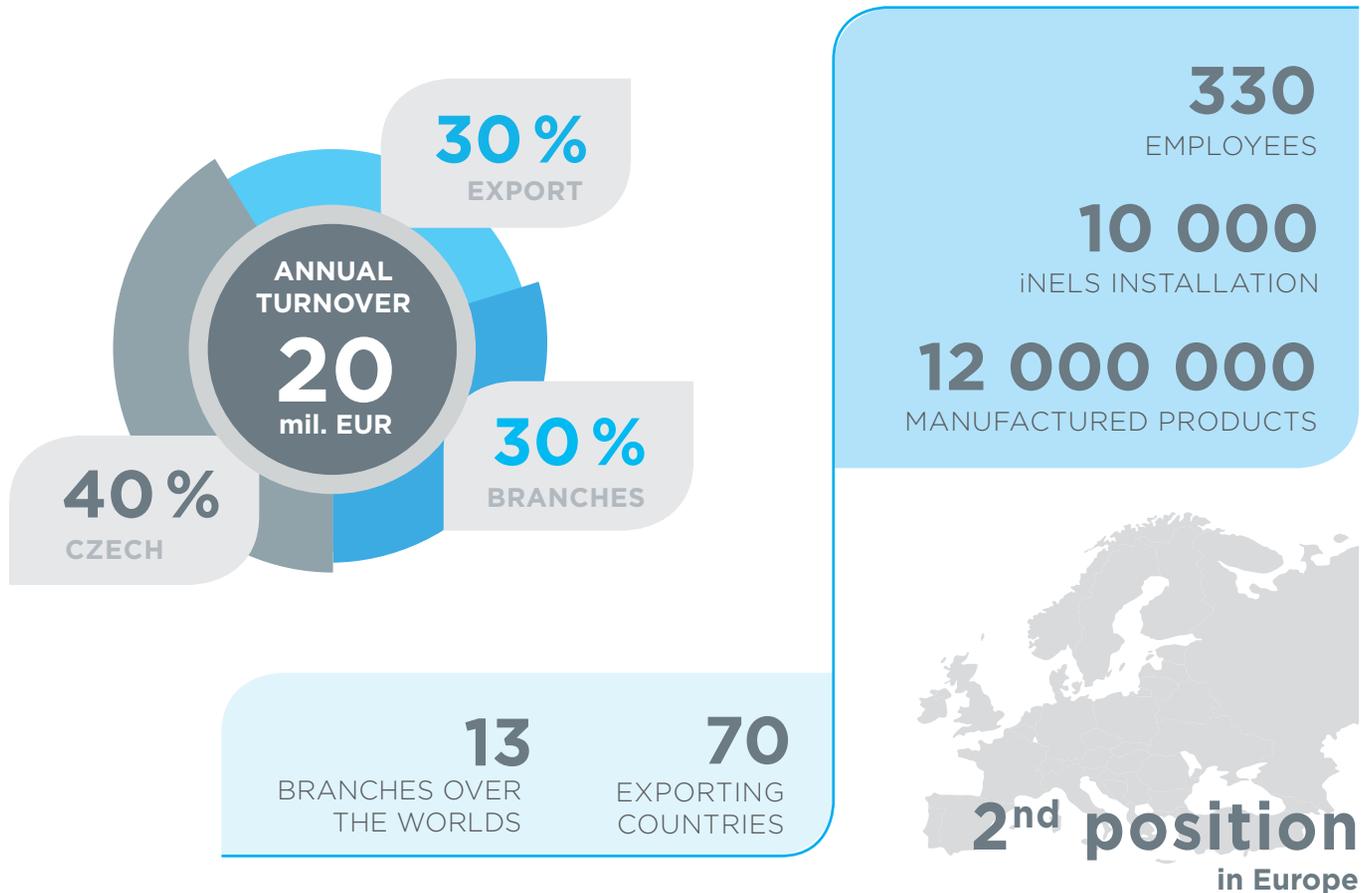
WE ARE

DEVELOPERS

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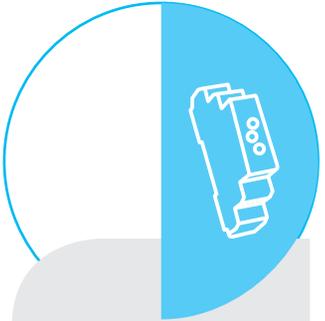
PRODUCERS

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.
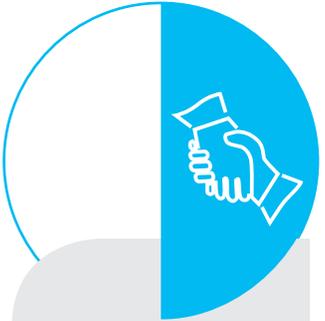
SELLERS

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

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
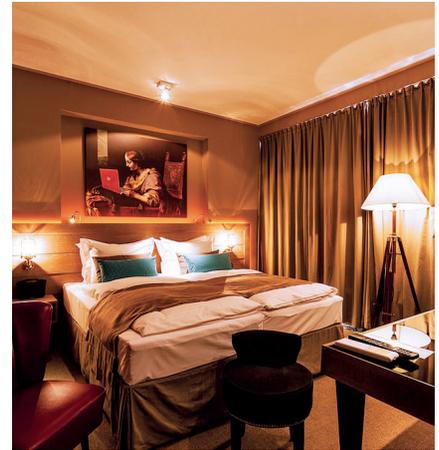
Baltazár Boutique
Budapest / Hungary

- 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
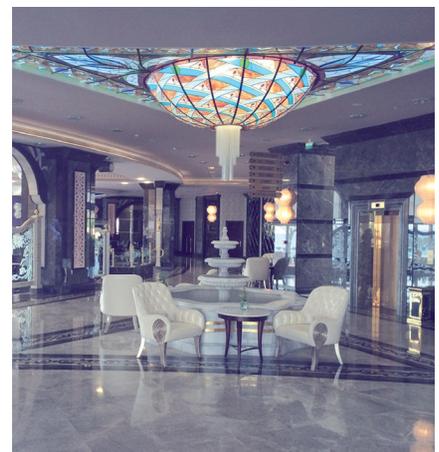
Merit Royal Premium
Kyrenia / Cyprus

- 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
Skhidnicya / 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^2
- 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 dispetching
- 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
- lightig 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

iNELS for everything, everywhere
Selection of references
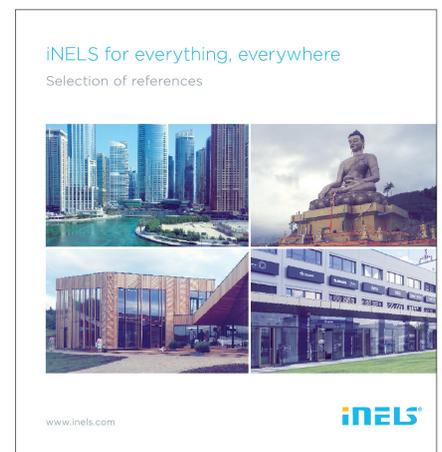
www.inels.com

Brochure
Selection of References

- elkoep.com/download/references

More on:
www.inels.com

Others just resell
HOWEVER, WE DEVELOP AND MANUFACTURE PRODUCTS OURSELVES!

26 years
on the market

15 years
ISO certification
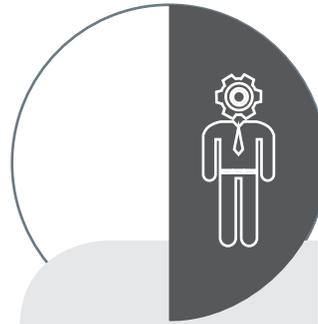
40
developers
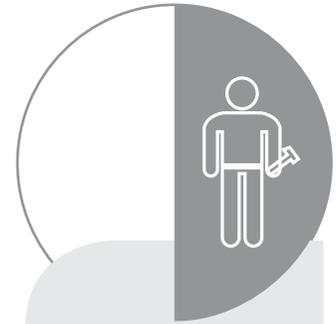
330
employees

2 000 m²
manufacturing space
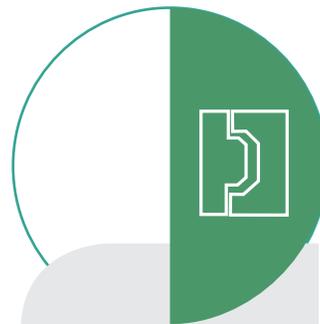
200
proprietary plastic mods
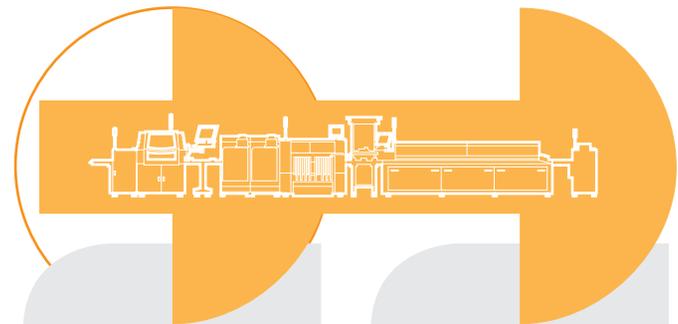
2
SMD lines
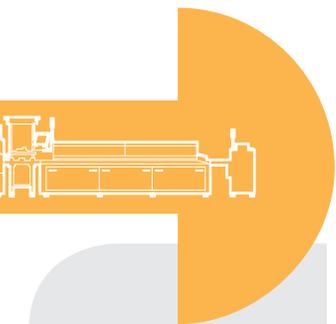
1 mil.
components per day
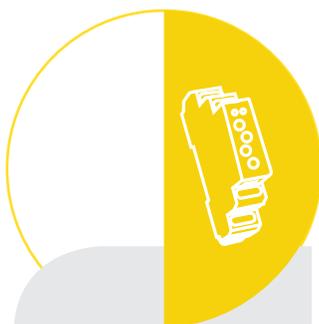
600 000
products per year
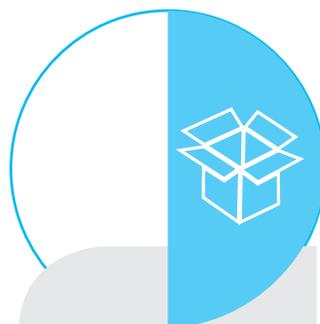
2 000 m²
finalization and dispatch

2000
warehousing spaces
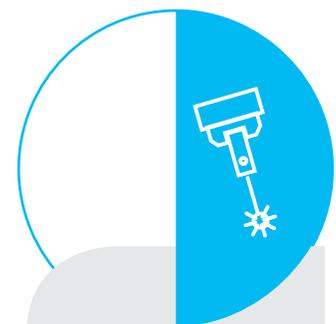
2
printing lasers

ELKO EP Holding

Russia

Ukraine

Poland

Baltic

Czech Republic

Germany

Hungary

Spain

Slovakia

Vietnam

India

UAE

Saudi Arabia

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