

Company profile

Smart devices for residential and industrial automation



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



Jiří Konečný | Founder, owner
and CEO of the company

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 app-

roach 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-



urity, 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.



A handwritten signature in blue ink, appearing to read 'Jiri Konecny'.

Jiří Konečný

Milestones

- 1993 ○ Jiří Konečný 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 ○ 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.
- 2007 ○ Establishing a branch office **ELKO EP Russia**.
- 2008 ○ Intelligent electro-installation **iNELS RF** (wireless control) launched to the market.
- 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.**
- 2012 ● **ELKO EP - The company of the year.**
- 2013 ○ 20 years on the market / New branch offices **ELKO EP España and ELKO EP Germany GmbH**.
- 2014 ○ Awards for **LARA** and **Smart RF Box**.
- 2015 ○ Wireless system **iNELS scores** - winning the prestigious award **Visionary 2015**.
New branch offices **iNELS Smart Home LLC USA and ELKO EP Middle East in Dubai**.
- 2016 ○ Own test lab opened, award for **iNELS Future office**.
- 2017 ○ Introducing the product line **IoT iNELS Air**.
Concept launched **iNELS Smart City**.

History of Headquarters

1993

Roštění, garage, 20 m²
Product: switching power units for electrical heating
Number of employees: 3
Technology: manual mounting and soldering



Roštění, a former elementary school, 200 m²
Product: first modular time relay
Number of employees: 15
Technology: the first Semi-Automatic SMD Pick&Place Machine, 20 % share of SMD components

1995

2000

Holešov, in the former building PVT, 400 m²
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



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

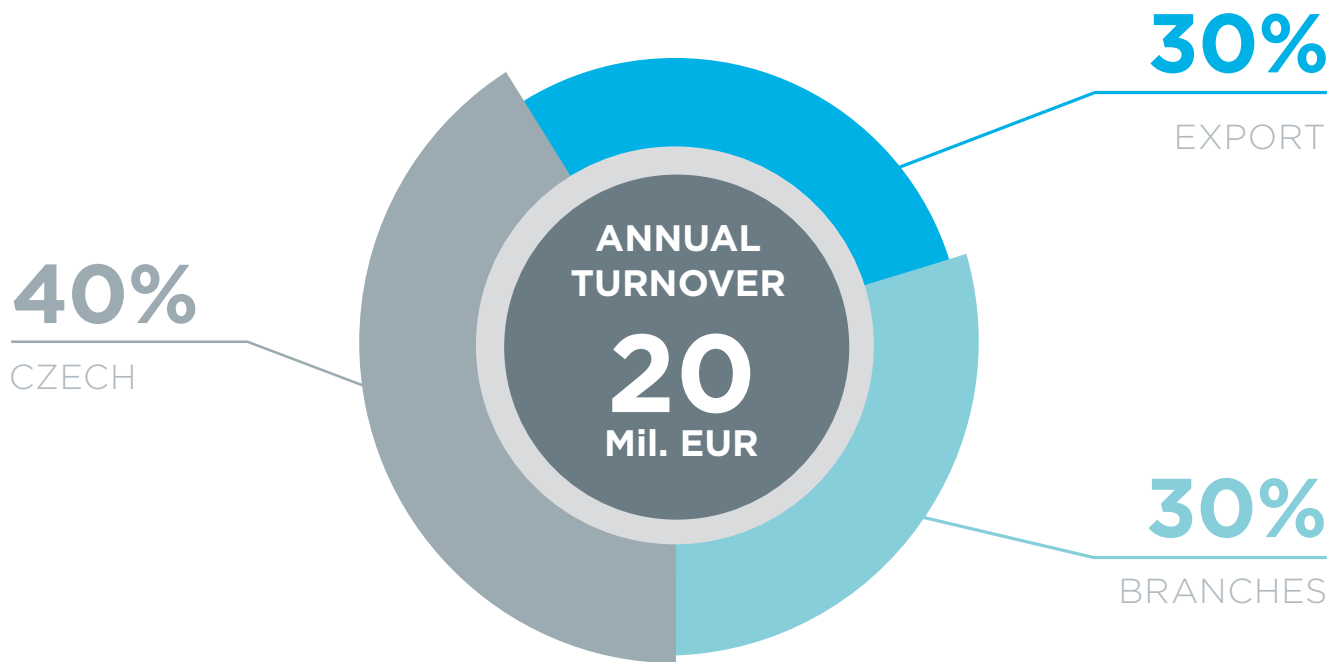
2001

2005

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



Facts and Stats



2nd position
in Europe

16
BRANCHES
OVER THE WORLD

70
EXPORTING COUNTRIES

240
EMPLOYEES

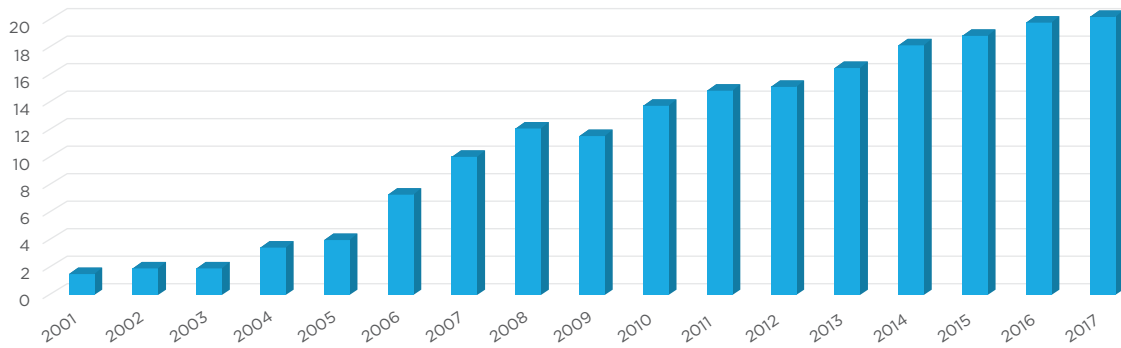
5 000
INELS INSTALLATION

12 000 000
MANUFACTURED PRODUCTS

Holding evolution

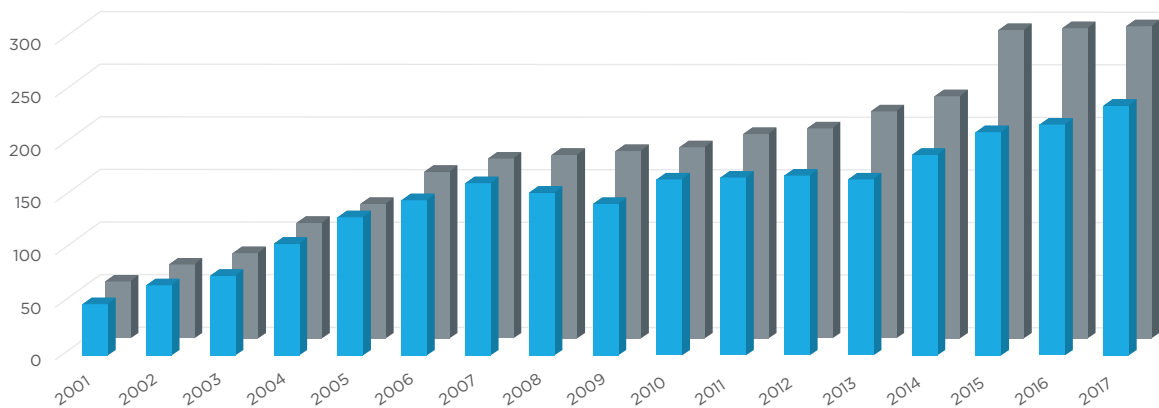
Turnover

mio EUR



Employees

■ Headquarters ■ Holding



Attained awards

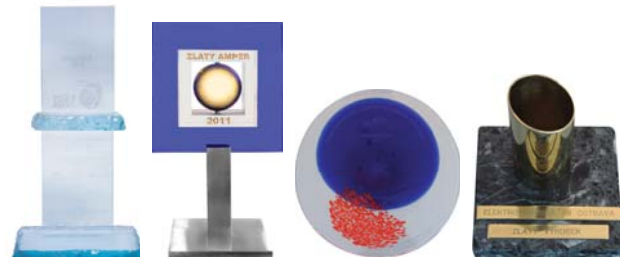
Corporate

- 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



Sales worldwide



● Own branches

● Export territory (over 70)

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 CEDIA 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. It was founded in 2012 and Jiří Konečný has stood at the forefront since 2013.

www.achb.cz



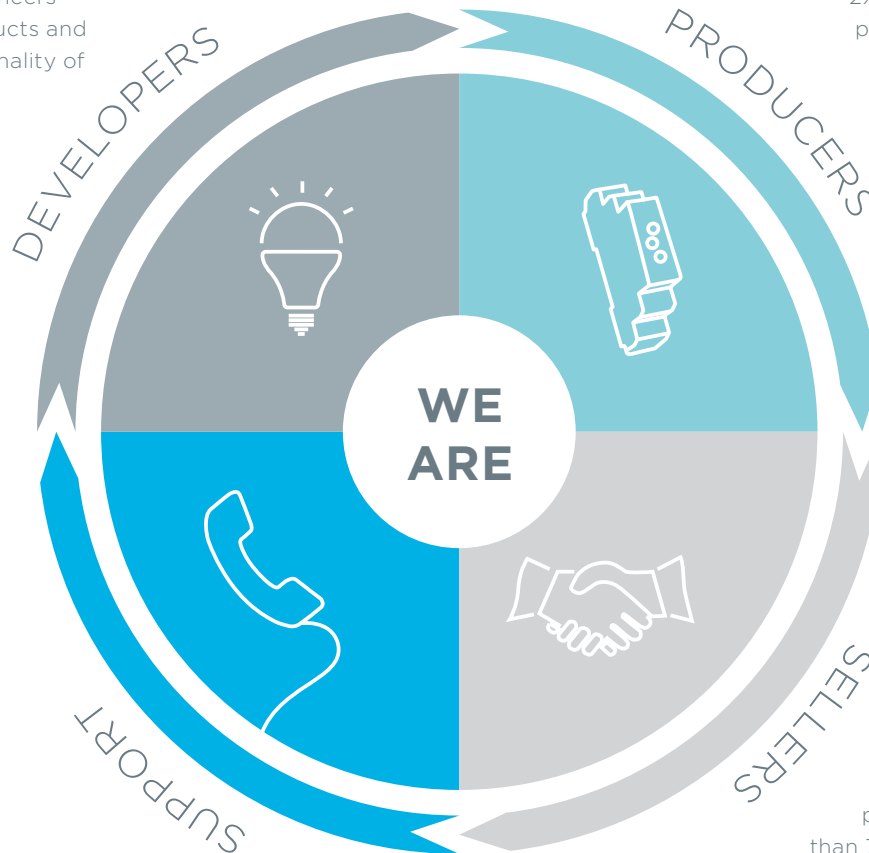
Everything under one roof

Research & development

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

Manufacturing

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



Support

24 hours / 7 days / 360 days we not only provide technical support but also logistics.

www.elkoep.com

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



Relays

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



Lighting

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



LOGUS⁹⁰

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



iNELS RF Control

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



iNELS BUS System

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



Audio/Video

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



Energy Management

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



iNELS Air

- Sensors and actuators
on the IoT platform

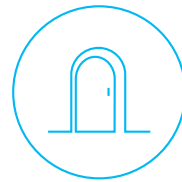


Smart City

- Smart Building
- Smart Traffic
- Smart Parking
- Smart Street Lights
- Smart Cameras



Smart Home & Building solutions



Apartment

Wireless installation
in an existing flat /
apartment.



Villa / House

When technologies
understand each other!



Hotel

First controller
that guests can
understand well.

New price configurator

elkoop.inels.com



Future office

Healthy, economical and efficient workspaces.



Commercial

Efficient use of technologies and energy.



Smart City

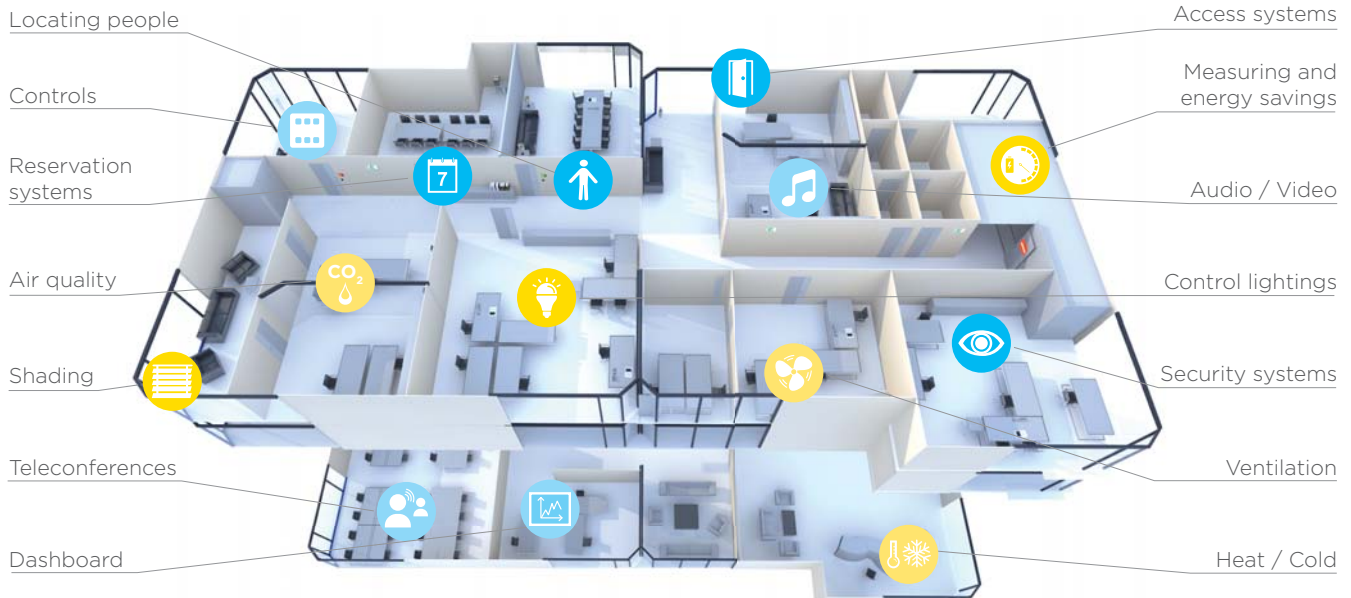
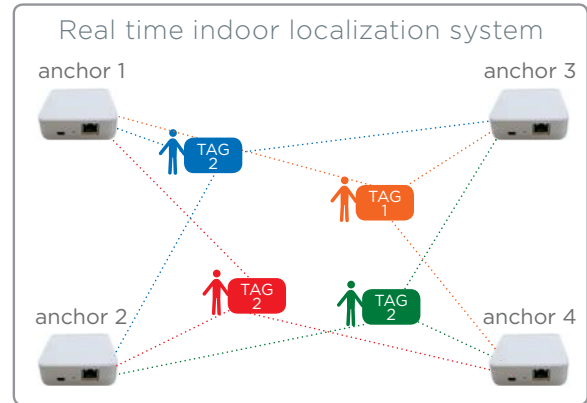
iNELS as a way to effectively manage the city.



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
KAMERY



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 x 0.2 mm), the maximum size is qfp 55 x 55 mm



Loader

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

Screen printing

Flexible, fully automatic in-line screen printing for printing adhesives and paste on DPS with 2D inspection.

2x pick & place 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 its own video camera.

Inspection station conveyor

Used to perform optical inspection of previous processes.

Reflow soldering oven

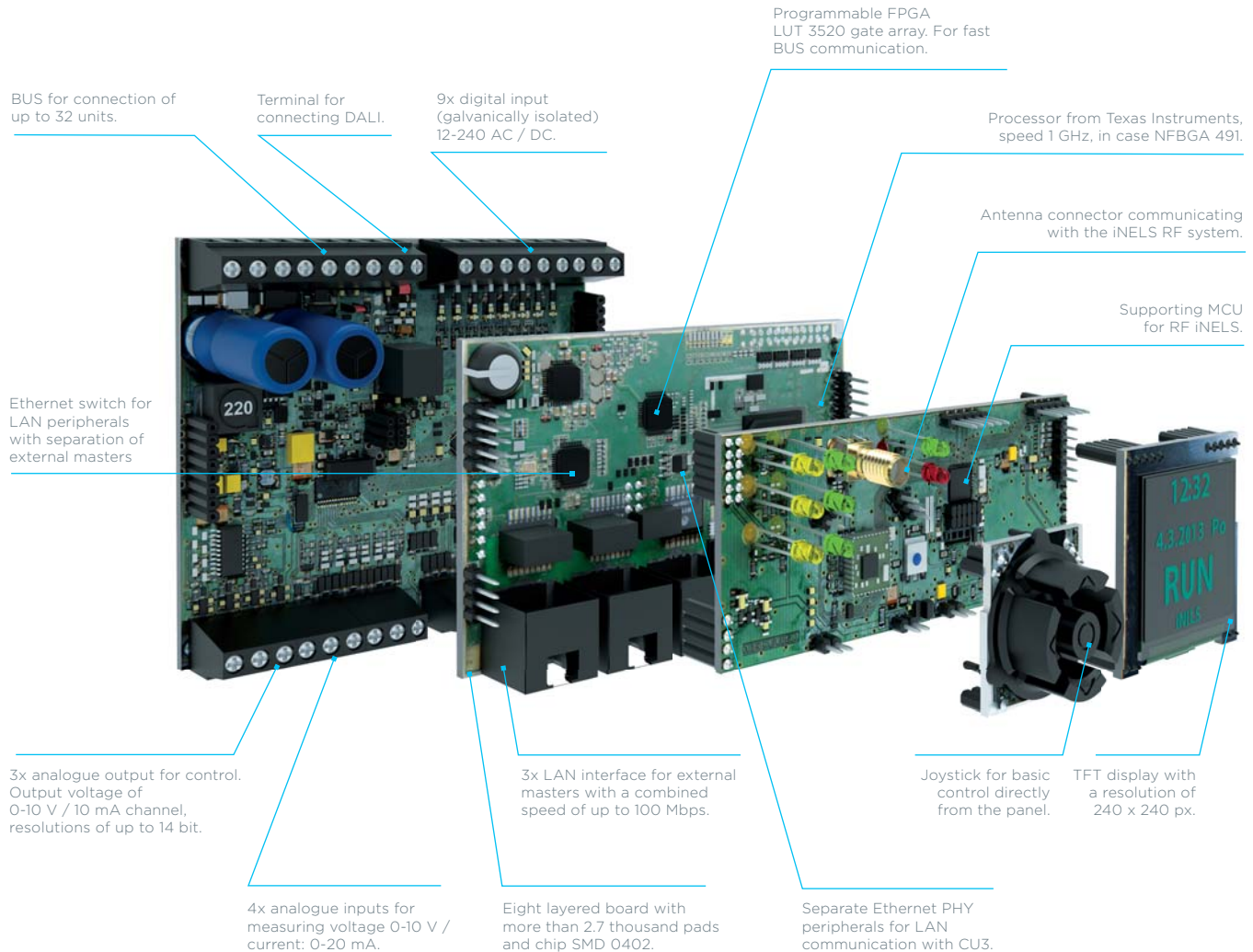
Based on type of chosen technology, it activates an adhesive or directly reflows paste in the soldered joint. In fourteen zones, it is possible to set the ideal soldering process curve.

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

○ NIKOLA TESLA Prague, Czech Republic

- 8 apartments
- LARA Intercom
- lighting control



○ APARTMENT Prostějov, Czech Republic

- wireless control
- lights
- home appliance integration



○ APARTMENT Prague, Czech Republic

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

Villa

○ VILLA

Dubaj, UAE

- garden irrigation
- home appliance integration
- intercom and LARA



○ VILLA

Brno, Czech Republic

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



○ A HOUSE ON ITS ROOF

Liptovský Mikuláš, 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

○ 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



○ MERIT PREMIUM

Kyrenia, Cyprus

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



○ 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



Commercial

○ JAMIE'S ITALIAN CASTLE

Budapest, Hungary

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



○ 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.



○ ALANCHA BESIKTAS

Istanbul, Turkey

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





Showrooms

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

Exhibitions

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





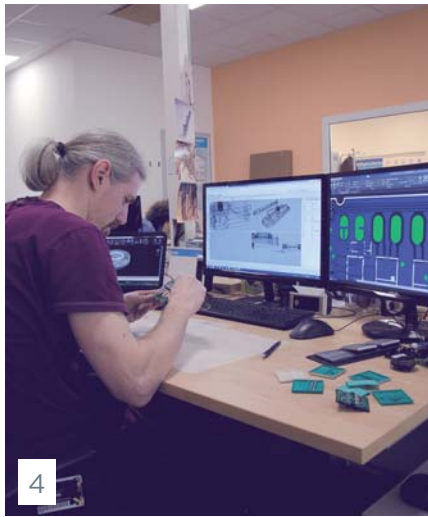
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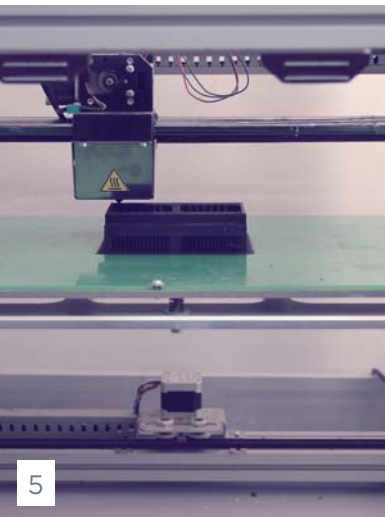
2



3



4



5



6

Research & development

1) R&D overall view

2) software developers

3) hardware developers

4) construction & design

5) 3D printer

6) interior lab

Relays references

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

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



TE
connectivity



Schneider
Electric



hager



EATON



SIEMENS



GE



ETI



Iskra



Kopp



VEMER

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



Relay



iNELS RF



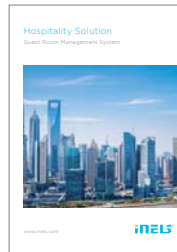
iNELS BUS



Wireless
Electro-installations



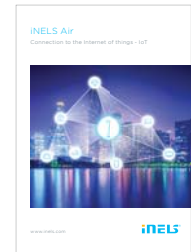
Wire
Electro-installations



Hospitality
solution



Lighting
Control



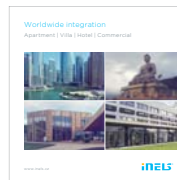
iNELS
Air



Smart Home
& Building Guide



LARA... Mediaplayer
in the switch



iNELS for everything,
everywhere



Modular
electronic devices
technical catalog



Wireless
Electroinstallations
technical catalog



Wire
Electroinstallations
technical catalog



Product overview
technical catalog

Certification

ISO CERTIFICATIONS

9001 - guarantee of customer satisfaction

14001 - environmental protection



EURASIAN CONFORMITY

Russia, Belarus, Kazakhstan, Armenia

FEDERAL COMMUNICATIONS COMMISSION

USA

UKRSEPRO CERTIFICATE

Ukraine

UNDERWRITERS LABORATORIES

USA



ELKO EP team...

...keeps growing.



ELKO EP Holding



www.elkoep.com

Published: 01/2018 | 1 st edition
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