## Company profile

Smart devices for residential and industrial automation





www.elkoep.com

## ELKO EP Holding

We are a traditional, innovative and purely Czech manufacturer of electronic devices and we have been your partner in the field of electro-installations for 25 years. Thanks to the many years of experience and our market activities we are able to say that we have become specialists in the field of modular electronic devices - relays, of which we produce more than 200 types. Our own production, modern tools and devices, research and development center. All these allow us to head towards development of the most sought-after technology: the intelligent electro-installation iNELS system.

www.elkoep.com



## Editorial



## $Ji \check{r} i Kone \check{c} n \acute{y} \Big|_{\text{and CEO of the company}}^{\text{Founder, owner}}$

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. It not only became a fact, but a complete given. The dynamic development of IT technologies as well as Internet of Things (IoT) also permeated a bit later in controlling electrical installations, creating a whole new field called the "Smart Home". For a long time now, we have been offering not just "components for automation", but entire solutions, fulfilling customer requirements down to the last detail. 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 must mention however that while our assortment of relays, which we also produce for the world's major players, keeps us profitable, we invest a substantial part from this into developing systems of intelligent electrical installations. Our iNELS, which either wirelessly or via bus covers smart installation requirements for the apartment, house, villa or large hotel complex, now controls several thousand buildings throughout the world. In a few years of hard work of the entire development department now comprising of over 30 engineers, 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 secu-

rity, HVAC, the camera surveillance system, audio and video distribution - the list goes on... And what it does not include can be easily integrated. So right from your smart phone, you can control the washing or coffee machine, the A/C or home theater system. And you won't need ten controllers to do so. Thanks to the fact that everything has been developed and produced "in-house", you can be sure that everything functions as it should, and you don't need to work out compatibility issues. Whether you are starting out or are well advanced in the field, our technical support team is available to you, from initial training to configuration, a price offer up to overseeing your installation. In the effort to provide the customer full service, we also perform a turnkey iNELS installation.

The annual increase in revenue and development of our sales network are clear indicators of this. So we could always be close to our customers, either with technical support or a well--stocked warehouse, you will find our branches in 16 countries around the world. Besides having our own branches, we have a constantly expanding network of reliable distributors in over 70 countries around the globe, who satisfy the ever-growing demand for our products. It is our pleasure that you can be with us as we move forward.

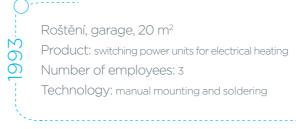




## Milestones

1993	0	Jiři Konečny started business in this field, in his garage. First product was switching power units for electrical heating.
1997	•	The company ELKO EP Ltd. was founded.
2002	0	First branch office ELKO EP Slovakia, export was started.
2005	0	New production and office spaces in Holešov - Všetuly. New branch offices <mark>ELKO EP Poland and ELKO EP Hungary.</mark>
2006	0	Intelligent electro-installation iNELS BUS launched to the market.
2007	0	Establishing a branch office ELKO EP Russia.
2008	0	Intelligent electro-installation iNELS RF (wireless control) launched to the market.
2009	0	Branch office ELKO EP Ukraine. Exclusive distributor of sockets and switches LOGUS <sup>90</sup> .
2010	0	iNELS Multimedia launched to the market / Awards of "Innovation of the Year" for RF Touch.
2011	0	"Gold Amper" award for <b>RF Touch</b> / New warehouse. Establishing <mark>ELKO Lighting Ltd.</mark>
2012	•	ELKO EP - The company of the year.
2013	$\phi$	20 years on the market / New branch offices ELKO EP España and ELKO EP Germany GmbH.
2014	0	Awards for LARA and Smart RF Box.
2015	0	Wireless system <b>iNELS</b> scores – winning the prestigious award <b>Visionary 2015</b> . New branch offices iNELS Smart Home LLC USA and ELKO EP Middle East in Dubai.
2016	0	Own test lab opened, award for iNELS Future office.
2017	6	Introducing the product line IoT iNELS Air. Concept launched iNELS Smart City.

## History of Headquarters





Holešov, in the former building PVT, 400 m<sup>2</sup> Product: Full range of time relays, first housing mold Number of employees: 50 Technology: Full SMD Pick&Place Machine, soldering line, more than 70% share of the components are SMD

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Holešov, new buildings on the site of a former sugar factory, more than 8000 m<sup>2</sup> 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



Roštění, a former elementary school, 200 m<sup>2</sup> Product: first modular time relay Number of employees: 15 Technology: the first Semi-Automatic SMD Pick&Place Machine, 20 % share of SMD components

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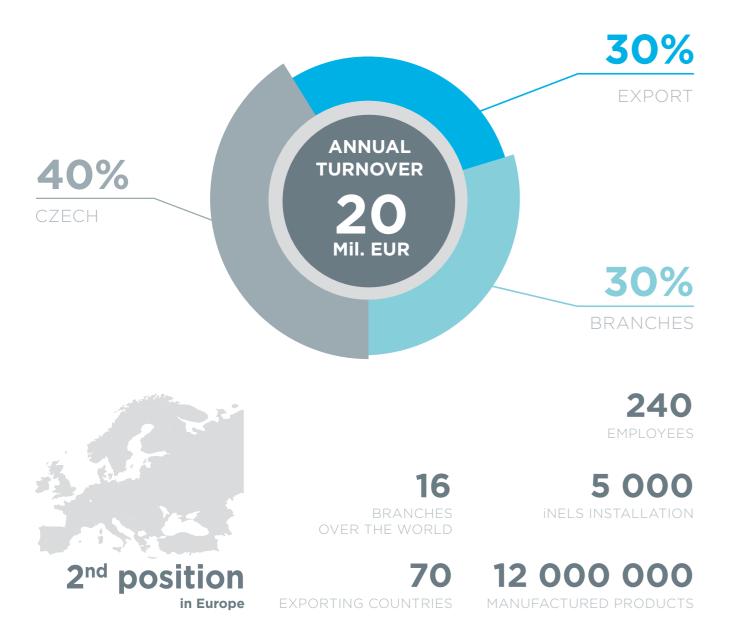
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Holešov, the former headquarter of LOANA, 1000 m<sup>2</sup> Product: complete range of monitoring relays Number of employees: 82 Technology: 2 x SMD Pick&Place Machines, soldering line, reflow



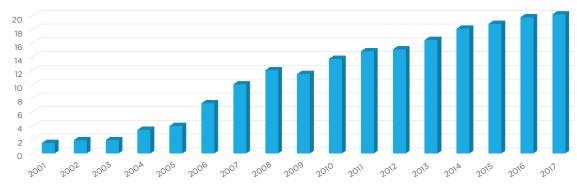
## Facts and Stats



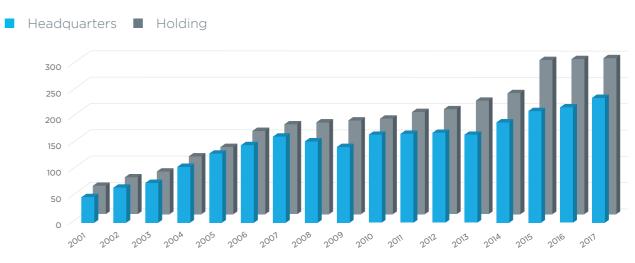
## Holding evolution

### Turnover

mio EUR



### Employees



## Attained awards

## Sales worldwide

### Corporate

- Jiří Konečný the entrepreneur of the year
- Company of the year •
- company ranked among • the 100 best Czech Companies

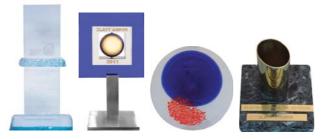
### Products

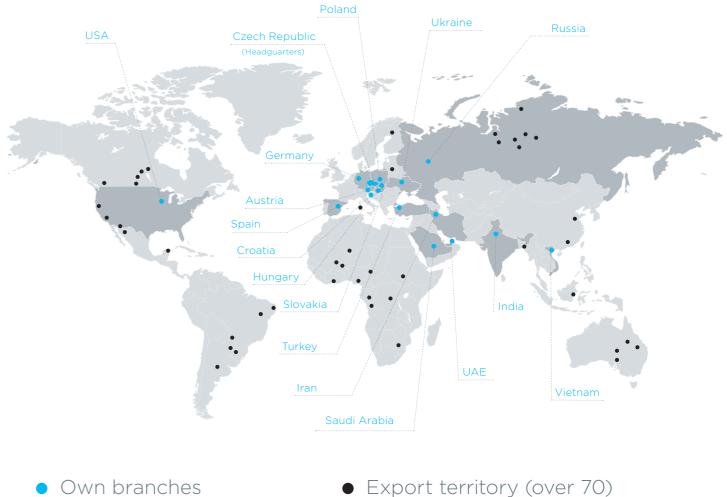
- Golden Amper for "iNELS wireless" •
- Czech Electro Association for "RF Touch" •
- Golden products for "Time relay SMR-T" •
- Czech Electro Association for "LARA" •
- Net Press Media with Infopres awards for "Smart RF Box"
- the honorable mention "Visionaries" • for "iNELS RF Control"
- for Energy Managements award Visionary 2015
- Award for Future Office •

www.elkoep.com/about-us/









www.elkoep.com/about-us/

## Responsibility

- we proudly sponsor many charitable organizations and cultural activities
- we help by employing disabled people.
- we joined the charity project "Good Angel"
- our employees have social security protection and also we provide benefits to our workers
- rewarding employees for successful, creative ideas
- cooperation with schools and support for graduates
- we participate in charity projects



## Environmentally friendly

- we develop and produce energy saving devices
- iNELS system is an integral part of passive and low-energy houses
- production process without any negative impact on the environment
- ISO 14001 certification
- we are involved in the system of sorted waste collection EKOKOM and RETELA
- comply with the RoHS Directive and Lead free production

## Education support

For several years we have cooperated with representatives of academia, both at school and even at university level. Thanks to these activities has the topic of intelligent electrical and building automation gradually become part of their educational plans. Not only through our support for schools have we offered training in demonstration panels and cases and organizing student tours, but also the organization of free training for The Heads of Training, instructors and teachers of vocational subjects. We also organize consultations, lectures and



discussion days for students within lessons in schools, which can also be utilized in the creation of projects in professional competitions or in preparing dissertations and theses. Students of secondary schools and universities are also offered the possibility of realization of scholarships and practice. To support the development of awareness of intelligent systems we also include the implementation of specialized laboratory equipment and cooperation in the development of textbooks and other learning materials.



## Membership

Custom Electronic Design and Association is an international trade organization for residential automation technology with more than 3,500 member companies worldwide. It is built on a strong foundation and provides access to cutting-edge education, certification, research and raising awareness among consumers. It was founded in the USA in 1989 and now CE-DIA is the world's leading authority in the field. www.cedia.co.uk

The Electrical and Electronic Industry in the Czech Republic is a business and employer association that brings together legal and individual persons from the electronic and electro-technical industry, medical technology, information services and other services 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

Smart House Association brings together experts from the field of Intelligent Electro-installation, architecture, audio-video technology, air conditioning and heat recovery, household appliances, cameras, security systems, lighting, etc.lt was founded in 2012 and Jiří Konečný has stood at the forefront since 2013.

www.achb.cz







## Everything under one roof

### Research & development



### Manufacturing

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

### Sales

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

## Product groups



Time relays Latching relays Auxiliary relays Staircase switches Dimmers Thermostats Level switches Power supplies Monitoring voltage relays Monitoring current relays

\_ighting

LED Bulbs LED Tube LED Panel LED Downlight LED Strips DALI control DMX control



Design lines / frame Sockets Switches and over-switches Pushbuttons Thermostats Motion detectors



Transmitters Switching actuators Shutter actuators Dimming actuators Temperature actuators Analog actuators Smart Kits Apps



Switching actuators Shutter actuators Dimming actuators Input units Converters Energy management Wall Controllers Apps



A/V distribution Multimedia LARA Infra Red control Intercom/videophone Weather stations 3<sup>rd</sup> parties devices & systems integration

www.elkoep.com

we not only provide technical

support but also logistics.

### Energy Management

Solutions for existing buildings Solutions for new buildings Energy gateway Pulse converter Sensors Cloud Apps



Sensors and actuators on the IoT platform



Smart Building Smart Traffic Smart Parking Smart Street Lights Smart Cameras



## Smart Home & Building solutions

# New price configurator

elkoep.inels.com





### Apartment Wireless installation in an existing flat / apartment.

### Future office

Healthy, economical and efficient workspaces.



## Villa / House

When technologies understand each other!



### Commercial

Eficient use of technologies and energy.



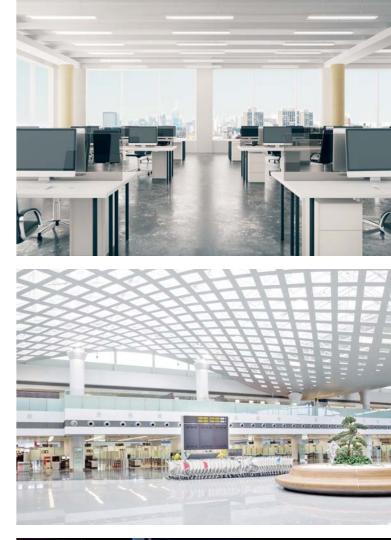


Hotel First controller that guests can understand well.



### Smart City

iNELS as a way to effectively manage the city.

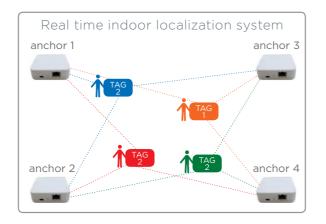




## Future Office

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

### inels.com/future-office



## Smart City & iNELS Air

Functional, efficient, safe, connected smart cities. Headquarters, whose infrastructure helps to improve services that create places which allows better living and working environments. Solutions to save and help people spend ten minutes less in traffic jams or in finding parking places.

### inels.com/smart-city













CHYTRÉ SEMAFORY



CHYTRÉ VEŘEJNÉ OSVĚTLENÍ



CHYTRÉ BUDOVY



CHYTRÁ PARKOVIŠTĚ

## High-level technology...

- more than 90 % share formed by SMD components •
- 2x fully automated Samsung SMD production lines
- capacity: 45.000 components / hour
- the minimum chip size is 0105 (0.4  $\times$  0.2 mm), the maximum size is gfp 55  $\times$  55 mm



### Loader

A device that loads printed circuit boards from a magazine on a line conveyor belt.

Flexible, fully

automatic in-line

screen printing

for printing adhe-

sives and paste

on DPS with 2D

inspection.

### 2x pick & place Screen printing machines

It mounts chips from 0201 (0.6 x 0.3mm), through CSP up to BGA with dimensions of 55 x 55mm with terminal spacing of 0.3 mm. The machine has six heads with it own video camera.

### Inspection Reflow soldering oven station conveyor

Used to perform Based on type of optical inspection chosen technoof previous logy, it activates processes. an adhesive or directly reflows paste in the soldered joint. In fourteen zones, it is possible to set the ideal soldering process

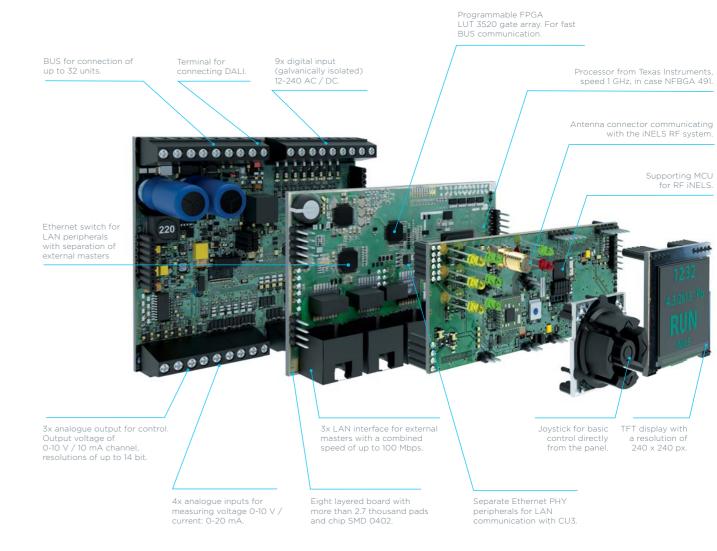
curve.

### Unloader A machine that loads PCBs from

the conveyor belt into the magazine.

## ...allows us to make high-tech products

This is how the new iNELS BUS system central unit looks!







## Apartment

### O NIKOLA TESLA

Prague, Czech Republic

- 8 apartments
- LARA Intercom
- lighting control

### O APARTMENT Prostějov, Czech Republic

- wireless control
- lights
- home appliance integration

## Villa

### O VILLA

Dubaj, UAE

- garden irrigation
- home appliance integration
- intercom and LARA

### O VILLA

### Brno, Czech Republic

- integrate security system
- 10 dimm, 35 switch light
- sauna, whirlpool
- home appliances

### O APARTMENT

### Prague, Czech Republic

- 6 dimm, 25 switch lights
- shutters, curtains
- individual heating control

### O A HOUSE ON ITS ROOF

### Liptovsky Mikulas, Slovakia

- control the switching and dimming of lights
- control machines (helicopter, motorcycle, ...)
- sound and lighting effects triggered by motion detectors
- machines controlled via tablet













## Hotel

### O KEMPINSKI

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

## Commercial

### O JAMIE'S ITALIAN CASTLE

Budapest, Hungary

- iNELS BUS System is contolling lighting and terrace-cooling/heating in the restaurant
- additional switched lighting circuits are controlled by 5 piece of SA3-06M actuator

### O MERIT PREMIUM

Kyrenia, Cyprus

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

### O MARRIOTT 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

### O MAGYAR STATE OPERA

Budapest, Hungary

- every additional lighting source is also controlled by iNELS system.
   The devices here are controlled by RF Touch.
- for switching the RFSA-11B and RFSA-66M is used.

### O ALANCHA BESIKTAS Istanbul, Turkey

- complex lighting control
- audio system
- HVAC and heating pump













## Showrooms

O iNELS CAFÉ Prague

O KAŠTANOVÁ Brno

- O MIELE GALLERY Prague
- O iNELS PRESENTATION Istanbul (Turkey)
- O SMART LIGHT Bratislava (Slovakia)
- O iNELS PRESENTATION Helmond (Netherlands)
- O iNELS PRESENTATION Beijing (China)
- O FORTUNE EXECUTIVE Dubai (UAE)

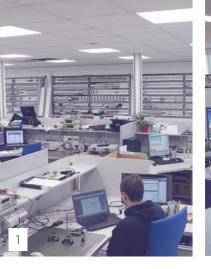
## Exhibitions

- O MATELEC Madrid (Spain)
- FOR ARCH
  Prague (Czech Republic)
- O MIDDLE EAST ELECTRICITY Dubai (UAE)
- O ISE Amsterdam (Netherlands)
- O HI-TECH BUILDING Moscow (Russia)
- O LIGHT AND BUILDING Frankfurt (Germany)
- O THE BIG 5 Dubai (UAE)
- O ISAF Istanbul (Turkey)





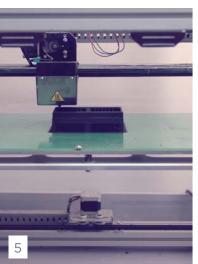














## Research & development

- 1) R&D overall view
- 2) software developers
- 3) hardware developers
- 4) construction & design
- 5) 3D printer
- 6) interial lab

## Relays references

ELKO EP is a world leader in the field of electronic relays development and manufacturing used in residential and industrial electroinstallations. We offer more than 150 types of relays that can be produced under well-







Schneider Electric

:hager



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ETI



🖻 Iskra

known OEM brand names. We develop and implement products according to customer specifications as well as launch new products under brand names.

















## Marketing support

### Display boards Easy to mount & present



Smart Flat

Smart Home

Smart Building

Future Office Hospitality Solutions Lighting Control

### Working cases For training & show



Workplaces



iNELS RF Control



Lara 5 in 1

## Marketing support



iNELS RF





Wireless

Electro-installations

Smart Home

& Building Guide

ELRO \_

MODULAR ELECTRONIC

Modular

electronic devices

technical catalog



Wire Electro-installations



LARA... Mediaplayer in the switch





Wireless Electroinstallations technical catalog



Wire Electroinstallations technical catalog



everywhere

INTELLIGENT





Hospitality solution



iNELS for everything,





Lighting Control



inels Air



Product overview technical catalog

## Certification

ISO CERTIFICATIONS

9001 - guarantee of customer satisfaction 14001 - environmental protection <page-header><page-header><page-header><page-header><page-header><section-header>

## ELKO EP team...

...keeps growing.



EURASIAN CONFORMITY Russia, Belarus, Kazakhstan, Armenia

FEDERAL COMMUNICATIONS COMMISSION USA

UKRSEPRO CERTIFICATE Ukraine

UNDERWRITERS LABORATORIES USA









## ELKO EP Holding



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