

WE MAKE WORLD
SMARTER



www.elkoep.com



EDITORIAL



Jiří Konečný

Founder and CEO of the ELKO EP HOLDING

When I was twenty and freshly trained in electronics, and I engineered my first time relay, I had no idea that today I would be controlling it from a smartphone apps. The dynamic development of IT technologies as well as Internet of Things also permeated a bit later in controlling electrical installations, creating a whole new field called the “Smart Home“. What separates us from the competition is not only our flexibility and ready approach to custom modifications, but also the desire to “Always something more!“ We invest a substantial part from this into developing systems of intelligent electri-

cal installations. Our iNELS, which either wirelessly or via bus covers now controls several thousand buildings throughout the world. In a few years of hard work of the entire development department we have elevated iNELS to a complex system involving not only the switching of appliances, dimming of lights or control of blinds, but also control of security, HVAC, the camera surveillance system, audio and video distribution - the list goes on... So right from your smart phone, you can control the washing or coffee machine, the A/C or home theater system.





We are a traditional and at the same time innovative purely Czech manufacturer of electronic devices and we have been your partner in the field of electrical installations for 28 years. Thanks to many years of experience and operation on the electrical market, we have become specialists in electronic modular devices - relays, of which we already produce more than 200 types. Our own production, modern devices, development and research center - all these allows us to direct the development towards the most popular technologies of today, the smart wiring system iNELS. Thanks to the fact that everything is developed and manufactured so-called „in-house“, you can be sure that everything works as it should.

Our technicians, who carry out regular training of partners, are also helpful to you - whether you are starting out or you have advanced successfully in the field. To be always close to our customers - whether with technical support or a well-stocked warehouse, you will find our branches in 15 branches around the world. In addition, we have steadfast customers in more than 70 countries around the world, and more are constantly being added as the demand for our products grows.

We are honoured that you can be with us.

A stylized, handwritten signature in black ink, located in the bottom right corner of the page.

HISTORIE SPOLEČNOSTI



1993

Rožtění,
garage, 20 m²

Product:
switching power units for electrical heating

Number of employees: 3

Technology:
manual mounting and soldering



1995

Rožtění,
a former elementary school, 200 m²

Product:
first modular time relay

Number of employees: 15

Technology:
first Semi-Automatic SMD Pick&Place Machine, 20% share of SMD components



2001

Holešov,
the former headquarter of LOANA, 1000 m²

Product:
complete range of monitoring relays

Number of employees: 82

Technology:
2 x SMD Pick&Place Machines, soldering line, reflow



2015

Holešov,
new buildings on the site of a former sugar factory, more than 8000 m²

Product:
Wireless and bus system iNELS

Number of employees: 170

Technology:
2 fully automatic SMD lines, lead-free soldering, laser printer, automated testing, own lab



2018

Holešov,
extension of new expedition

Product:
devices for IoT: iNELS Air Smart pole

Number of employees: 240

Technology:
optical tester AOI (automatic optical inspection), marking laser for warehouse, Shoe cover machine



2020

Holešov,
product innovation, strengthening production

Product:
rounded corners for glass controllers, the smallest central unit in the world - miniCU

Number of employees: 330

Technology:
extension of robot machines for production

Facts and Stats



**2nd position
in Europe**
with timers/time relays

9

BRANCHES

330

EMPLOYEES

6

FRANCHISES

15 000

INELS INSTALLATION

70

EXPORTING COUNTRIES

12 000 000

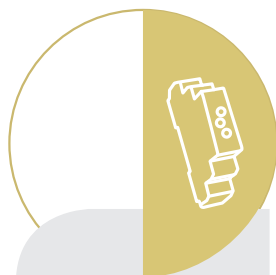
MANUFACTURED PRODUCTS

WE ARE



DEVELOPERS

In a state-of-the-art research centre, more than 30 engineers develop new products or expand the functionality of existing ones.



PRODUCERS

We produce everything “at home”, in Holešov. In clean and modern areas, using two fully automated SMD lines, with a two-shift operation.



SUPPORT

We are available 24 hours a day, 7 days a week, 360 days a year. We help you with technologies, with installations, with logistics. And with whatever you need.



SELLERS

The personal approach of more than 70 sales representatives within the ELKO EP holding provides perfect service to our partners and customers.

MILESTONES

1993

Jiri Konecny started business in this field, in his garage. First product, leaving the garage, was switching power units for electrical heating.



1997

The company ELKO EP Ltd. was founded.

The company becomes the practical dominant producer of modular devices in the Czech Republic.



2002

First branch office **ELKO EP Slovakia.** Export was started.



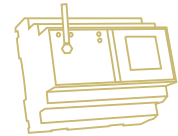
2005

New production and office spaces in Holešov - Všetuly. New branch offices **ELKO EP Poland and ELKO EP Hungary.**



2006

Intelligent electro-installation **iNELS BUS** launched to the market.



2012

The company of the year in Zlín region / 2nd place in The company of the CZ.



2014

Awards for **LARA** and **Smart RF Box.** Further development of our products is ongoing.



2015

Wireless system **iNELS** scores – winning the prestigious award **Visionary 2015.** New branch **ELKO EP Saudi** in Riyadh.



2016

Own test lab opened. Award for **iNELS Future office.**



2017

Introducing the product line **IoT iNELS Air.** **iNELS Smart City** concept launched.



2007

Establishing a branch office **ELKO EP RUS LLC**. Expansion of the company with Research and Development and a new hall. Obtaining UL certificate for USA.



2008

Intelligent electro-installation **iNELS RF** (Wireless control) launched to the market. Exclusive distributor of ETI.



2009

Branch office **ELKO EP Ukraine**. Exclusive distributor of sockets and switches **LOGUS⁹⁰**.



2010

iNELS Multimedia launched to the market. Awards of "Innovation of the Year" for **RF Touch**.



2011

"Gold Amper" award for **RF Touch** / New warehouse. Establishing **ELKO Lighting Ltd**.



2018

Establishing a branch office **ELKO EP Baltic** / Integration of **iNELS BMS** with Iridium-Niagara.



2019

Smart pole as the basic pillar of the **Smart City**.



2020

The smallest central unit in the world was manufactured - **miniCU** (CU3-07).



2021

RF Key key fob innovation with 4 and 6 buttons and a new elegant design of **RFGB** controllers.



2022

Product innovation **RF Touch** and heating head **RFATV-2**.





STEPS TOWARDS AUTOMATION, QUALITY AND EFFICIENCY

Since its establishment in 1993, ELKO EP has been a significant innovator in the field of development and production of electronic devices and solutions for home, office and industrial automation. It launches dozens of improvements every year - and today it is one of the European leaders in the field and the largest Czech exporters.

In addition, unlike many of its competitors, it has maintained its production and development facilities under one roof throughout its existence. Today, directly at the company's headquarters in Holešov, it produces tens of millions of products every year, which it supplies to order to the world's leading companies or directly to end customers.

Today, it has branches in 15 countries around the world, and the company and its owner have been awarded many times for the precision of their production, innovative approach to development and business results - Visionary of the Year, Global Exporter, Entrepreneur of the Year or Czech SuperBrands in 2019, 2020 and 2021.



Made in
Czech Republic



5 years warranty



Own development



Manufacturer
support



Accredited testing
laboratory





ATTAINED AWARDS



Jiri Konecny
Entrepreneur of
the year



Company ranked
among the 100 best
Czech companies



Vodafone
Company of the
year 2012



Jiri Konecny
Personality
of Smart city
2017



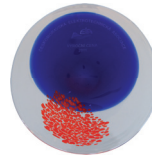
Czech Business
Superbrands
2019 and 2020



Visionary 2015
award For Energy
Managements



Golden Amper
for "iNELS
wireless"



ELA award
for "RF
Touch"



ELA award for
"LARA"



Czech Business
Superbrands
AWARD
2021

Membership



Custom Electronic Design and Association

Custom Electronic Design and Association is an international trade organization for residential automation technology with more than 3,500 member companies worldwide. It was founded in the USA in 1989 and now CEDIA is the world's leading authority in the field.

www.cedia.co.uk



The Electrical and Electronic Industry

The Electrical and Electronic Industry in the Czech Republic is a business and employer association that brings together legal and individual persons with similar product orientation or business interests. It was founded in 1992 and Jiří Konečný is a member of the Board of Directors.

www.electroindustry.cz



R&D overall view



Manufacturing hall



Testing lab



Finalization and dispatch



TESTING AND CERTIFICATION

The company ELKO EP has had its own testing laboratory for more than 15 years, which is certified and accredited according to EN ISO / IEC 17025: 2018. During this time, the laboratory has gained experience in performing development tests and tests for conformity assessment not only of our own products, but also of many other electrical equipment used in industrial processes and in households.

In 2016, the laboratory underwent a major reconstruction in an effort to expand the portfolio of tests performed and increase its operating capacity. The laboratory enables the performance of tests in the field of electromagnetic compatibility, electrical safety tests, durability tests and specific functional tests. We are not keeping pace with IEC / EN standards - we are one step ahead. We design and test products to withstand the harsh conditions from Siberian frosts to the harsh temperatures in the Middle East.

ISO Certification



ISO9001
Production and development quality management system



ISO14001
Environmental management system



ISO17025
Testing and calibration laboratories

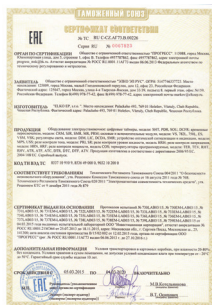


CE



CE
Declaration
of conformity

ERC



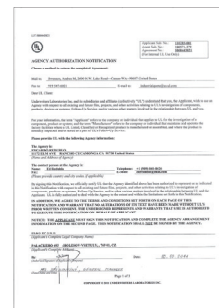
EURASIAN CONFORMITY
Russia, Belarus,
Kazakhstan, Armenia

FCC



FCC
USA

UL US



UNDERWRITERS
LABORATORIES
USA





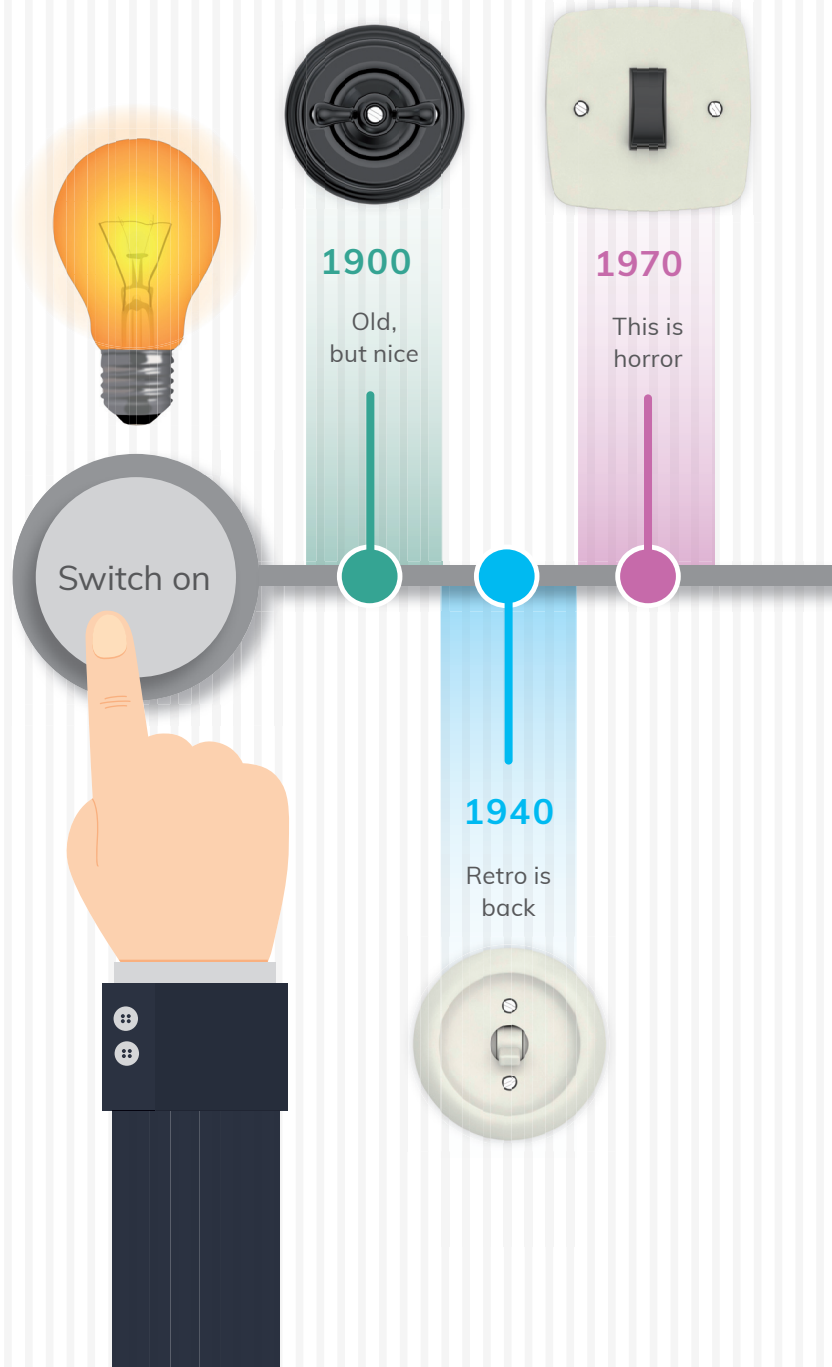
EVOLUTION OF THE SWITCH

Einstein would be surprised ...

While its location has not changed much since the end of the 19th century, its functions are virtually limitless.

Power contacts are replaced by buttons with low upstroke and safe voltage. Wires disappeared and pressure has been replaced by capacitive pads or a touch screen.

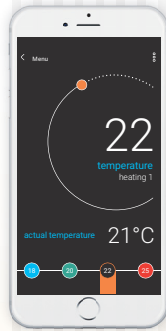
Today we already know well what will come next.





2010

Touching differently



2016

Smartphone controller



2020

Voice control



2000

Modern trend



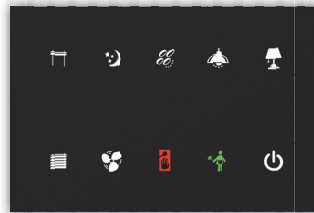
2012

Touch solution



2019

Glass design



2021

Unknown options



PRODUCT GROUPS



Timers / Relays



Protection monitoring relays



iNELS Air - IoT devices



Wireless electroinstallation (RF)



Wired electroinstallation (BUS)



Energy management



Wireless Retrofit Hotel (HRESK)



Hospitality Hotel (GRMS)



Building Management System (BMS)



Lighting control



Multimedia

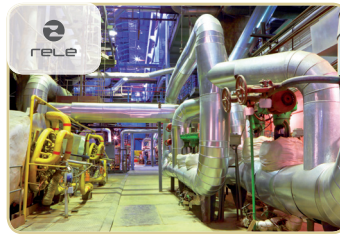


Sockets & outlets

SOLUTIONS



Residential



Industry



Smart kits



Home automation



Smart home



Smart building



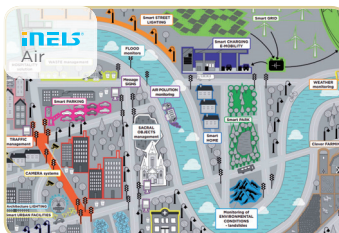
Future office



Hotel systems



Commercial



Smart City



Smart Pole



Smart Agriculture



INDUSTRY

In industry, RELAYS are an essential part of every electrical installation and machine. Our relays offers a full-fledged industrial automation solution. In addition, for example, a new range of monitoring relays for monitoring machines and equipment in production they are ready to measure quantities with an accuracy of up to 2%, which sets them apart from the cheaper competition. RELAYS are designed to withstand the demanding operating conditions in industry and can be used in a variety of territories.



Timers



Auxiliary relays



Frequency relays



Voltage relays



Current relays



Speed sensing



Reverse power relays



Power factor relays



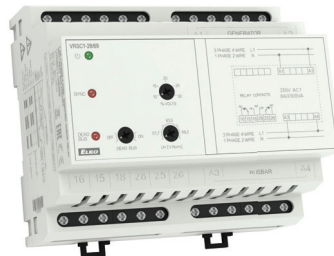
Synchro-check relays



Thermostats



Under and over voltage monitoring relay



Synchro-check monitoring relays of two power supply systems



Current monitoring relay



Multifunctional time relay





MPS-1
1
2
3

START DELAY
PROBES DELAY
FUNC.L1
L1
FUNC.L2
L2
FUNC.L3
L3
FUNC.L4
L4
FUNC.L5
L5
FUNC.L6
L6

OUTPUT L1 15 18
OUTPUT L2 25 28
OUTPUT L3 35 38
OUTPUT L4 45 48
OUTPUT L5 55 58
OUTPUT L6 65 68

RD [kg]
ID [s]

16 15 18 28 25 26

16

15 16 18

16 16 15 15 18 18

16 15 18 28 25 26

18 18

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16 16 15 15 18 18

16 16 15 15 18 18

16 16 15 15 18 18

A1 A2 N L1 L2 L3

A1 A2 A1+ A2+

L1 L2 L3

L2 L3

T1 T1

A1 A2

C D H

L1 L2 L3 L4 L5 L6 C

A1 A2

+ 1 2 3 4 5 6
EXT. LED OUTPUT

ACTV OFF
MOTOR OFF
Output
RESET

HRH-13
Un
L1
L2
L3
L4
L5
L6

HRH-15
Un
L1
L2
L3
L4
L5
L6

HRH-16
Un
L1
L2
L3
L4
L5
L6

HRN-SU/S5
Un
L1
L2
L3
L4
L5
L6

TER-3H
Un
L1
L2
L3
L4
L5
L6

HRH-8
Un
L1
L2
L3
L4
L5
L6

HRH-9/UNI
Un
L1
L2
L3
L4
L5
L6

Un
START DELAY
PROBES DELAY
FUNC.L1
L1
FUNC.L2
L2
FUNC.L3
L3

MAN. SENS 4-6
PROBE CAL.
FUNC.L4
L4
FUNC.L5
L5
FUNC.L6
L6

100k
50k
150k
200k
CAL

Function
1234
1256
1357
ON Delay
5678
3478
2468
OFF Delay

RH [kQ]
TH [s]

Un
START DELAY
PROBES DELAY
MAN. SENS 4-6
PROBE CAL.

ELKO

16 16 15 15 18 18

16 16 15 15 18 18

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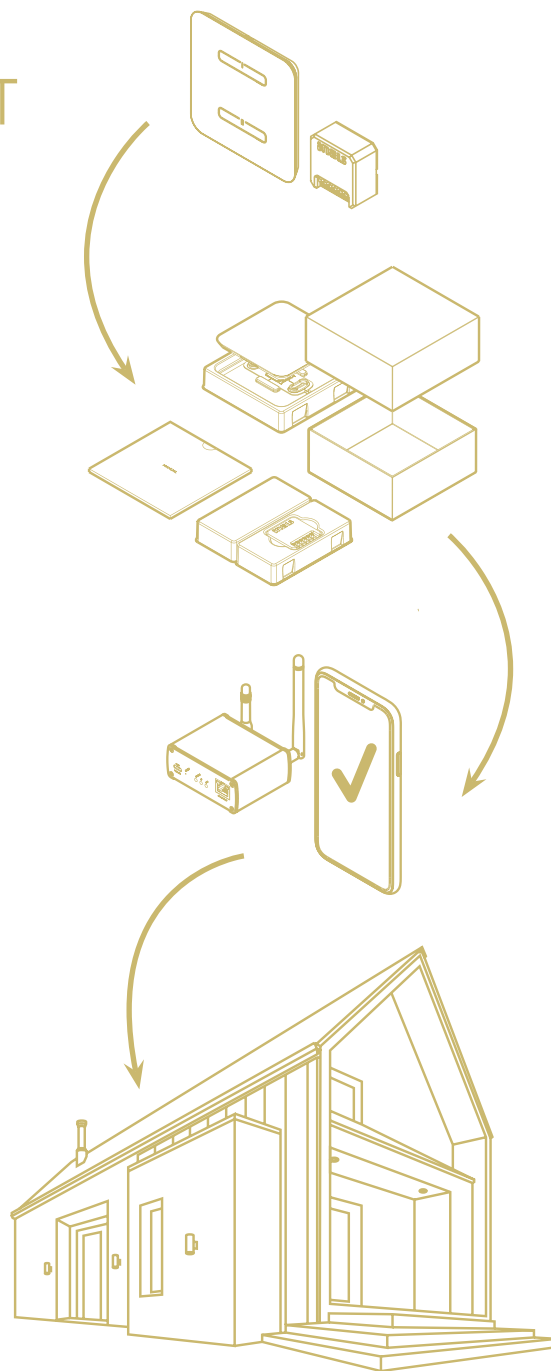


FROM A SINGLE COMPONENT TO A SMART HOUSE

Installation that grows with you

Our products are not available to the ordinary person, on the contrary. They are perfectly modular - you don't have to start with a complete electrical installation, but feel free to choose from small useful little things to complete house automation. From relays, key fobs, lights, dimmers or touch panels. You will find our products in most good electrical equipment stores. In newly designed, clean white boxes with ELKO EP inscriptions. With the certainty of a well-manufactured product, guaranteed technological level and a long warranty.

Do you know that they work even without wiring?





Double box



Single box





SMART FLAT & APARTMENT

Wireless electroinstallation

Why choose „wireless“? Because you get unlimited possibilities that you will never experience with a classic electrical installation.

Savings comfort and safety - everything you expect from a Smart Home solution. But in the case of wireless wiring, you have one more major advantage. You do not have to undertake any extensive construction modifications whenever you decide on any further change. You just move the controls and switches; you just buy new functions or products.

You will get a household that will always keep up with new trends.



RGB dimmer



Shutters switching and dimming



Key fob



Touch controller colour variations



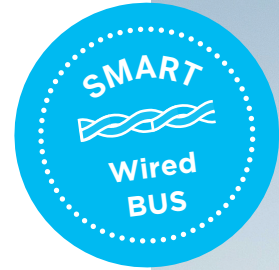
Heating head







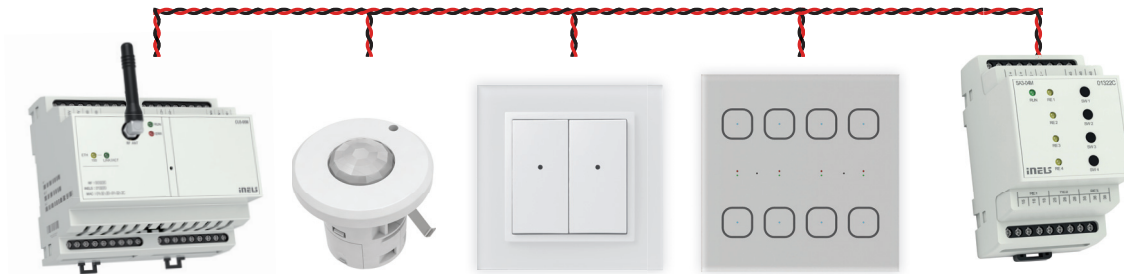
HOUSE & VILLA



Wired (BUS) electroinstallation

Why choose the bus variant? It is simple, because you will be reimbursed several times over time, and it will bring a lot of extra comfort.

The system is incredibly modular and flexible. Compared to conventional electrical installation, it brings unlimited possibilities of savings. It has been proven to save up to half of energy expenditure and half of adverse environmental impacts. It unquestionably saves a load of nerves thanks to smoke detectors, flood probes or motion sensors.



Central unit

Combined motion, temperature, humidity and light intensity detector

Wall controller

Glass wall controller

Switching actuator





8:31

Devices



Lights
Devices: 6



Switching On/Off
Devices: 4



Shutters
Devices: 6



Heating
Devices: 2



Air condition
Recuperation
Devices: 6



Energy
measurement
Devices: 4



Cameras
Devices: 6



Scene
Devices: 2



Dashboard



Rooms



Devices



Account



HOTEL RETROFITS FOR RECONSTRUCTION

For **EXISTING** hotel rooms

Do you need to modernize the hotel? There is nothing easier than equipping it with smart technologies. Quick, easy, without drilling or excavating.

The HRESK wireless solution uses communication via a wireless signal. The controls can be mounted anywhere without any cables directly on the furniture, glass wall or in the luminaire. Screw a wireless LED bulb directly into the luminaire, which you can regulate using wall controls. The system can also be extended with wireless motion detectors, window or door detectors or temperature controllers. By deploying the system, you will achieve economical operation of the hotel room and the guest will feel perfect comfort. An extra star for you hotel.



Switching/ Dimming



LED dimmable



Window / door detector



Motion detector



Temperature controller



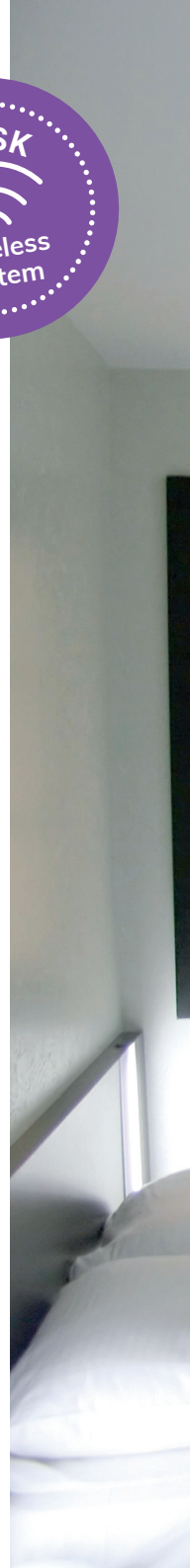
Fancoil control

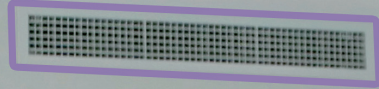


Wireless controller



Card reader with indication







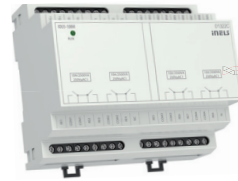
LUXURIOUS SOLUTIONS FOR EVERY HOTEL

For **NEW** hotel rooms

If you are preparing a new hotel, you have to reckon with smart technologies. Today they are no longer above standard, but an absolute necessity. Let your guests feel really good about you. From opening the door via the hotel's RFID card or by phone, to setting the atmosphere in the room with an elegant touch panel with an intuitive interface - control the temperature, lighting, shading or music scenes. All these in an attractive glass design in black or white. Because we are primary manufacturers, we offer you customized design modifications in the interior style.



miniCU
Central unit



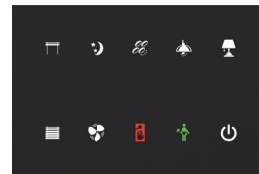
Input / output unit



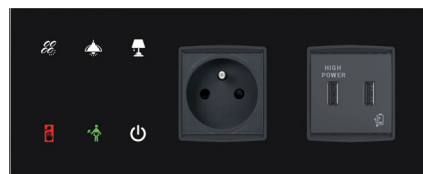
Glass card reader



4" touch panel



Glass touch panel



Glass touch panel with sockets



ACCESS



AUDIO



VIDEO



Temper.
control



Electric
control



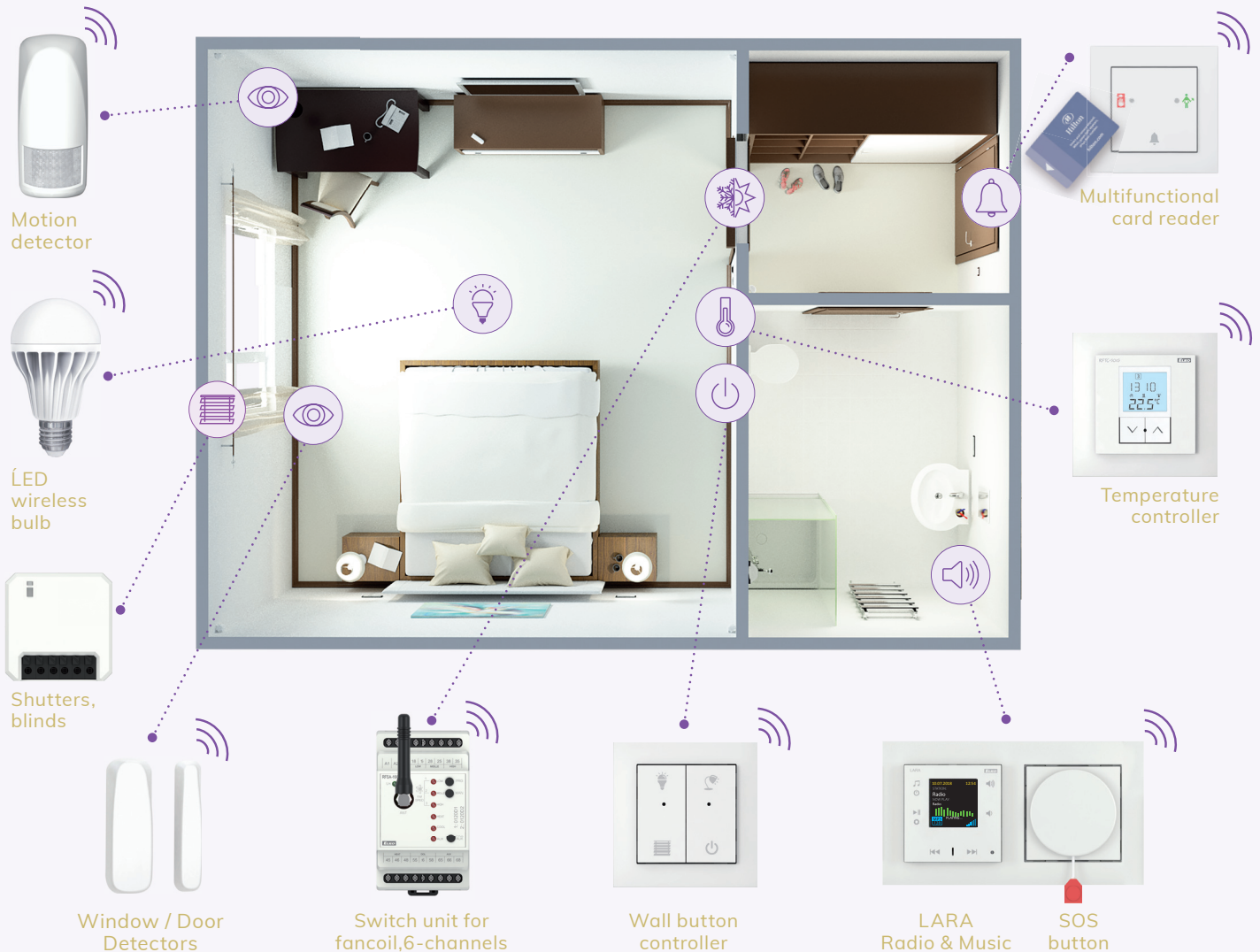
iNELS
GRMS





Wireless plastic option EXISTING hotel room

Type	Focus on	Communication	Controllers material	Hotel stars level
HRESK	Existing hotel	Wireless	Plastic	☆☆☆ & ☆☆☆☆





BUS (wired) glass option
NEW hotel room

Type	Focus on	Communication	Controllers material	Hotel stars level
GRMS	New hotel	Wired	Glass	★★★★★ & ★★★★★★





BUILDING MANAGEMENT SYSTEM

When technologies work together

It is an integral part of every modern building. In addition to managing it, it also integrates various technologies in the building into one whole system. Contemporary buildings emphasize energy consumption, safety, a healthy working environment, quality and fast services, and maximise the use of IT technologies and automatic operation. This can only be guaranteed by thoroughly connecting the sensors and actuators of the various systems. iNELS uses BMS Niagara and Flowbox, which allows the integration described above.



FLOWBOX

niagara
framework®



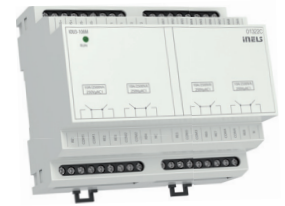
Mini server Flowbox



Switching actuator,
(22-channels)



Universal dimmer,
(6-channels)



Input/output unit



Lights



IoT



Environmentally friendly (Green Building)



HVAC



Conference and meeting rooms booking



Energy management



Software, applications, platforms



Healthy park



RTLS (Real-Time Location System)



Security



Smart street lighting



Payment terminal



Waste management



Information



Parking



EV Charging





INTERNET OF THINGS

Precision agriculture

We cannot affect the wind and rain, but we can monitor and evaluate them very well. iNELS Air can do incredible things. Secure the building, monitor the condition of the soil, measure the wetting of the leaves, set the temperature in the granaries and haylofts, read meteorological values, protect property, anticipate risks and react quickly in crisis situations. Even on huge agricultural areas all thanks to the properties of IoT networks.

Smart City

One thing is true. If cities are to survive, they must be really smart. Without technology, it is not possible to manage transport, monitor the air, save and transform energy. We just have to want cities not to be smart just on paper. Thanks to our IoT components, we can monitor air quality, lighting poles, electricity, water and gas consumption. We are constantly pushing the boundaries further and further.

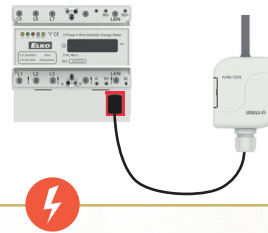
Smart street lighting

The smart lighting in our presentation is not just meant to shine. It can „think“ - regulate the intensity of light based on the time of day, the surrounding traffic and the situation. In the event of a fault, it will then ask by itself for a repair. This will save villages and towns a lot of money.

Smart Agriculture



Electricity monitoring



Gas monitoring



Water monitoring



IoT networks



Air quality (outdoor)



CO₂ / CO / O₃ / NO₂
PM10, PM25, PM4

Appliances control



Universal sensor



humidity,
temperature,
pressure

BTS
(Base
Transceiver
Station)

Weather station



Mobility monitoring



Smart street lighting

LWES (ZHAGA) US (NEMA)

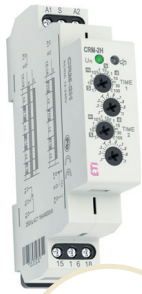




WE DO THE BEST, FOR THE BEST

ELKO EP is a world leader in the development and production of electronic relays for domestic and industrial wiring. We manufacture more

than 200 types of relays. Not only under our own brand: but also in OEM design for the world's largest players.



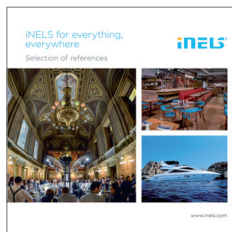


iNELS REFERENCES

ELKO EP, iNELS, iNELS Air. There are millions of manufactured products, and thousands of references that make the world smarter.

You will find us in apartments, houses and hotels. In offices, banks and production and industrial buildings. In giant agricultural areas and in cities with millions and millions of people. They make sense everywhere. Because they combine efficiency, comfort and ecology.

iNELS connects human needs with technologies.



BROCHURE
DOWNLOAD






Narva castle
(Narva, Estonia)




National bank (Timphu, Bhutan)




Isla Mallorca (Mallorca, Spain)

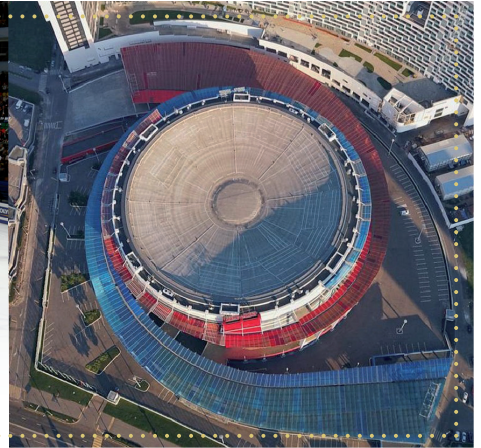




Hermitage museum
(St. Petersburg, Russia)

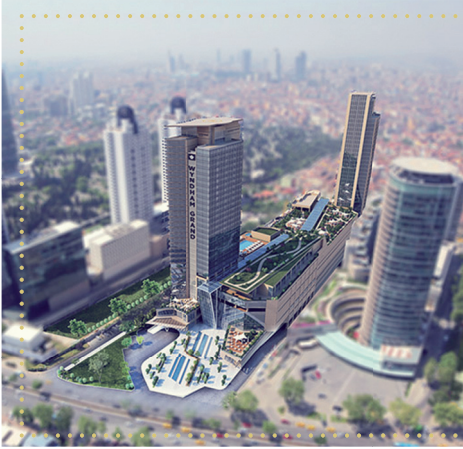


Dvorec sporta Megasport
(Moscow, Russia)



Lexus showroom (Lviv, Ukraine)





Wyndham Grand (Istanbul, Turkey)



Sunseeker Yacht (Mallorca, Spain)



Bodorka Aquarium
(Balatonfüred, Hungary)

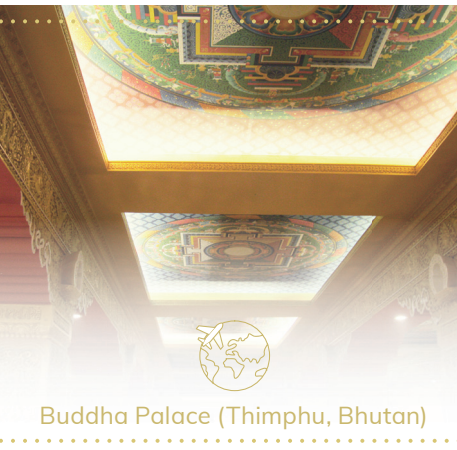




Kromeriz hospital
(Kromeriz, Czech Republic)

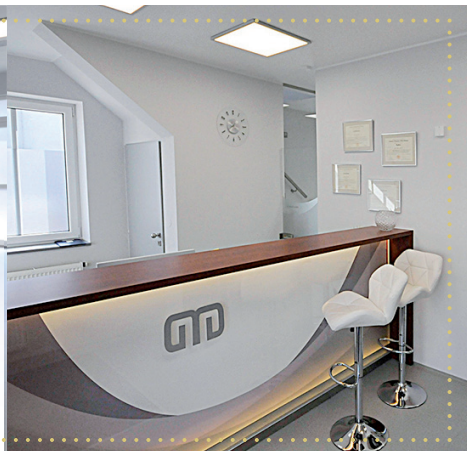


ELKO EP (Holesov, Czech Republic)



Buddha Palace (Thimphu, Bhutan)





M-Gate clinic
(Pardubice, Czech Republic)



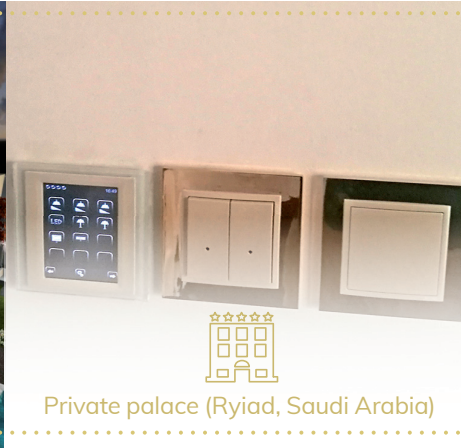
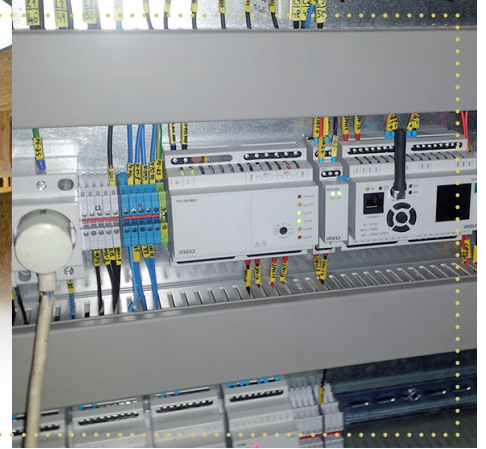
Moni's Jewelry
(Budapest, Hungary)



Hyundai (Nosovice, Czech Republic)



House on the roof (Liptov, Slovakia)



Private palace (Riyad, Saudi Arabia)



Passerinvest (Prague, Czech Republic)



MARKETING

 Live presentation

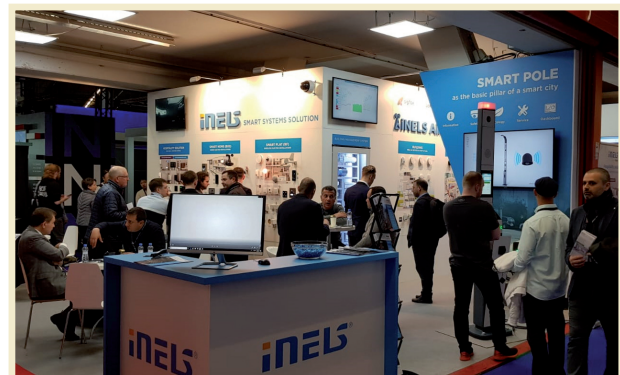


 Showrooms



New Living Center, Prague

 Exhibitions



ISE, Amsterdam

CATALOGUES AND BROCHURES

Branch catalogues



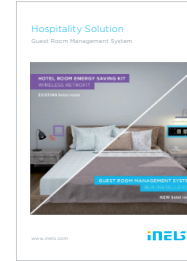
Smart City



Smart street lighting



Smart Agriculture



Hospitality solution



Smart system solution (RF and BUS solution)

Technical catalogues



Modular electronic devices



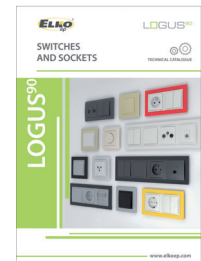
Wireless electro-installation



Wired electro-installation



Product overview



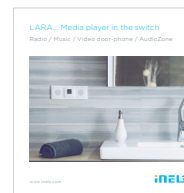
Switches and sockets



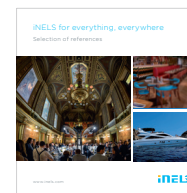
Smart pole



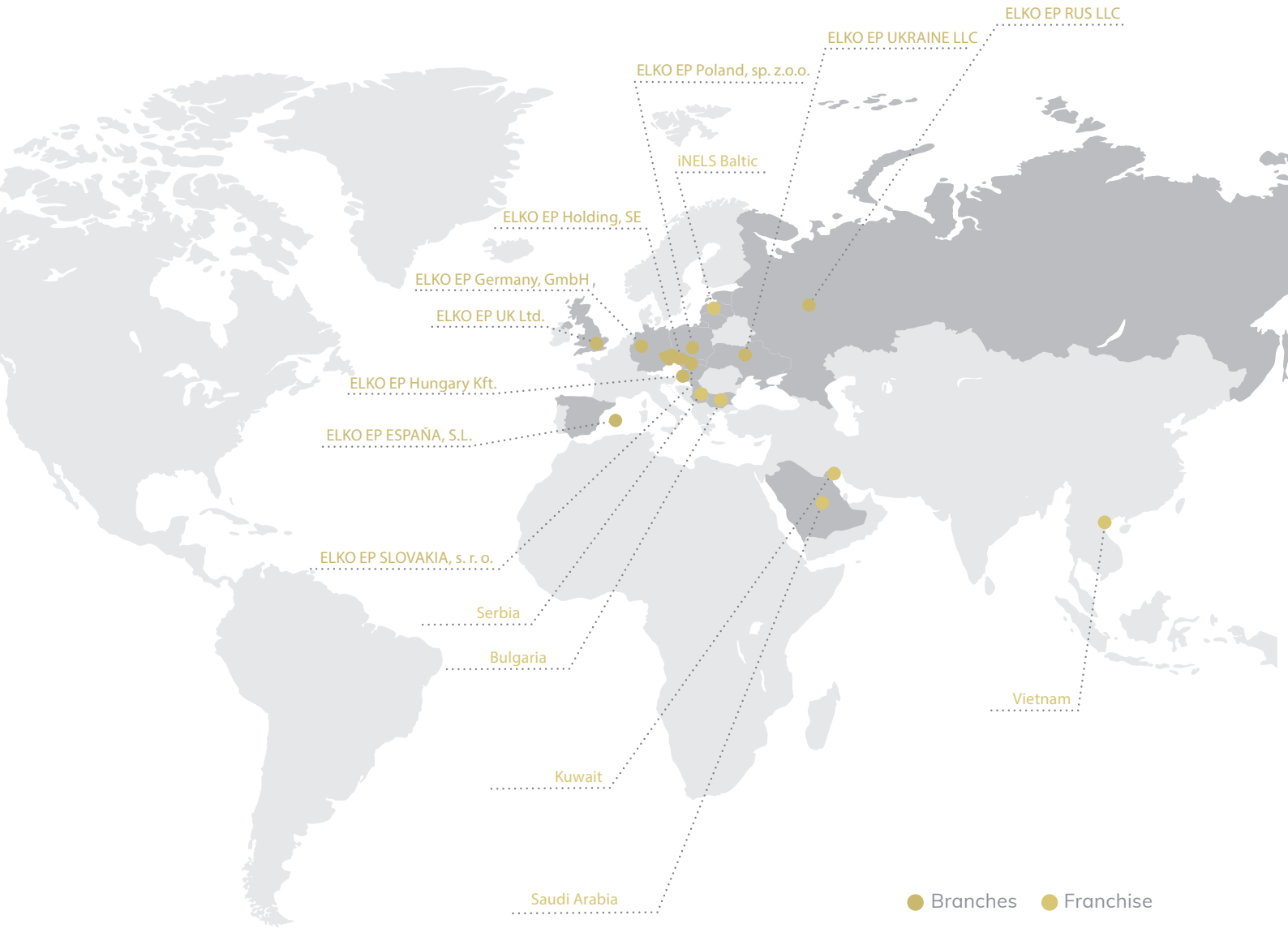
Smart Home & Building Guide



LARA... Media player in the switch



iNELS for everything, everywhere



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