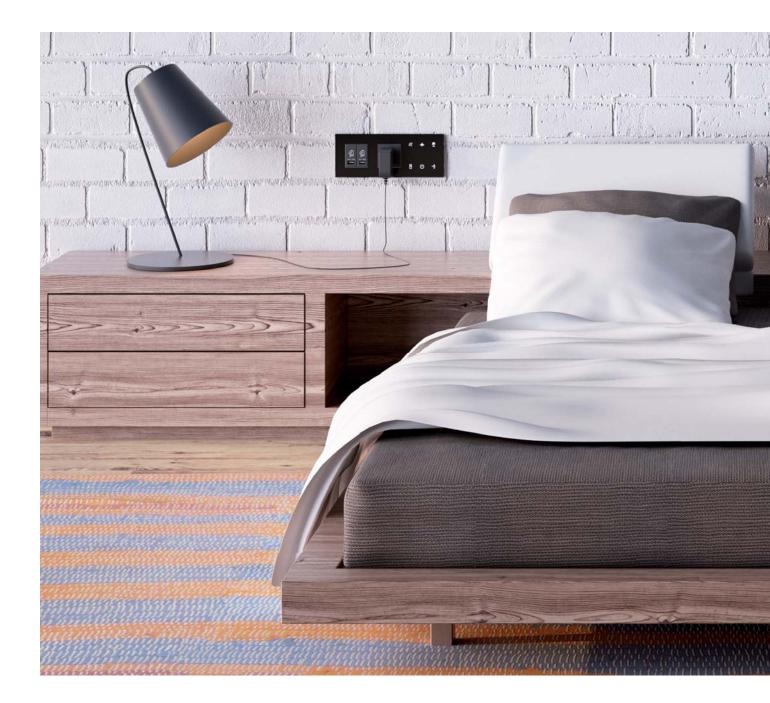
# Hospitality GRMS system

Smart solution for new & existing hotels





www.inels.com/hotel

# **EXISTING** hotel room - RETROFIT

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 airconditioning) 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 (2in1)

# NEW hotel room

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

safety

• signalling: MUR, Do not disturb, Laundry



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



• occupancy sensor detects the presence of person(s) • smoke detector - a fire or smoke from

Safety

- 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

#### Control

standard controllers	
<ul> <li>frames of natural materials (wood, glass, metal, stone)</li> </ul>	•
• glass controllers	х
• touch panel (RF Touch)	•
• application from a smartphone (eLAN for every room)	•
Audio/Video	
• LARA - music&radio player with intercom (LAN cabel 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)	х
• connection with BMS (Building Management System)	х
• connection with PMS (Property Management System)	х
• connection with door locks systems	х
Others	
• variability - change controllers place	•
navigation for Hotel guests	х

Design

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





- - ओ WIRELESS solution



- fixed temperature limits min. (For airconditioning) 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!



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

# Flexibility

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



### Control

• standard controllers	•
<ul> <li>frames of natural materials (wood, glass, metal, stone)</li> </ul>	•
• glass controllers	•
• touch panel (HST)	•
• application from a smartphone	•
Audio/Video	
• LARA - music&radio player with intercom	•
• TV control via application (must be used eLAN IR)	•
<ul> <li>device control via TV (hospitality TV with eLAN RF)</li> </ul>	•
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	х
navigation for Hotel quests	



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.

### Door/window detectors

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



## 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.



 $\bigcirc$ 

# Wireless LED bulb

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

22.5%

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.



(())

 $\mathbb{G}$ 

### Music player

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

# Motion detector

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

8





### Fancoil 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 thermoregulator.



## Door bell

Wireless bell button for a flexible placing to any place in front of a room door. Call for buzzer or piezo inside of RFSA-66M unit (if used).



## 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



# **WIRELESS** 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

FDEL-718 🛞

1000

Universal dimmer

• light scenes function

 overheat protection • operated from 32 channels

type of load: R, L, C, LED, ESL
control from external button

• minimum brighteness setting

• switching with a micro-button

Switches & Dimmers



### 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

111111111111111

• power: 110-230 V AC/50-60 Hz

time-functions (2 s.- 60 min.)
operated from 32 channels (of

· option of connecting an external

• 6 independent channels

11

Switch unit

RFSA-66M

load: 6x 8 A

controllers)

Wall speaker

• impedance:  $8 \Omega$ 

• dimensions (mm): 270 x 183 x 37

• maximum output: 15 W

On the wall

· color: white

antenna

• color OLED display





#### Smart Wi-Fi RF Box

eLAN-RF-Wi-003

- power: 10-27 V DC/200 mA SELV over and under temperature
- 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

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





#### Wireless LED bulb

#### • power: 220-240 V AC 50/60 Hz

Dimmable LED bulb

- luminous flux: 550 lm / 675 lm luminous flux: 806 lm • brightness regulation: 0 - 100%

  - brighteness regulation: 0 100%
  - compatible base: E27

# Detectors

• compatible base: E27

• durability: 30 000 h.



### Smoke detector

RFSD-100

- power: 2x 1,5 V AAA battery • smoke detection: optical light
- scattering
- autotest



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

# • power: 100-240 V AC 50/60 Hz

E27-806 E27-1060

- color temperature: 2 700 K

- durability: 25 000 h.





• power: 1x 1,5 V AAA battery

Motion detector

- - detection angle 120°

RFMD-100

• shot length 12 m (13.12 yd)



LOGUS speaker

• dimensions (mm): ø 50.8

• maximum output: 10 W

• impedance:  $32 \Omega$ 

design LOGUS<sup>90</sup>

Into a frame



### Music player

IARA

- 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 i ogus<sup>90</sup>



- 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

• load: 16 A time-functions (2 s.- 60 min.) • operated from 32 channels (of controllers)

Ceiling speaker

Into a suspended ceiling

• dimensions (mm); ø 127

• impedance:  $8\Omega$ 

· color: white

• maximum output: 30 W

 terminal for control from existing button



#### Fancoil 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 switchin build preset combination
- with RFSA-166M • power: 2x 1,5 V AAA batterv
- temperature range: 0 to +55°C
- weekly programming
- integrated sensor
- design LOGUS<sup>90</sup> (glass, metal, wood, stone)

## Shutter unit



#### Shutter actuator

RFJA-12B

• load: 2x 8 A • operated from 32 channels (of controllers)



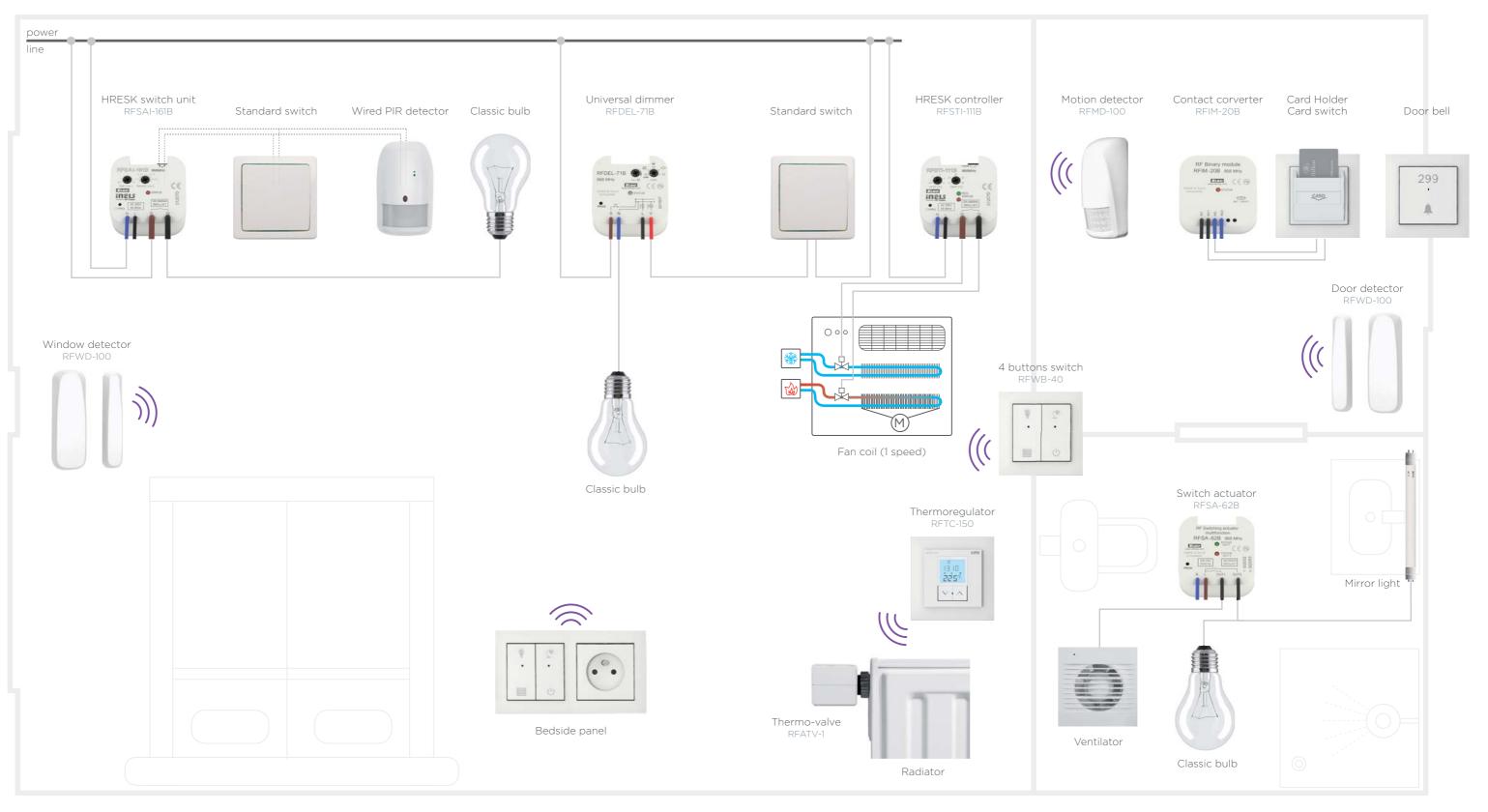
#### Window/door detector

RFWD-100

- power: 2x 3 V CR2032 battery
- opened window / door detection
- battery status indication

# Use case 1: Connection diagram

- combination of existing controllers with wireless actuators
- control local HVAC system with 1 speed fan coil



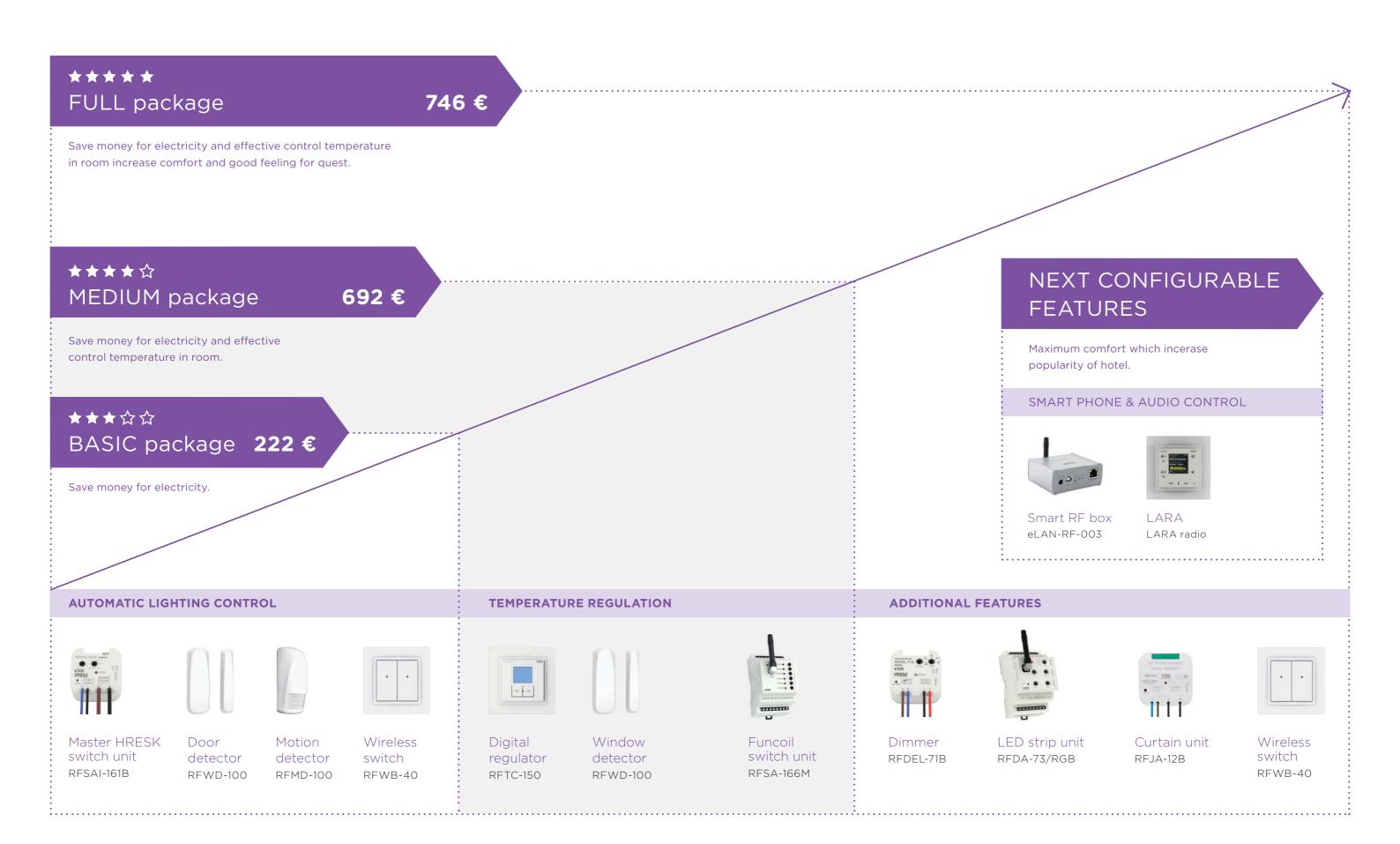
# WIRELESS RETROFIT (76)

## Use case 2: Connection diagram RFSA-166M RFSA-166M for Fan coil for actuators in bathroom Bell RFDA-73M/RGB • all devices are fully wireless Dimming actuator Main MCB Master contactor Fan coil (3 speeds) Motion detector RFMD-100 $\bigcirc \circ \circ \bigcirc$ \* ((( ŵ (M) Window detector 4 buttons switch RFWB-40 Wireless dimmable LED bulb (( . $\widehat{\phantom{a}}$ 13 10 225\* to RFSA-66M $\widehat{\phantom{a}}$ V.1 output 6/6 $\wedge$ Thermoregulator RFTC-150 0 Bedside panel Ventilator





# MIRELESS RETROFIT





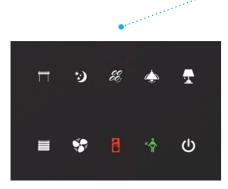


iNELS solution for guest room management is designed to help to create an environment that allows guests to feel as if they were at home. The hotel room always welcomes guests with a pleasant temperature and the controls offer a very simple to use option for creating the atmosphere which was currently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



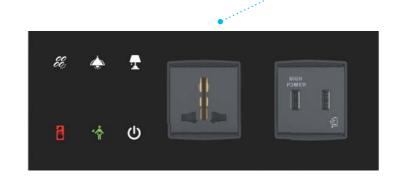
## Multifunctional touch panel

Fully configurable 3.5" touch screen with TFT display in variety frames design. Allows the control of all iNELS Hospitality features including multimedia. Fully confi urable 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.



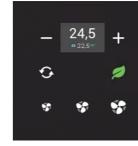
## Glass Bedside Panel

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



## 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.

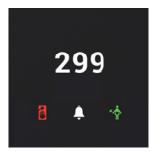


# Thermoregulator

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



# 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 backlighted room number.



## Glass Card Holder

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



## Music 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 celling or wall speakers.

## BUS/GRMS product overview

## Glass touch controllers



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Glass Switch Button

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



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.

# Standard (plastic) controllers



Glass Room Thermoregulator

•

.

#### GRT3-50/B. GRT3-50/W

• Temperature glass controller for simple temperature setup. Fan and mode control. Oled display with actual and setup temp. value. BUS connected.



Glass Bedside Panel

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



Elko Hotel Touch

EHT3

- touch screen panel with
- · controls temperature, lighting,
- rated current 150 mA from BUS

# Access control





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



Detectors

Wall Push button

- two colors signalization LEDs • rated current 25 mA from BUS



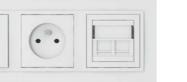
Digital thermoregulator

- IDRT3-1
- measures and controls temperature in room

225

× - ~

- rated current 20 mA from BUS
- design LOGUS<sup>90</sup>



Bedside panel

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

# Audio/Video



### Music player

#### LARA

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



### Smoke detector

- power: 2×1,5 V AAA battery
- smoke detection: optical light
- scattering autotest



### Motion detector

#### RFMD-100

• power: 1× 1.5 V AAA battery

### detection angle 120°

• shot length 12 m (13.12 yd)



### Window detector

#### RFWD-100

• power: 2× 3 V CR2032 battery

#### • opened window/door detection

· battery status indication





- 3.5" display
- shading, scenes
- LOGUS<sup>90</sup> design

Wall card reader

• RFID card reader 13.56 MHz

• 2 push-buttons, LOGUS<sup>90</sup> design

• rated current 50 mA from BUS

WMR3-21

NFC ready

"Make Up Room" signs.



#### Elko Hotel Touch

#### EHT3

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

# System units



basic element of the system

• 2× BUS, 1× EBM BUS

• ethernet 100 Mbps

• 2× AI, 4× DI, 1× DO

wireless submodul

Central unit

CU3-02M



#### Guest Room Controller

#### CU3-04M

- manages DND/MUR, lighting, HVAC and shading in the guest room
- communicates with the BMS and PMS

# Access control

299

1 1

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





#### Smart Card Holder

• In-room card holder with RFID reader which detects correct card and eliminates fake cards. Optional 3 buttons: Don't disturb / Make up Room / Master Off.



#### Card holder

90731 TBR

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



#### External master

MI3-02M

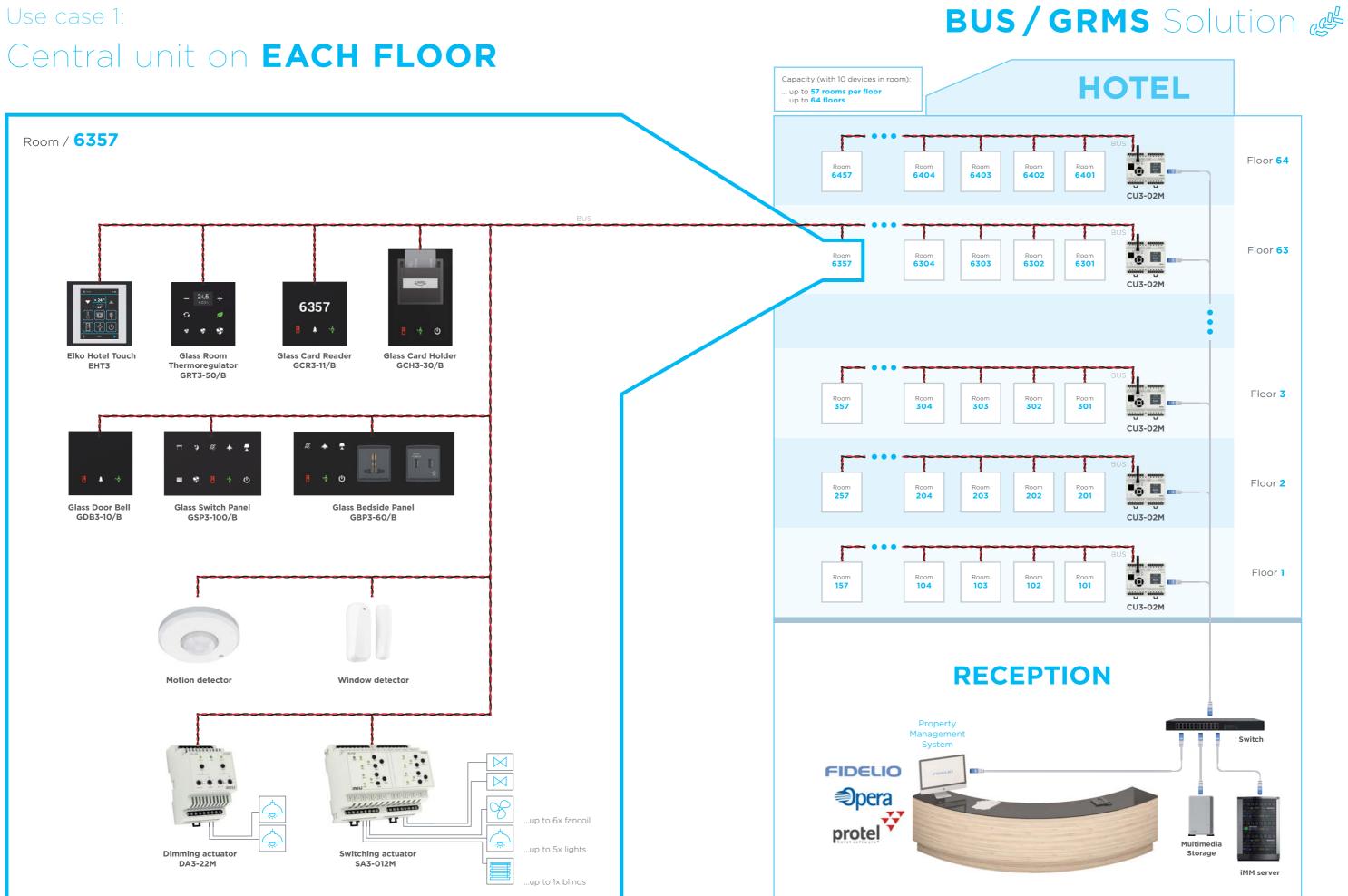
- · allows to expand the system
- 2× BUS
- communicates with the central unit via EBM



#### Power supply

PS3-100/iNELS

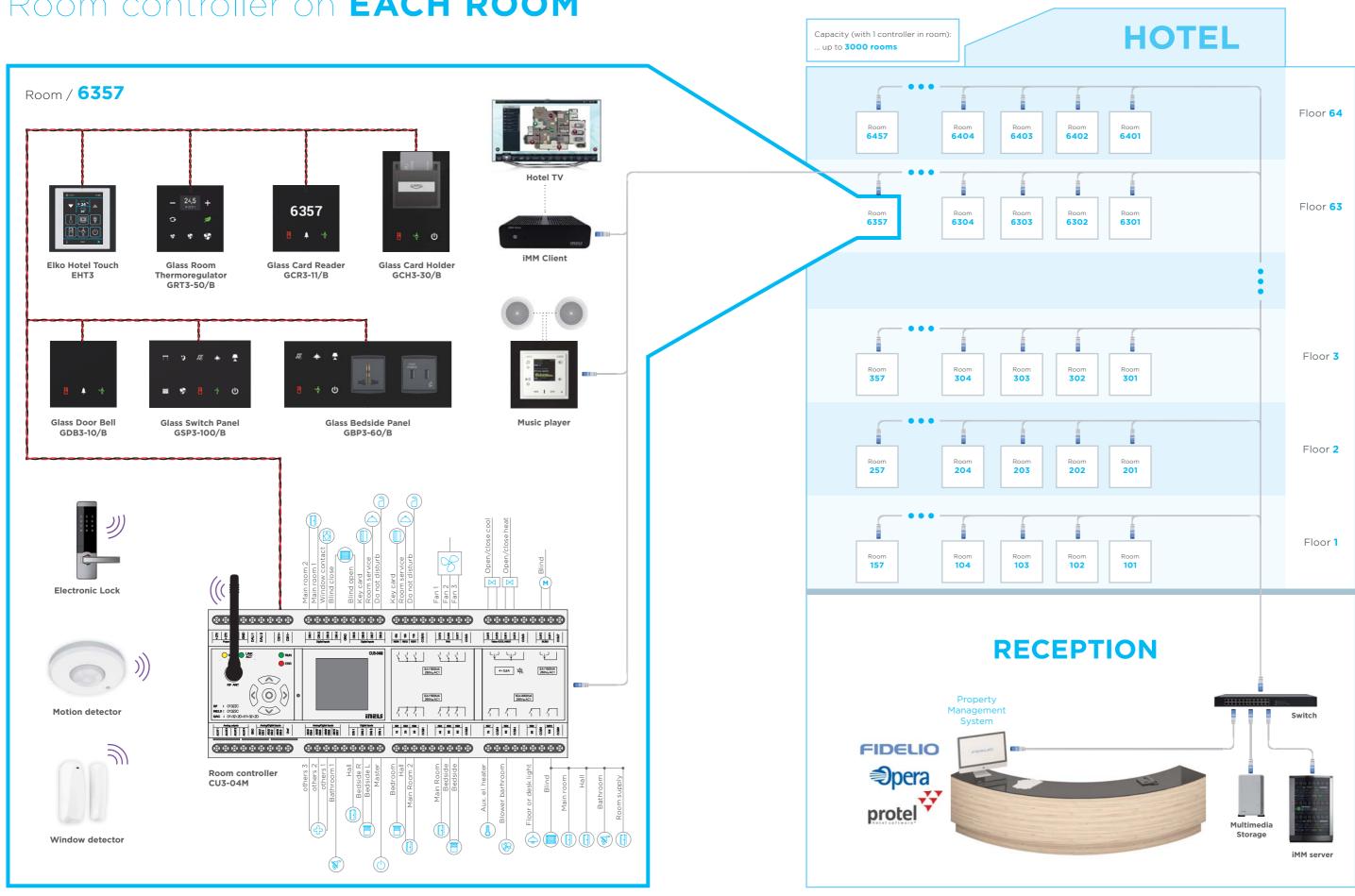
- power supply 100 W
- supply voltage 100-250 V AC
- output 1: 27,6 V/3,6 A
- output 2: 12,2 V/0,35 A





# Use case 2: Room controller on EACH ROOM

# BUS/GRMS Solution







Light ON/OFF

Light 0–10V

Light DALI

Curtain

Door lock

Scene

Thermoregulation

Master ON/OFF

Bedside controlina

Socket switching

# \*\*\*\* FULL package

# 4 199,60 €

Configuration for a single hotel room using one CU3-04M central unit, glass controllers with symbol backlight and vibration, room control with BSP from multiple locations. Switching of six light circuits, four outputs for dimming lighting, switching for four socket circuits, fan coil units, blinds, central control STOP, DND, MUR.

# \*\*\*\* MEDIUM package 2 566,60 €

Configuration for a single hotel room using one CU3-02M central unit, glass controllers with symbol backlight and vibration from multiple locations. Switching of six light circuits, four outputs for light dimming, switching for four socket circuits, fan coil units, blinds, central control STOP, DND, MUR.

# \*\*\* BASIC package **1560,90 €**

Configuration for a single hotel room or up to 20 rooms with a single central unit CU3-02M, with the plastic version of the LOGUS 90 designed control. Switching for four lighting circuits, heating circuits / cooling, blinds, with remote control STOP.

#### **BASIC** package





V ...

Wall controller WSB3-20/WSB3-40



iNELS Central unit CU3-02M



Power supply PS3-100/iNELS



Digital thermoregulator IDRT3-1

**Glass** Card Holder LOGUS90 21031



Switching 12-channel actuator SA3-012M



Bus power separator BPS3-02M

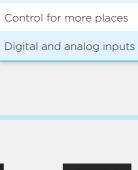




Switching 12-channel actuator SA3-06M



**Glass Room** Thermoregulator GRT3-50



**Glass** Card with symbols



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Reader

GCR3-11

Glass Card Holder GCH3-31

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Glass switch panel GSB3-100/S



# BUS/GRMS Solution

BASIC package	MEDIUM package	FULL package
4x	5x	6x
no	no	yes
no	no	yes
yes	yes	yes
no	no	yes
no	yes	yes
no	no	4x
no	2x	4x
no	no	yes



CU3-04M

GRMS iNELS central unit

# Glass switch button



### Glass bedside panel right / left GBP3-60R / GBP3-60L

# Bedside panels configuration

code.)

VGA

connector

32B (20348)

32W (20348.B)



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



## Plastic Bedside Panel

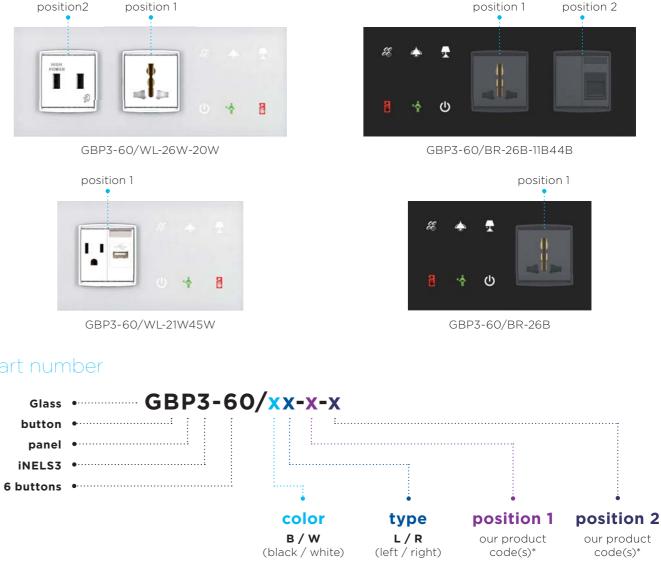


#### L (left variant)





## 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.

## Classic plate





Glass white ice / 2M

Glass black ice Glass black ice / 2M / 3M

If you have any question contact our sales representative.

#### R (right variant)



For more information: www.vimar.com/en/int/catalog/product

# Customization

# Broad selection of color variations (design LOGUS<sup>90</sup>)

Plastic	Metallic plastic	Color plastic	Color plastic	Crystal
Metal	Metal	Wood	Wood	Stone

# Standard symbols for laser on plastic key and glass panel



... other on request

## Glass color selection



# Reception console: iDM Hotel

The iDM3 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. iDM3 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 iDM3 are exported all objects used in communication between BMS and iNELS.

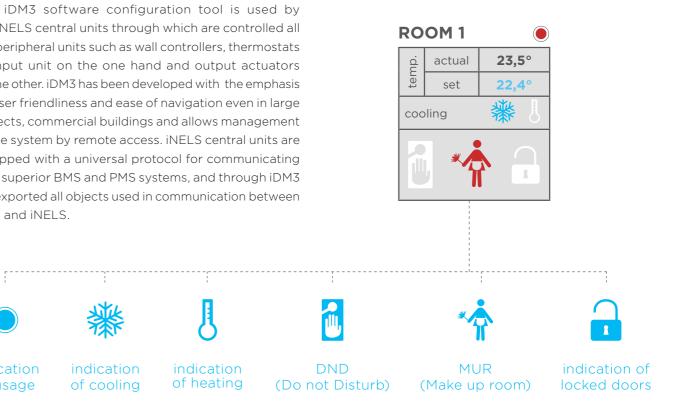




indication of usage

indication indication of heating of cooling





# Integration with Niagara BMS

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. niagara framework'





\* A complete list can be found on www.inels.cz.



# Access/lock control integration

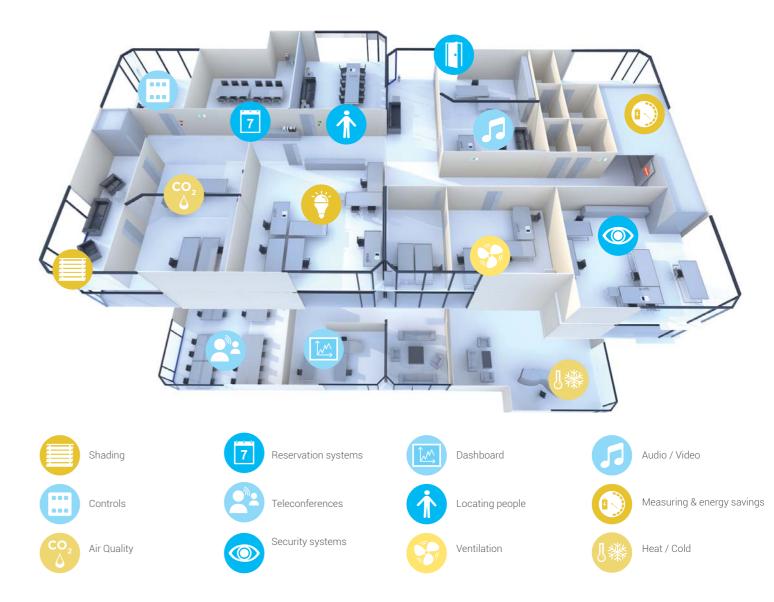
## Clever access under top security

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.

# Conference and office control









# References



### Kempinski Hotel Bayterek Marriot Marquis

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



# 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



### 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



### Baltazár Boutique Budapest/Hungary

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



### Pest-Buda Bistro & Hotel Budapest/Hungary

- The oldest hotel of Hungary, which was built in 1696
- Furniture & equipment has been
- renovated a few years ago • 10 rooms with unique luxury equipment with unique copper lamps and unique heating & air-condition



### 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

### 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









### Merit Royal Premium

Kyrenia/Cyprus

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

iNELS for everything, everywhere INELS'

### Brochure

Selection of References



• elkoep.com/download

### More on: www.inels.com/hotel

# ELKO EP Holding



www.elkoep.com

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