Smart Home & Building Guide

The most comprehensive system for your smart life!

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iNELS®

Introducing iNELS

Guide to the world of electrical installations. Become inspired and learn what it is really all about.

Electrical installations are everywhere. They are a part of every building, and every home has at least some modern technology. Anybody can turn the lights on or off or adjust the blinds.

But we wanted to go a step farther. We wanted to create a truly intelligent system. A system that would think for you and save you time, energy and money.

We developed the iNELS – an intelligent wiring and wireless system that can control the whole home, e.g. regulating heat, air-conditioning and recuperation, adjusting roll blinds and shutters, controlling appliances and even the home security system.
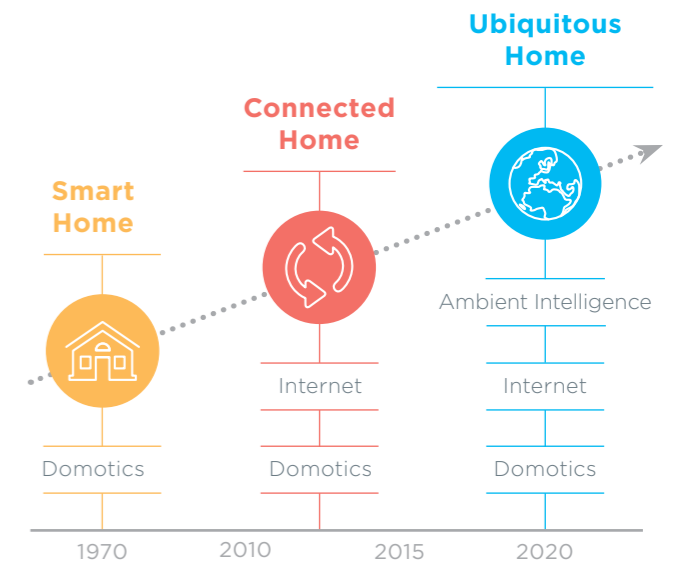
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Why Smart Home?

Today, without even realizing it, we are surrounded by an entire series of smart gadgets. From touch phones that we use every day to automobiles, up to home appliances or a modern electrical installation. The smart home therefore does not just function fully automatically, but also economizes, it provides comfort and security and the main thing – it thinks for you!
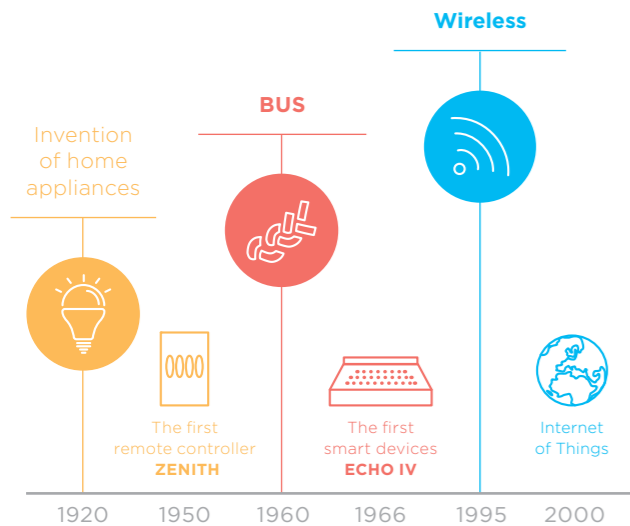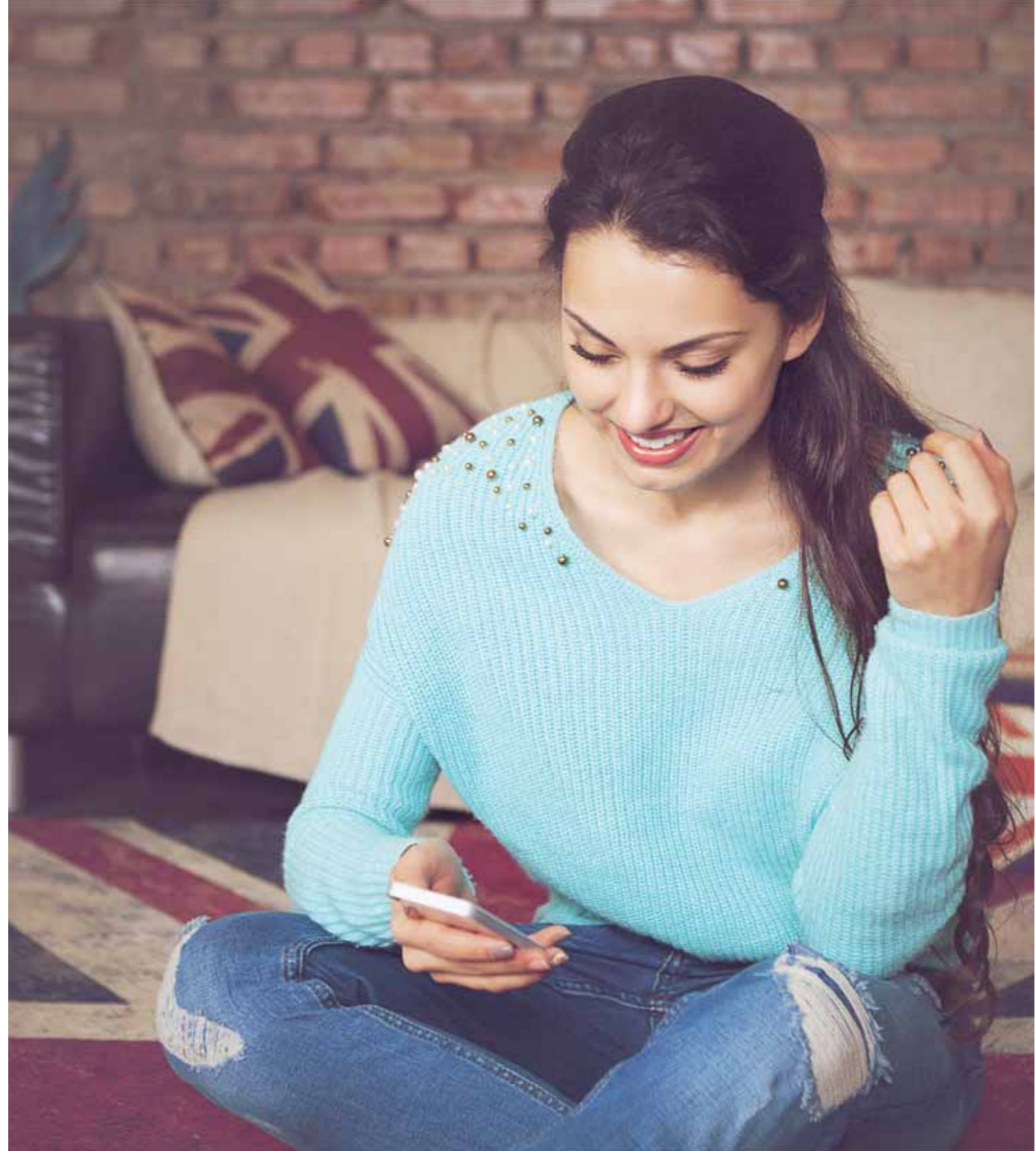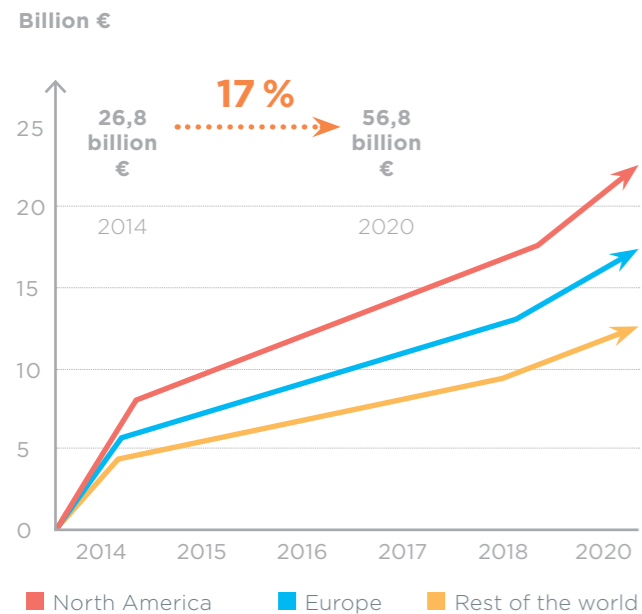
Internet of things

This term includes the concept of connecting appliances, machines, sensors to an existing internet structure. This structure utilizes a specially designed network for small data transfer and low power consumption over long distances. For this concept, we use the Sigfox, LoRa, and NB-IoT networks.

Wireless

BUS

Invention of home appliances

The first remote controller
ZENITH

The first smart devices
ECHO IV

Internet of Things

| 1920 | 1950 | 1960 | 1966 | 1995 | 2000 |

Ubiquitous Home

Connected Home

Smart Home

Ambient Intelligence

Internet

Internet

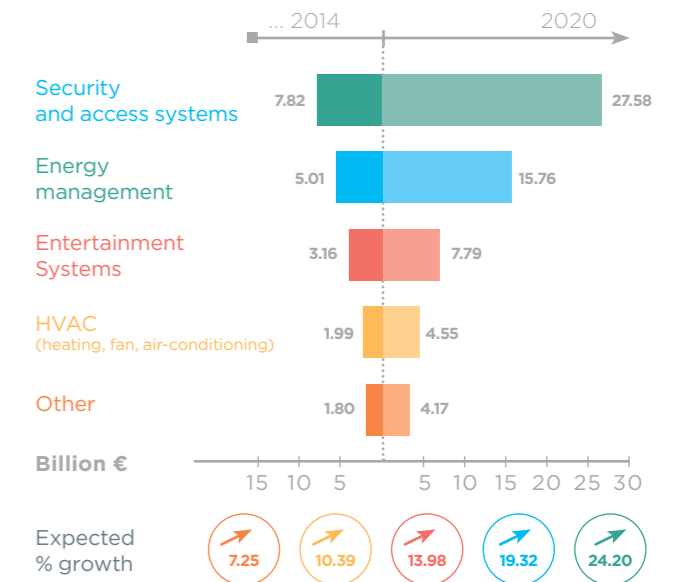Domotics

Domotics

Domotics

| 1970 | 2010 | 2015 | 2020 |

Smart Home users

The Smart Home phenomenon has undergone unseen development just like automobiles, computers, telephones and electronics in general. This appears in materials and technologies that are used to build today's homes. This growth will be even more dynamic as we approach the year 2020.

Billion €

17 %

26,8 billion € → 56,8 billion €

2014   2020

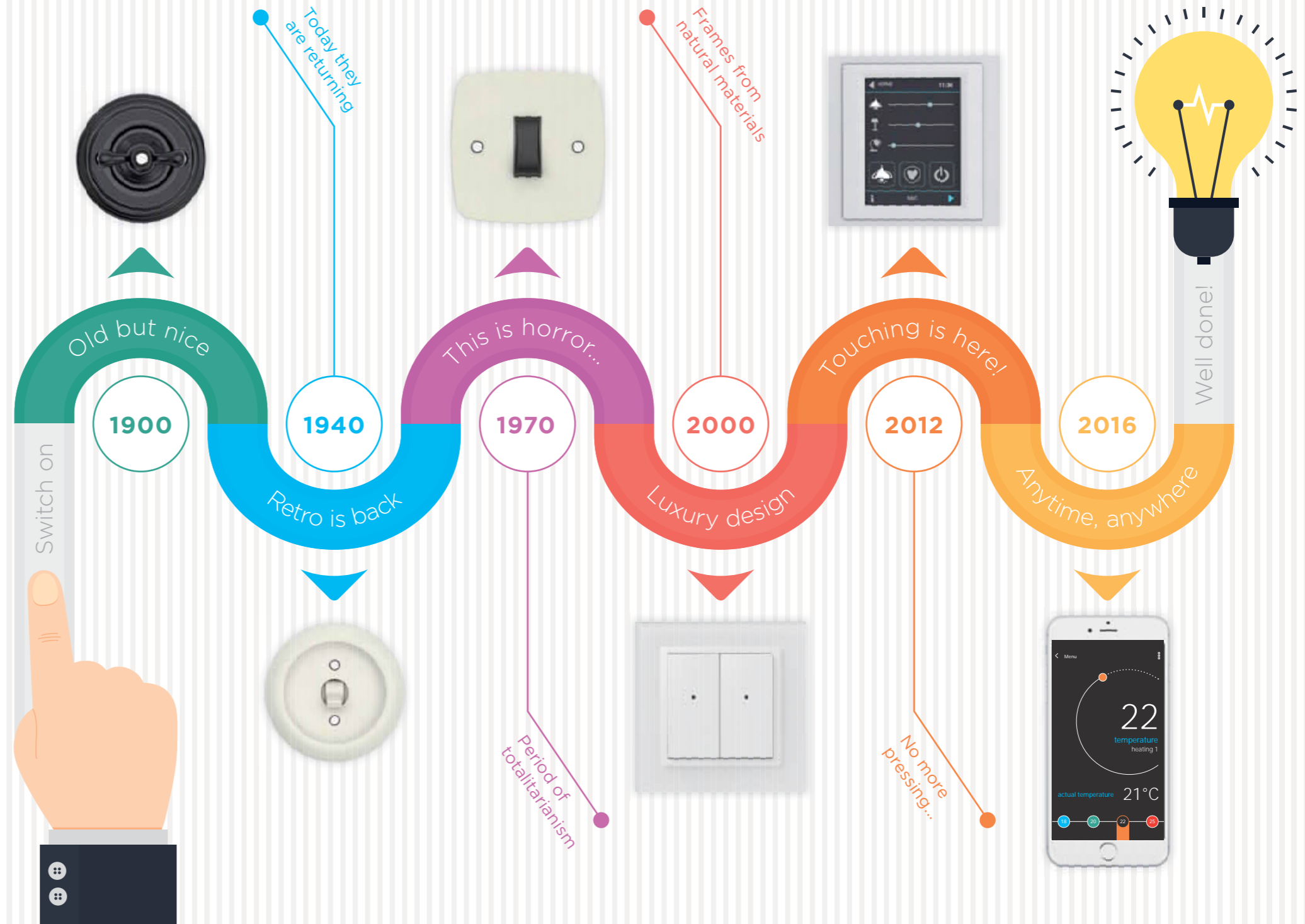- North America
- Europe
- Rest of the world

Future of the Smart Home

In the spirit of robust development, the ever greater need arises for interconnectivity and the integration of technologies in the home, to enable them to understand and communicate with each other. Today, the smart home is far from being just about controlling lights and heating through your telephone. It is about the connection of all sources so that they ultimately provide the user with the desired comfort and economical return from one's investment.

... 2014   2020

	2014	2020
Security and access systems	7.82	27.58
Energy management	5.01	15.76
Entertainment Systems	3.16	7.79
HVAC (heating, fan, air-conditioning)	1.99	4.55
Other	1.80	4.17

Billion €

15 10 5   5 10 15 20 25 30

Expected % growth

| 7.25 | 10.39 | 13.98 | 19.32 | 24.20 |

Evolution
of the switching

The switch – as we know it – has not seen many changes since its invention at the end of the 19th century. We still use it in its many forms today. Its size has remained practically the same, but in the Smart Home, power contacts have been replaced with buttons with low upstroke and safe voltage. Contacts and pressing have been replaced by a capacitive pad or touch display.

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Switch on

Old but nice

1900

Today they are returning

Retro is back

1940

This is horror...

1970

Period of totalitarianism

Luxury design

Frames from natural materials

2000

Touching is here!

2012

No more pressing...

Anytime, anywhere

2016

Well done!

22
temperature
heating 1

actual temperature
21°C

Wireless solutions

The wireless electrical installation iNELS RF is mainly appropriate for existing apartments and houses. The switching and dimming elements are placed directly into the socket, lamp or into the appliance. For controlling, you can select from a wide assortment of controllers, from pocket key alarms, to button switches in modern designs. All the way to control from a smart phone application for comfortable control - whether you are at home or away. The wireless iNELS includes functions dimming lights, timing for shutters and blinds and heat regulation.
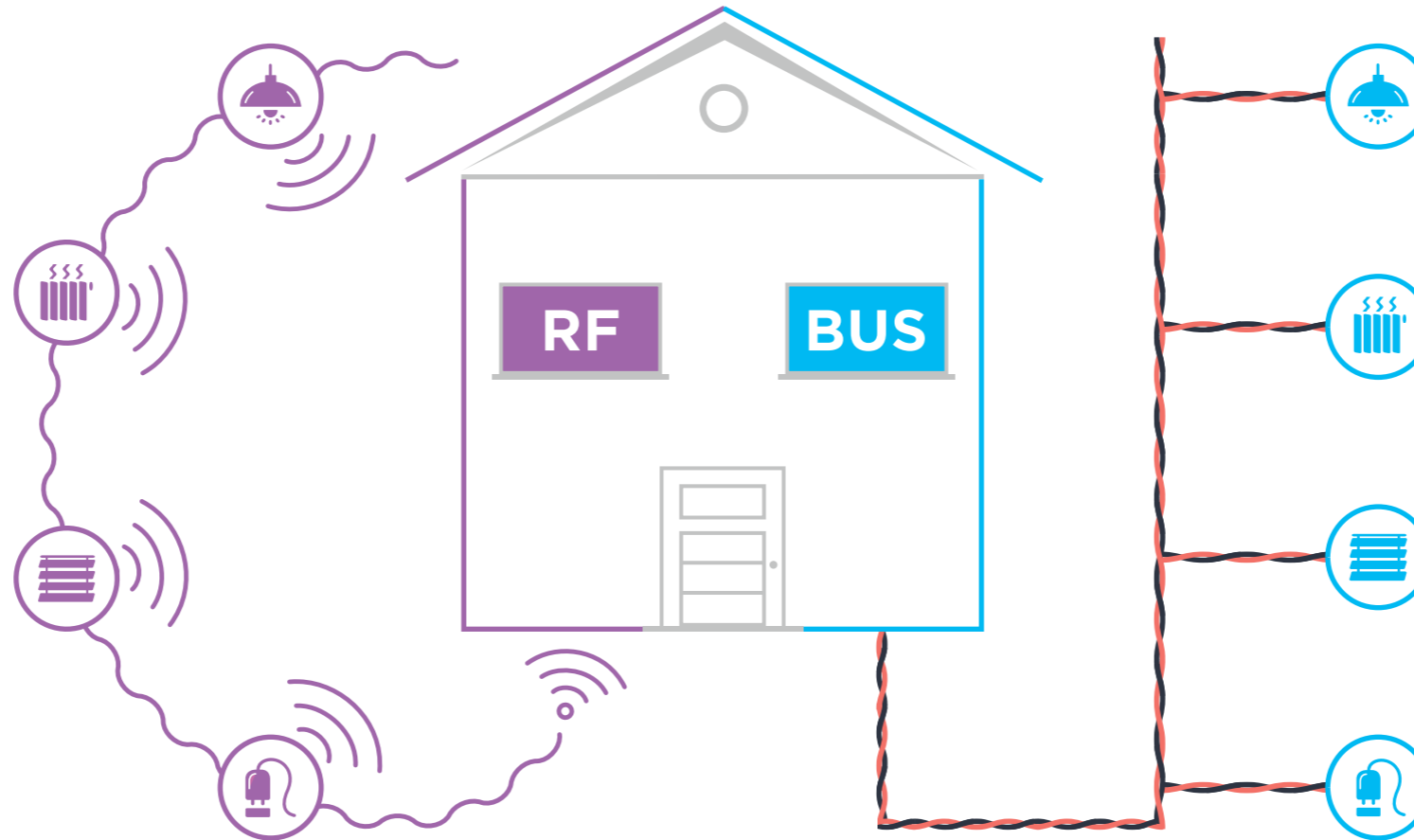
BUS (wire) solutions

The iNELS BUS version on the contrary is designed for new constructions of larger homes and villas to large commercial centers. The basis of this smart electrical installation is the communications data cable, i.e. bus, connecting all sensors, controllers and performance units in the house, which is terminated in the central unit in the switchboard. The advantage of the BUS version is not only in the amount of functions that it brings, but also the option of integrating third-party devices: video cameras, kitchen appliances, solar systems, photo voltaic systems, energy management and much more.

RF **BUS**
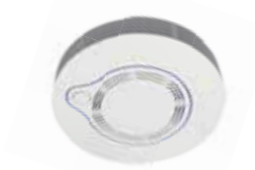
Comparison of systems

The table below shows the individual functions that can be controlled within the wireless or BUS iNELS electrical installation. The main difference is the scope, where in the case of the BUS solution, it is practically unlimited, whereas for the wireless solution, the scope is given by the range of radio waves.

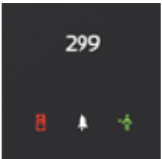|	Wireless	BUS (wire)
Heating	●	●
Roll shutters, blinds	●	●
Dimming the lighting	●	●
Switching appliances	●	●
Measuring energy	●	●
Detectors	●	●
Video cameras	●	●
Video door-phone	●	●
Alarm	●	●
HVAC		●
Kitchen appliances		●
Weather station	●	●
LARA Radio/Intercom	●	●
Access system	●	●
GRMS		●
iNELS touch panel	●	●

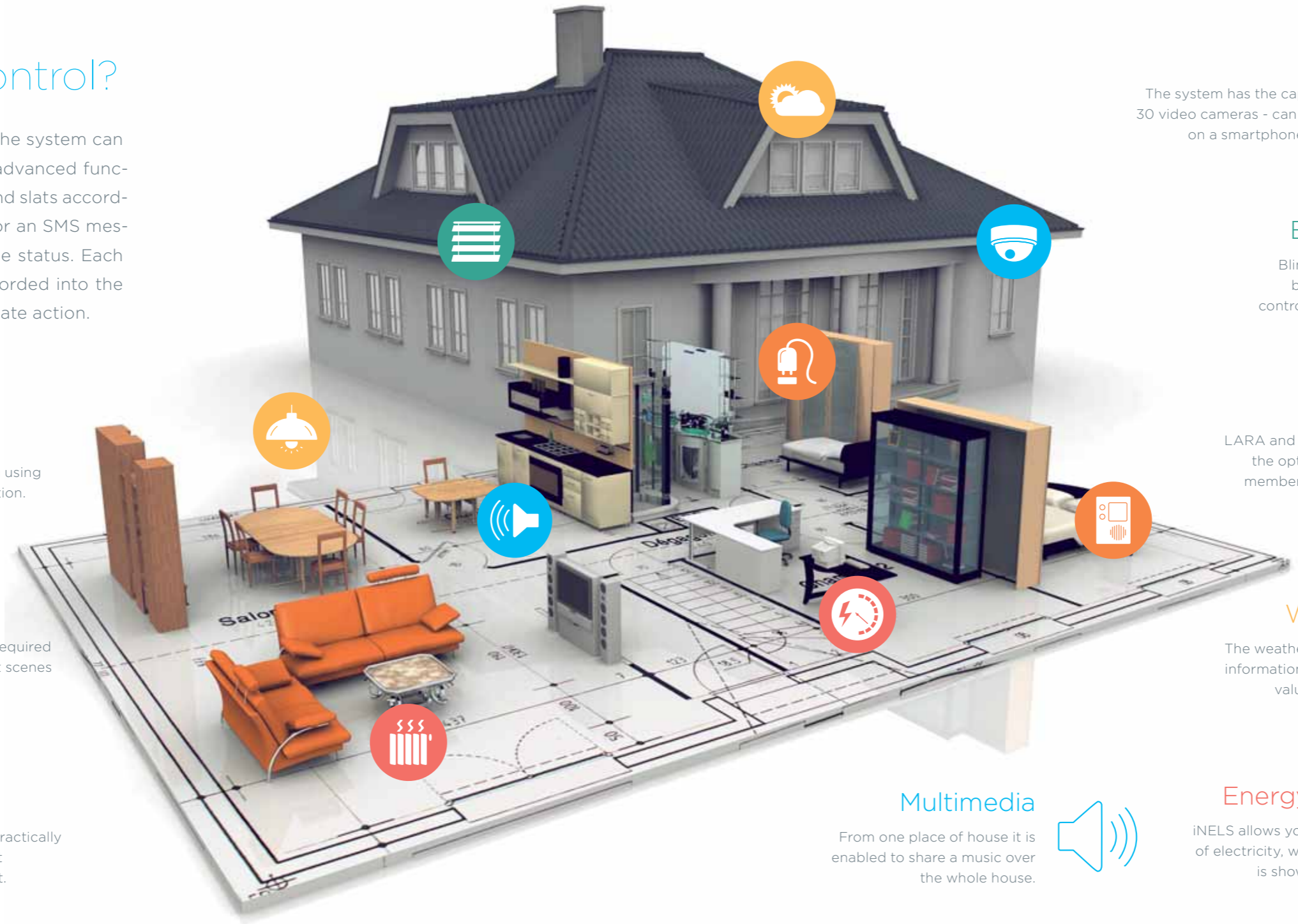|			
Heating	Roll shutters, blinds	Dimming the lighting	Switching appliances
Measuring energy	Detectors	Video cameras	Video door-phone
Alarm	HVAC	Kitchen appliances	Weather station
LARA Radio/Intercom	Access system	GRMS – Guest room management system	iTP – iNELS touch panel

What can I control?

In addition to basic functions, the system can be set up with even the most advanced functions. iNELS can manoeuvre blind slats according to the position of the sun, or an SMS message can be sent to change the status. Each sensor and request can be recorded into the system along with the appropriate action.

Video camera

The system has the capacity for connecting up to 30 video cameras - can be watched in applications on a smartphone or tablet, and even on TV.

Blinds, Shutters

Blinds, gates and awnings can be controlled by any system controller, including applications.

Heating

It is possible to set the temperature in each room using a single button or application.

Intercom

LARA and the iNELS application offer the option of communicating with members of the family in individual rooms of the home.

Lighting

Not only dimming to the required level, but also setting light scenes for every occasion.

Weather station

The weather station not only provides information, but also allows measured values to be used for controlof functions in the home.

Switching

You can switch on or off practically any electric appliance that is connected to the socket.

Multimedia

From one place of house it is enabled to share a music over the whole house.

Energy management

iNELS allows you to measure consumption of electricity, water and gas. Consumption is shown as time units or directly in terms of money.

How can I control iNELS?

It does not matter what you control but what you control it with. You can control units and appliances in many ways and even combine them.

For those more conservative, buttons take the form of switches as you have always been used to. Those often moving around the home and garden will appreciate having the keychaing in their pocket. The touch unit is designed for those who always want to have all buttons in one place – on a 3.5" framed display. For some, a smart phone is an interesting accessory, but for many it is the only controller that does not need to be purchased because they already have one!

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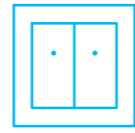
4th button switch
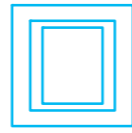
Touch unit

Keychaing

Glass switch

Smartphone app

iTP – iNELS Touch panel

iNELS
Home Control

The iNELS intelligent electrical installation system controls everything from heating regulation and air-conditioning, lighting, blinds and other appliances to securing your home and protecting your property. With iNELS, you always keep an eye on your home. Anytime, wherever... All technologies are controlled directly from this application, whether you are connected in a home network Wi-Fi or you are using mobile data while on the go.

Available on:

www.inels.com

Energy management

Video door-phone

Main menu

Lights

Detectors

Heating

Time schedule

Video cameras

LARA... Mediaplayer in the switch

Can you imagine that in just a switch, radio and MP3s can play, or that through this switch, you can talk to your roommates or a visitor at the door?

Yes, it is possible. We were able to incorporate all these functions into a single device the size of a switch. Along with speakers in the same design, you thus gain high-speed, quality sound in the bathroom or kitchen, or perhaps the hallway or children's rooms.

LARA Configurator

Configure your LARA comfortably on the Web configurator. In the configurator, you can select from countless options of connection, size and design.

lara.inels.com

RADIO
Internet radio stations in the best quality.

MUSIC
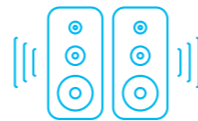Listen to your favorite songs from shared storage or a smartphone.

VIDEO DOOR-PHONE
In combination with the door communicator, you will see or hear what or who is standing outside your door.
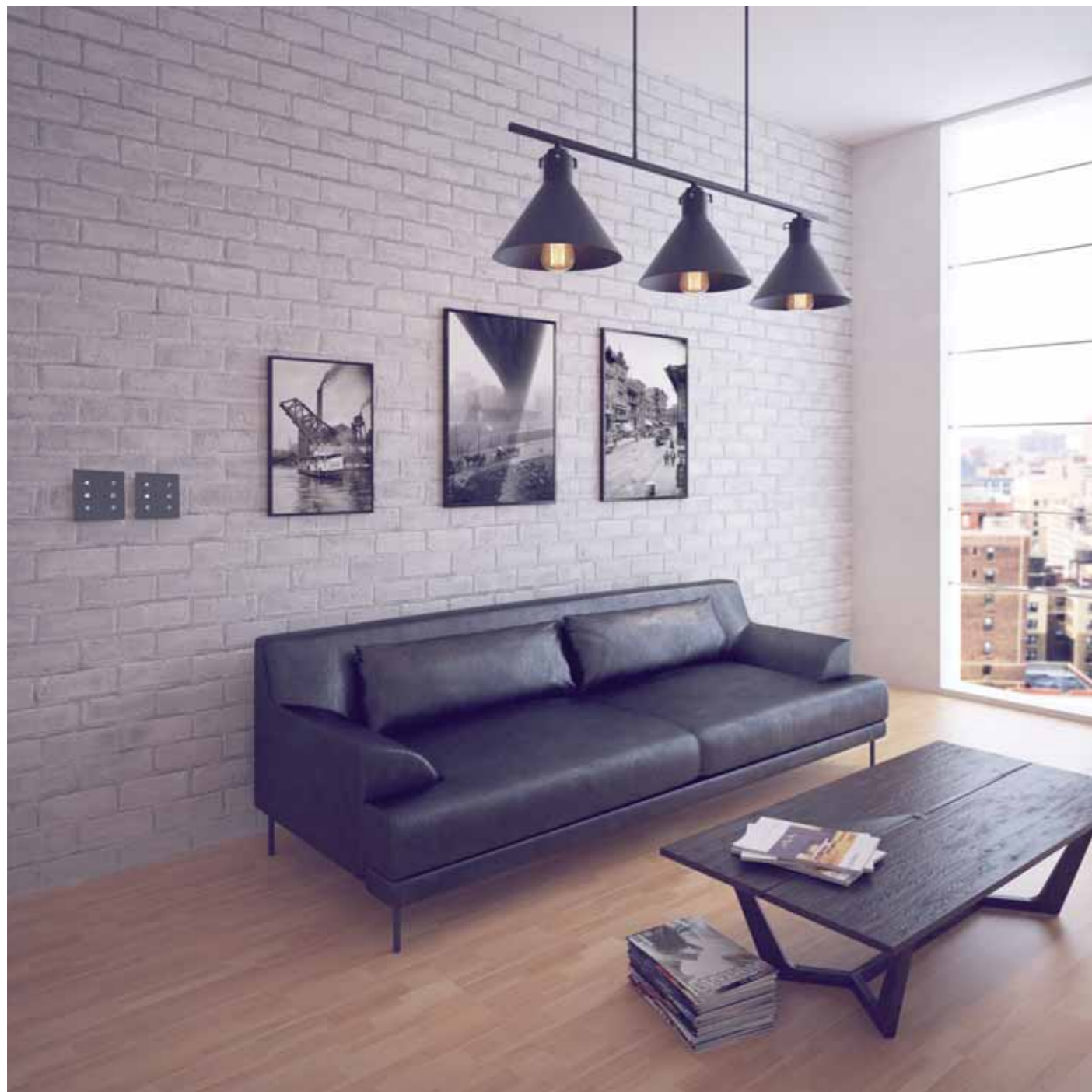
INTERCOM
Communicate throughout the home with all your family members.

AUDIO ZONE
Music player within the system iNELS Multimedia.

Exclusive glass switch

Wall-mounted glass controllers with touch control of the GSB series are a design element in the iNELS unit with elegant and pleasant control. The touch switches are produced from special tempered glass in black or white, and as opposed to classic switches, they offer savings of space. They are supplied in three variants having four, six or eight buttons. The GSB can also be used not only to switch on the light but also to dim it, or control shading or light scenes.

The controller loaded with functions has a light intensity sensor available for controlling lighting in the room or a blue button backlight, appropriate also for orientation lighting, and a heat sensor for heating regulation. A button press can be signaled by vibration, audio tone, and an appliance status signal is also integrated into controllers using red or green LED diodes.
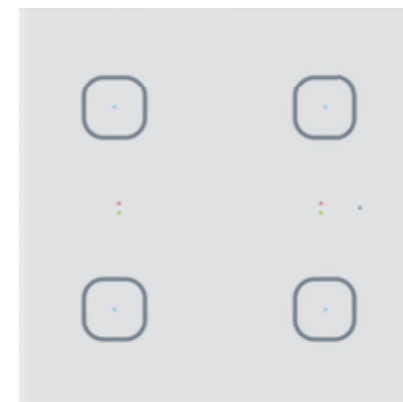
4 buttons

6 buttons

8 buttons

APARTMENT

Wireless installation in an existing apartment

Owners of existing apartments and houses in which electrical installations already exist need not worry. We have prepared for them an iNELS wireless version – RF Control. As the name implies, it functions wirelessly, so there is no need to install or rearrange cabling. There is truly little in the way of structural modifications, only depending on the original electrical installation.
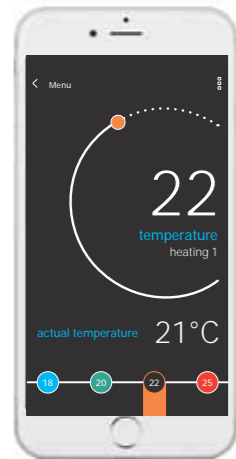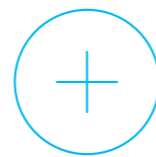
Temperature control
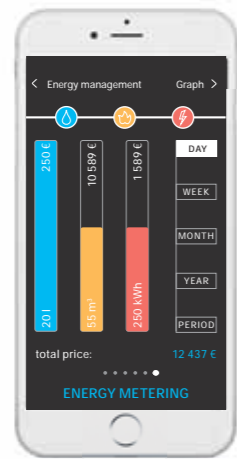
Energy management

No demolition

Flexibility

Expandable

Wall-mounted controllers

The high versatility of wireless switches in both classic design and in natural materials such as wood, glass, metal or stone.

Control touch unit

Wireless touch unit RF Touch is a central unit to control heating, switch home appliances and devices, dim lighting, control shutters.

Keychain

The wireless key alarm enables control of appliances, barriers and gates. It can control up to four independent devices and switch scenes.

iNELS Home Control – Apps

Via the application iHC, you can control lighting, blinds, heating, and video cameras but also run the TV, play music, control air-conditioning, etc.

VILLA

When technologies understood each other!

For larger houses and villas, we recommend the iNELS BUS system. The advantage is not only in the amount of functions that the bus brings, but also the option of integrating third-party devices: video cameras, kitchen appliances, devices for heating, air-conditioning, heat pumps, solar systems, photo voltaic systems, energy management and much more.

Remote monitoring

Savings

Security

iTP – iNELS Touch panel

Glass wall controller

Wall-mounted glass controllers with touch control made from specially tempered glass in white or smoke variant enhance the overall impression of the interior.

Control unit

It is equipped with three screens for controlling temperature, for selecting the color of the RGB light source, and for controlling up to twelve devices or scenes.

Lara Intercom

Up to 64 units of LARA Intercom can be connected.Newly integrated function of the video door-phone bringing image and sound by means of the IP intercom.
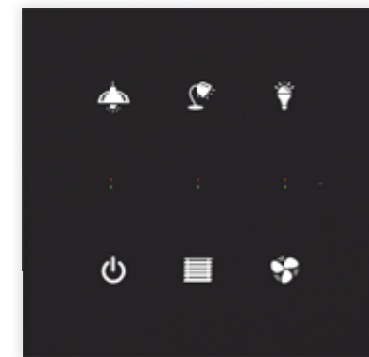

iTP – iNELS Touch panel

Versatile touch control panel is usable for full household control, compatible with wireless and Bus wiring.

GRMS

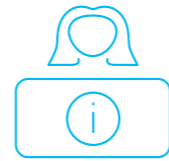## First controller that guests can understand well!

iNELS in the form of GRMS (Guest Room Management System) enables not only control of lighting, air-conditioning or room access, but also control of music or television. All of this occurs from the central touch panel in designs of clear plastic, the natural materials wood, metal, stone or luxurious glass touch panels. A standard service we offer customers is customization – a description of symbols applied by laser onto plastic or glass controllers based on specification.

Do Not Disturb

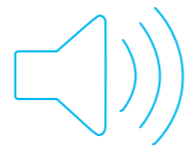
Energy saver
(Master Off)

Multimedia

Combined controller

Multifunctional touch panel

Entrance (door) panel

Features a Mifare reader, Deesfire cards, a ringer button and status "Do not disturb / Make Up Room". The integrated relay enables opening of the door.

Combined controller

Luxurious glass switch with 4, 6 or 8 capacity buttons located in a horizontal or vertical position. Feedback sound and vibration response to touch.

Multifunctional touch panel

Enables control of lights, HVAC, blinds, Master Off and multimedia within the framework of the system Multimedia. It comes equipped with a 3.5" TFT display.

LARA, Radio and Music player

LARA lets you play streaming Internet radio and music from your central storage. You can control it from the front panel, the multifunction panel or a smartphone.

HOTEL RETROFIT

## How to simply offer customers much greater comfort

iNELS in the form of HRESK (wireless hotel room solution) is designed for existing hotels where the wiring is already installed. With wireless communication with devices (sensors and actuators), you can upgrade your electrical systems to the next level in a short period of time and without unnecessary refurbishment.

Comfort
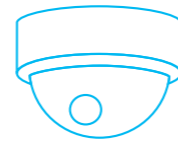
Monitoring
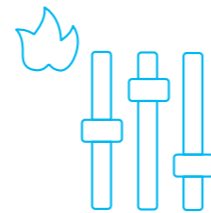
Regulation

Thermoregulator

Door bell

Smart card holder

Elegant glass touch control buttons with colour coded buttons and symbols that can be freely customised according to customer requirements. Controllers are available in black and white.

Door bell

The narrow base and battery power supply enables the location of the doorbell to wherever it is needed. The frame portfolio offers various designs in natural materials such as wood, glass, metal or stone.

Motion detector

The motion detector in combination with the main switch unit, among other things includes automatic light control. Its battery powered which allows you to place it anywhere.

Thermoregulator

It is designed for central control of heating and cooling and operates in three gears. Manufactured in varied colour design, the LOGUS90 perfectly fits into each hotel room.

COMMERCIAL

Efficient use of technologies and energy

iNELS finds more and more applications in the wide sphere of commercial buildings – stores, offices, restaurants, hospitals and also in historical buildings or manufacturing halls.
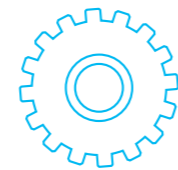
Though it is most frequently used to control lighting and HVAC (Heating–Ventilation–Air-Conditioning), in references you will find iNELS projects using an access system, shading control, a video camera security system or distribution of audio/video.

BMS – Building management system

CARD

Access system

Automation

Connection of BMS

Future office

iNELS includes a mode/solution for a modern and functional solution of office buildings that focuses on energy savings, work efficiency and the working environment.

Gastro

In dining facilities, major emphasis is placed on light scenes and on optimum air quality, where iNELS can efficiently control heat, cooling and recuperation all at once.

Buildings

In large buildings, horizontal control of individual offices or rooms is connected through the Connection Server to the building's vertical system, including connection to BMS.


Lighting control

iNELS includes units for control of DALI ballasts, and can thus control up to 4,000 lights. We can dim various light loads including LED sources and RGB strips.

How to proceed with the proposal?

By the design you must know what you have in your property, or you will have. We have prepared a checklist that you can download in a format PDF. Fill in as much information as you know and send it to our email or postal address.
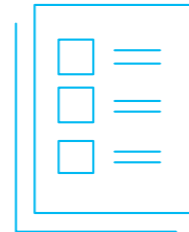
You can find interactive price quote HERE!

www.inels.com/checklist

We advise you online

Support ELKO EP

Live chat
Ask us anything

Support ELKO EP:
Good day, may I help you?

Visitor 1:
Hello, I am searching for inspiration for our existing family home. I still can't decided whether to choose a wired or wireless installation. I would like to see the options for resolving this with my own two eyes. Do you happen to have a showroom in Prague?

Support ELKO EP:
Yes we do. You can find the showroom iNELS CAFÉ at Prague 8 - Karlín. Rohanské nábřeží 671/15.

Visitor 1:
Thank you.

Support ELKO EP:
You're welcome! Have a nice day!

Powered by Smartupp

Send

24 hour — Customer service

Support **7** days a week

Tips / Advice / Help **12** months

Facts and Stats

40 % CZECH

30 % EXPORT

30 % BRANCHES

ANNUAL TURNOVER **20** Mil. EUR

2nd position in Europe

16 BRANCHES OVER THE WORLD

70 EXPORTING COUNTRIES

240 EMPLOYEES

5 000 iNELS INSTALLATION

12 000 000 MANUFACTURED PRODUCTS

WE ARE

DEVELOPERS

PRODUCERS

SUPPORT

SELLERS

ELKO EP Holding

USA

Russia

Ukraine

Poland

Czech Republic
(Headquarters)

Germany

Austria

Hungary

Spain

Croatia

Slovakia

Turkey

Iran

Vietnam

India

UAE

Saudi Arabia

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