Wireless electro-installation
Home & building wireless solutions

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ELKO EP employs about 330 people, exports its products to more than seventy countries, and has representatives in thirteen foreign branches. Company of the Year of the Zlín Region, Visionary of the Year, Global Exporter of the Year, Participation in the Czech TOP 100, these are just some of the awards received. Still, we are not finished. We are constantly striving to move forward in the field of innovation and development. That's our primary concern.

Millions of relays, thousands of satisfied customers, hundreds of our own employees, twenty six years of research, development and production, thirteen foreign branches, one company. ELKO EP, innovative - a purely Czech company based in Holešov, where development, production, logistics, service and support go hand in hand. We primarily focus on developing and manufacturing systems for building automation in the residential, commercial and industrial sector, a wide range of Smart city facilities and the so-called Internet of Things (IoT).
A Smart Home is not a necessity of life, but is becoming a vital requirement. It can do what a classic electrical installation cannot, or can only do with great difficulty.

Each potential customer has different motivations for wanting to set up a smart home. Some are interested in savings, others like combining comfort with safety, but in either case, all the characteristics are an inseparable part of the system, and it is only up to the customer which ones are most important.

The main advantage of iNELS RF is it performs wirelessly. This means that you do not need to carry out extensive alterations to your electrical installations to promote them to a higher order of magnitude.

So you can indulge what was not possible before. In addition, the electronic installation can be extended, changed or upgraded at any time.

Why a Smart Home?

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You can control your devices in various ways

It does not matter what you control, but how easily you control it. With us you can control the devices and appliances in many ways, one at a time or combine them at will.

For those conservatives amongst us, there are buttons in the form of switches exactly as we know and are used to them, for those of us who often move around the house in the garden, the RF Pilot remote control in your pocket will surely be appreciated. Touch unit is again designed for those who like everything in one place with a ~ 3.5” display securely holding all the necessary buttons within the frame. An interesting and often preferred option is the driver’s smartphone – which most of us already have in our pocket.
Your home

The wireless iNELS RF system offers you a unique chance to breathe life into your home.

Controlling appliances, dimming lights, creating light scenes, security - we need all these functions in our daily lives. iNELS RF is a building kit that you build just the way you like. The result will be one system that takes complete care of the running of your home. It will become an indispensable part of your family. You can fully adjust iNELS based on what you do or where you are, whether on vacation or at work, with family at home or with friends, or whether you are waking up or going to sleep.

APPs for your home

Through an application on your smartphone, you can control your home while keeping complete track of all its ongoing processes.
This is the room where not only family, but friends and guests meet. It is usually the home's largest room, and all technologies and multiple lights are installed here. You also may spend the majority of your time here.

With the press of a single button, INEL.5 lets you set up a light scene to suit the current situation or mood. The control touch unit puts the entire home virtually under your thumb - switch off all the lights, close the gate, read the outside temperature and set the thermostat in the children’s room.
The kitchen is a room with a large number of appliances. These include the stove, the dishwasher, the hood and the refrigerator. It is therefore natural to protect this area. This is accomplished either by a surge monitor in the distribution box or by detectors.

The smoke detector monitors a sudden fire or flare-up. The flame detector is the foundation of safety in your home. Battery power makes installation easy. The integrated temperature sensor scans for the critical temperature at which materials not producing smoke can ignite. The unique, stylish design is appropriate in every modern interior.
Bedroom

You control the lighting and blinds with a switch on the nightstand.

With a long press, you set the brightness to your desired intensity, and keep one button reserved to light the way to the bathroom at night. With one practical button, you can also switch off all lights, even the forgotten ones (master switch).

The color LED lamp or colour LED strip will provide a wonderful bedroom atmosphere to suit your mood.

Button for "GOOD NIGHT"

- set romantic light scenes
- master switch (All OFF)
- night light corridor to toilet
- gradual dimming off
Children’s room

Ideal when they’re playing, being good and safe. The wireless button grows with the children.

For the older and more resourceful kids, the RF Pilot is ready. It can not only play with the colours of the coloured LED lamps and strips, but can also control everything else in your home.

In the meantime, a video camera is monitoring the toddler in the crib and a night light chases away bad dreams – a lamp set by a dimmer to minimum brightness.
One system, one application for whole house

Video cameras
Through the telephone application or RF Touch, you can browse through images of up to 9 video IP cameras.

Lighting
Simple switching or dimming of various types of light sources including LEDs and even colored RGB strips.

Light scenes
With just one button on the controller, you can simultaneously control multiple devices (light scenes, all off, nighttime hallway, etc.).

Exhaust and ventilation
In relation to presence or according to the time mode or dependence of lights.

Macro functions
If the light is on the shutters go down.

Garage, gate
You can control from controllers or automatically according to position upon approach.

Watering
It is possible to predetermine a time mode in the system for watering in relation to temperature and moisture. You can control circuits manually from the application as well.

Door communicator
Verbal and visual communication with a guest by means of the app or the smartphone application.

Blinds and roll shutters
Actuators enable control of various types of shading technology. It is possible to set dependent programs in a time mode, light scenes, or to control manually.

Heating and cooling
iNELS enables control of up to 40 independent circuits of heating or HVAC. Setting several ways: RF Touch, application, ...

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iNELS enables control of up to 40 independent circuits of heating or HVAC. Setting several ways: RF Touch, application, ...

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If the light is on the shutters go down.

Garage, gate
You can control from controllers or automatically according to position upon approach.

Watering
It is possible to predetermine a time mode in the system for watering in relation to temperature and moisture. You can control circuits manually from the application as well.

Door communicator
Verbal and visual communication with a guest by means of the app or the smartphone application.
Temperature regulation

Heat regulation – with RF Touch, you have heating under control throughout the home.

It is not necessary to have a thermostat in each room, and yet you can regulate each room separately. Whether you are controlling a radiator-mounted thermovalve or floor-mounted electrical cable, this element always has a temperature sensor that sends information to RF Touch, which then regulates the home based on the set temperature and according to a time program.

Wireless touch unit
RF Touch
• this is a touch wireless unit with a 3.5” display
• can control up to 40 heating or AC circuits = 40 thermostats in 1 device
• in connection with other wireless units, it can react to an open window or outdoor light intensity
• if the thermostat is connected to the Internet, it sends temperature information via the Cloud, and you can set the temperature from anywhere using a mobile application
The INELS can control various heating sources – water, gas and oil boilers and regulate radiators, spiral heaters, fan coil units or electrical cables.

Using a wireless sensor, it can sense not only the outdoor, but also the indoor or floor temperature. Control is possible from RF Touch, a mobile application or by Temperature controller.

**Wireless temperature controller**

- used for autonomous temperature control for underfloor pipes and auxiliary heating
- the display features information on the current and set temperature and heating parameters
- weekly program

**Wireless thermo-valve**

- measures the ambient temperature that it then compares with the set temperature in RF Touch or in the App
- based on regulation, it controls water valves in radiators and heating ladder
- temperature range 0—32 °C (32—90 °F)

**Wireless temperature sensor**

- measures the indoor (internal) and outdoor (external) temperature
- it sends the measured temperature to RF Touch or to a Smart RF Box
- temperature range -20 to 50 °C (-4 to 122 °F)
- battery power allows placement anywhere, sensors from TC/TZ line

**Switch unit with a temperature sensor**

- the ideal solution for underfloor electrical (hot water) heating, where the external sensor senses the floor temperature, and a unit directly switches the heating mat (cables)
- the automatic program with manual regulation is performed via the unit RF Touch or the application INELS Home Control

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Shading controls, door, gates, jalousies, blinds, roll shutters...

Controlling garage doors, entrance gates, barriers, blinds, roll shutters, awnings – all of these can be controlled from a single controller – either a key alarm, RF Pilot or smartphone app.

The main advantage of integration with the INELS system is the option of presetting light scenes. In practice, this could mean closing the blinds at a set time or pulling down roll shutters in the event of bad weather – automatically, based on information from the weather station or manually. Whether you’re at home or away. Another advantage to controlling light scenes is grouping multiple blinds together and controlling them with a single button or a single command. The pinnacle of use is rotating the lamellas of the blinds based on outdoor light intensity or sunset/sunrise. Yes, INELS can do this too.

Switch unit for shutters
RFJA-12B

- the shutters unit is used to control garage doors, gates, blinds, awnings, etc.
- load up to 2 x 8 A
- integrated time-functions

Wireless remote controller with display
Wireless touch unit RF Touch
App

Blinds/Shutters
Awning
Access gateway
Garage
Intercom & Video door-phone

Intercom function allows communication between RF Touch units or intercom calls between these units and smartphones or tablets.

You can also receive audio/video transmission from the front door communicator through the intercom and you can see and speak with visitors even if you are not at home. It is a comfortable replacement of traditional doorbells or door phones. It is a wireless installation allowing a user to open the door or gate.

Door Communicator

- enables communication with voice- and video equipment in the facility: LARA, phone applications, tablet or TV – where individual devices can be combined
- videophone basic module can be extended with additional modules (for residential houses or buildings)
- the only connection required is a LAN cable that also supplies power (PoE)

INELS enables you to redirect a door bell ringing and consequent video conversation to your phone, even if you are not at home.

The application enables calls between participants on smartphones, tablets, or LARA device.

Besides playing your music or the radio, the LARA unit can also facilitate a video conversation with the door communicator, the home intercom system or calls to the application in your mobile phone.
INELS enables communication inside the home (intercom) as well as calls from the Video door-phone. There can be up to 30 users on various devices: LARA, Smartphone, Tablet, TV. Thanks to having its own server, it is possible to communicate (for free) even if you are away from home – a simple Internet connection suffices. A call at the door can also be forwarded.

Even if you are not home, you can communicate with roommates or friends. You can also have the conversation redirected from the door intercom button.
Security of residents and protection of property are top priorities. For this reason, INELS provides detectors that sense smoke, motion or open windows or doors.

Thanks to INELS, you can set up basic security for your home, which, if breached, sends a notification in the application or via SMS. The flood sensor detects and indicates leaking water or an overflowing washing machine; after assessing the problem, you can thaw out a frozen gutter or remove icicles. You can connect some video cameras in the application that monitor internal or exterior movement.

Security & Safety

Smoke detector
RFSD-100
- It detects smoke from a fire
- Automatic testing
- Integrated temperature sensor
- Battery status indicator
- Battery power

Motion detector
RFMD-100
- It detects movement of persons and automatically controls lighting
- Infrared scanning method to prevent false alarms
- Battery power

Window / Door detector
RFWD-100
- It informs you as you are leaving that a window or door is open
- Upon activation, it sends information to the unit or Application
- Integrated temperature sensor
- Battery power

Wireless flood detector
RFSF-1B + FP-1
- It detects flooding or overflowing by means of an external probe FP-1
- When activated, it sends a signal to the app or RF Touch to the switching units for closing the water pipe

iNELS Cam
- Up to 10 video cameras can be connected in the Application
- LAN or Wi-Fi connection
- 640 x 480 px resolution
- Night IR illumination
- Power adapter: 5V/1A (part of supply)

Video cameras
- You can connect any video camera supporting MJPEG2
- In the application, you can zoom in, zoom out and rotate if the video camera allows it
Energy management

Due to ever-rising energy costs, monitoring energy consumption is one of the most important aspects of a smart home.

Wireless sensors are installed directly to the water meter or gas meter and by means of a concentrator at the electric meter, and information is sent to the Cloud for further processing. Data may be browsed through various filters in the Apps or Web browser.

It is also possible to set up notifications when critical parameter settings are exceeded and to switch on/off a certain device. Connecting to Smart Grid intelligent networks enables efficient electricity usage at optimal times.

Energy gateway
RFPM-2M
• the energy gateway is a central device for assessing energy consumption (electricity, water, gas)
• it acts as an interface between the pulse converter RFTM-1 and your smartphone
• connection to the data network is made by means of a LAN Ethernet connector or wirelessly via a Wi-Fi network
• monitored data is stored on internal memory storage
• by means of the application iHC and Cloud connection, it is possible to maintain online access to data and monitoring history
• up to 4 tariff meter readings of electricity consumption

Current transformer
CT50
• opening pliers open/close on the existing wire of the measured circuit, most frequently at the main supply at the electricity meter
• it is connected to the energy gateway RFPM-2M (up to 3 CT)

Wireless pulse converter
RFTM-1
• the wireless pulse transducer scans the sensor data from the meter and sends it to the RFPM-2M gateway for further evaluation
• supported sensors: LS (LED sensor), MS (magnetic sensor), IRS (IR sensor)

Consumption overview
• all energy sources for the selected period
• comparison with previous period
• critical limits from previous values

History in a graph
• possible to display based on units or value
• time restriction: day, week, month or selected period
Dimming & Lighting control

Dimming is one of the basic characteristics of a smart home. Dimmers not only render a pleasant atmosphere, but also save on electricity.

iNELS offers dimmers in various designs (box, flush, DIN rail mounted, socket) for all types of light sources including today’s popular LEDs.

Colour strips and lamps have become a modern trend used not only for decorative illumination, but also more and more for lighting in the workplace. These too are integrated in iNELS.

RGB LED bulb
RF-RGB-LED-550
• receiver and dimmer enable setting of the brightness and colour
• luminance: 550 lm/675 lm, Base: E27
• lamp life: 30,000 hours
• function: brightness 0—100%, RGB lamp: automatic blending of colours

Wireless dimmer switch
RFDW-71
• wireless switch in glass design with integrated dimming element
• supply voltage: 230V AC/50 Hz, 120V AC/60 Hz
• 4-channel design
• control up to 25 channels
• 6 light functions

Wireless twilight switch
RFSOU-1
• the wireless twilight switch measures outside illumination intensity
• based on a set value, it controls the switching element
• elimination of short-term change of ambient lighting (glare)
• battery power

Dimming actuator for LED (RGB) strips
RFDA-73M/RGB
• dimmer for controlling 3 single-colour strips or an RGB colour strip
• control from the RF Key Alarm, RF Pilot, RF Touch or the Application
• inputs for controlling 0—10 V
• maximum load: 3x 5 A

Universal dimmer
RFDEL-71M
• designed for dimming various light sources 230 V (600 VA), 120 V (300 VA)
• type of load: R, L, C, ESL, LED
• smooth dimming or brightening
• setting min. brightness for eliminated flashing LED sources
• DIN rail mounted

Wireless twilight switch
RFDEL-71B
• designed for dimming various light sources 230 V (160 VA), 120 V (80 VA)
• type of load: R, L, C, ESL, LED
• smooth dimming or brightening
• setting min. brightness for eliminated flashing LED sources
• flush mounted
Appliance control

It is possible to switch a multitude of electrical devices and appliances.

Whether they are connected to a socket, installation box or hard-wired, iNELS has the right switch design for them.

Switching actuators are not only used for switching appliances but also allow you to set dependent functions – time-dependent or functions depending on the value of other input – motion detectors, flood sensors, light sensors or door opening detectors.

Switching socket

- **RFSC-61**
  - Switched socket for controlling fans, lamps, heaters and other devices connectible by cable with plug
  - Time-functions up to 10 hours

Wireless switch unit

- **RFSA-61M**
  - The switching unit is used for controlling appliances, sockets, lights or ventilation
  - Can be combined with detectors

- **RFSAI-61B**
  - The switching unit with 1 output channel is used for controlling appliances and lights
  - Integrated time-functions up to 60 min.
  - Terminal for connection existing push button switch

- **RFSA-62B**
  - The switching unit with 2 output channels is used for controlling appliances and light circuits
  - Integrated time-functions up to 60 min.
How you will control it?

The system can be controlled in a wide variety of ways. These include buttons the size of a classic switch, which control four various devices or functions. A button can be attached, glued or simply placed somewhere.

The wireless key alarm makes for a suitable pocket controller of gates, garage doors or entrance ways.

RF Pilot with its OLED color displays serves as a basis for home automation. It can control up to 40 devices, which can be located in individual rooms.
Behind the scenes

Smart Boxes are important but invisible elements in the smart home system. They are used to interface with a controlling telephone through its application. They are connected to the network, and if remote control is necessary, also to the Internet.

The Smart Box also acts as a mediator for storing data in the Cloud. Signal repeater – the repeater is used to extend the range where it is necessary to control devices over a greater distance.

New, now you can also use as signal repeaters other units in our portfolio, such as the switching, dimming components that use the protocol RFIO².

Smart RF Box with WiFi

eLAN-RF-Wi-003

- smart RF box is center of your Smart Home and bridge between your smartphone and controlled appliances
- thanks to the two-way communication, it visualizes the current status of individual units/actuators
- controls up to 40 units
- the intuitive app iNELS Home Control
- provides a centralized control from one place
Apps for all

Applications that you can download completely free, with which you can control all devices connected to the system.

On your device, you can view power consumption values and charts, check security cameras, or control your home audio. At the same time, you can configure all your devices through the application.

The application is designed for smart phones and watches running on Android or Apple iOS.

Overview of functions

- Lighting control
- Blinds/Shutters
- Sockets
- Garage doors/gates
- RGB bulbs, LED strips
- Scenes
- Heating
- Cameras
- Air conditioning
- Weather station
- Energy control
- Video door-phone
- Audio/Video

Overview

Absolute control over all appliances.

Thermo

You can set the temperature in each room just the way you like.

Lighting control

Dim up/down set romantic light scenes with RGB.

Blinds control

Did you forget to set the shutters in light of the weather? No problem.

Scheduling

When and what mode of heating in one place for a week-arranged and easier.

Cameras

You can keep an eye on the security of your home from anywhere on earth.
Since we began supplying iNELS, we have performed over 10,000 installations. Introducing a selection.

A fully remote-controlled squash center in Hungary, a French restaurant in Prague’s Municipal House, a discotheque in Kiev, Ukraine, a summer residence on Mallorca and a myriad of apartments and houses. You can find our systems installed and implemented in hundreds of locations across the globe.

We can introduce the iNELS system to various projects, whether it concerns the residential sector or commercial space.

Quote can be found at:
elkoep.inels.com

Smart Home & Building Solutions for

Home  Hotel  Future Office  Commerical  Industry  Smart City

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**Thermo-regulation**

**Wireless touch unit**
RF Touch
- power: 100–230 V AC, from the side 12 V DC
- load up to 40 units
- output: 2x potential free relays (3 A)

**Simple wireless temperature controller**
RFSTC-10/G
- power: 2x 1,5 V AAA battery
- temperature range: 0 to +55°C (32–131°F)
- integrated sensor
- design LOGUS™ (glass, metal, wood, stone)

**Wireless temperature controller**
RFATC-10/G
- power: 2x 1,5 V AAA battery
- temperature range: 0 to +55°C (32–131°F)
- weekly programming
- integrated sensor
- design LOGUS™ (glass, metal, wood, stone)

**Wireless temperature controller**
RFSTC-10/G
- power: 100–230 V AC/50–60 Hz
- temperature range: 0 to +55°C (32–131°F)
- weekly programming
- integrated sensor
- design LOGUS™ (glass, metal, wood, stone)

**Switching unit with a temperature sensor**
RFSTI-11/G
- power: 2x 1,5 V batteries AA
- temperature range: 0 to 32°C (32–90°F)
- integrated sensor
- adapters: RAV, RA, RAVL
- internal/external sensor
- design LOGUS™
- LED status indication

**IP camera**
iNELS Cam
- power: 5 V DC adapter
- resolution: 640 x 480 px
- night light
- up to 10 cameras in app

**Energy management**

**Energy gateway**
RFPM-2H
- power: 230 V AC / 50–60Hz
- inputs: PULS1, PULS2, BUS
- tariff inputs: TARF1, TARF2
- current measurement probes 3 x CT50
- output RELAY: 1NO/NC, 16A
- connection: LAN/Wi-Fi

**Wireless pulse converter**
RFPM-1
- power: 2x 1,5 V battery AAA
- supported sensors: LS (LED sensor), MS (magnetic sensor), IRS (Infra Red sensor)
- IP 65 protection

**Current transformer**
CT50
- the opening CT are installed on the existing wire of the measured circuit, most frequently at the main input to the electricity meter
- current: 50 A
- frequency: 50/60 Hz
- dimensions: 31 x 46 x 32 mm (1.22 x 1.81 x 1.26 in)

**LED sensor**
LS
- the LED sensor scans LED pulses on meters, which indicate consumption by flashing
- cable length: 1.5 m (4.92 ft)

**Magnetic sensor**
MS
- the magnetic sensor scans the pulse, created with every rotation of a magnet located on the unit dial
- cable length: 1.5 m (4.92 ft)

**Infra Red sensor**
IRS
- the Infra Red sensor scans the reflective curtain placed on the moving dial (mainly on water meters)
- cable length: 1.5 m (4.92 ft)

**Detectors**

**Smoke detector**
RFSD-101
- power: 2x 1,5 V AAA battery
- smoke detection: optical light scattering
- autotest

**Motion detector**
RFMD-100
- power: 2x 1,5 V AAA battery
- detection angle 105°
- shot length 12 m (13.12 yd)

**Window / Door detector**
RFWD-100
- power: 3x 3 V battery CR2032 battery
- opened window/door detection
- battery status indication

**Wireless Flood detector**
RFSF-1B + FP-1
- power: 1x 3 V battery CR 2477
- terminal for external probe FP-1
- operation button: battery status, signal quality

**Cameras**

**IP camera**
INELS Cam
- you can connect any video camera supporting MJEPG2
- compatible cameras Axis, D-link, Dahua

**Video cameras**

**Energy gateway**
RFPM-2H
- power: 230 V AC / 50–60Hz
- inputs: PULS1, PULS2, BUS
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- output RELAY: 1NO/NC, 16A
- connection: LAN/Wi-Fi
### Dimming actuators

**Wireless coloured bulb**
- RF-RGB-LED-550
  - load: 2x 8 A
  - power: 230 V AC/50—60 Hz
  - type of load: R, L, C, LED, ESL
  - minimum brightness setting
  - operated from 32 channels

**Dimming socket**
- RFSC-71
  - power: 12—24 V DC stabilized
  - load: 3x 5 A
  - 6 independent channels
  - time-functions (2 s—60 min)
  - operated from 25 channels (of controllers)
  - option of connecting an external antenna

**Dimming actuator**
- RDFSA-37M/RGB
  - power: 12—24 V DC stabilized
  - load: 3x 5 A
  - LED strip; single color 7.2 VA
  - 3x 8 m (3x 26.25 ft) RGB LED
  - 14.2 VA; 70 m (52.80 ft)
  - external control 0—10 V or potentiometer
  - control from external button
  - light scenes function
  - minimum brightness setting
  - operated from 32 channels

**Universal dimmer**
- RFDEL-71M
  - load: 230 V AC/50 Hz (605 VA); 120 V AC/60 Hz (300 VA)
  - type of load: R, L, C, LED, ESL
  - external control 0—10 V or potentiometer
  - control from external button
  - light scenes function
  - minimum brightness setting
  - operated from 25 channels

**Universal dimmer**
- RFDEL-71B
  - load: 230 V AC/50 Hz (605 VA); 120 V AC/60 Hz (300 VA)
  - type of load: R, L, C, LED, ESL
  - external control 0—10 V or potentiometer
  - control from external button
  - light scenes function
  - minimum brightness setting
  - operated from 25 channels

**Wireless dimmer switch**
- RFDW-71
  - load: 230 V AC/50 Hz (605 VA); 120 V AC/60 Hz (300 VA)
  - type of load: R, L, C, LED, ESL
  - external control 0—10 V or potentiometer
  - control from external button
  - light scenes function
  - minimum brightness setting
  - operated from 25 channels

**Dual Band wireless switching component input button**
- RFSAI-62B
  - supply voltage AC / DC 12 - 24, AC 120 V or AC 230 V.
  - load 2x 8 A
  - 2 independent channels
  - terminal for control from existing button
  - each channel can be controlled by up to 12 controllers

**Wireless contact converter**
- RFSG-1M
  - cheap/expensive current control
  - power: 110—230 V
  - AC/50—60 Hz, 24 V DC
  - galvanically separated
  - control input 12—230 V AC/DC
  - option of connecting an external antenna

**Wireless remote controller with display**
- RFDW-71
  - power: 2x 1.5 V AAA batteries
  - wireless switch in glass design
  - integrated dimming element
  - supply voltage: 230 V AC/50 Hz; 120 V AC/60 Hz
  - 4-channel design
  - control up to 25 channels
  - 6 light functions

**Wireless contact converter**
- RF-Contact
  - wireless contact converter
  - changes your existing button to a wireless one
  - power: 1x 3.5 V battery CR 2477
  - 2x 3 V battery CR 2032
  - 2 channels/4 channels

### Switching actuators

**Switching socket**
- RFSC-61
  - power: 230—250 V/50—60 Hz, 120 V AC/60 Hz
  - load: 16 A
  - time-functions (2 s—60 min)
  - operated from 32 channels (of controllers)

**Wireless switch unit**
- RFSA-61M
  - power: 10—230 V AC/50—60 Hz, 12—24 V DC
  - load: 16 A
  - time-functions (2 s—60 min)
  - operated from 25 channels (of controllers)
  - option of connecting an external antenna

**Wireless switch unit**
- RFSA-66M
  - power: 10—230 V AC/50—60 Hz, 12—24 V DC
  - load: 16 A
  - time-functions (2 s—60 min)
  - operated from 25 channels (of controllers)
  - option of connecting an external antenna

**Switch unit for outdoor use**
- RFUS-61
  - power: 230 V AC/50—60 Hz, 120 V AC/60 Hz, 24 V DC
  - load: 12 A
  - time-functions (2 s—60 min)
  - operated from 25 channels (of controllers)
  - manual control with built-in button

**Wireless switch unit with the input**
- RFSAI-61B
  - power: 230 V AC/50—60 Hz, 120 V AC/60 Hz, 24 V DC
  - load: 16 A
  - single-function ON/OFF or multifunctional design
  - operated from 25 channels (of controllers)
  - manual control with built-in button

**Wireless contact converter**
- RFSG-1M
  - cheap/expensive current control
  - power: 110—230 V
  - AC/50—60 Hz, 24 V DC
  - galvanically separated
  - control input 12—230 V AC/DC
  - option of connecting an external antenna

**Wireless contact converter**
- RF-Contact
  - wireless contact converter
  - changes your existing button to a wireless one
  - power: 1x 3.5 V battery CR 2477
  - 2x 3 V battery CR 2032
  - 2 channels/4 channels

### Controllers

**Switch unit for shutters**
- RFSA-10B, RFSA-62B
  - switching of roller shutters, blinds, garages, garage doors, gates etc.
  - possibility of connecting an existing buttons
  - power: 230 V AC/50—60 Hz, 120 V AC/60 Hz, 0—24 V DC
  - load: 2x 8 A
  - operated from 25 channels (of controllers)

**Wall switch controller**
- RF-WB-20/G, RF-WB-40/G
  - power: 3 V CR 2032 battery
  - 2 channels / 4 channels
  - scenes function
  - command LED indication
  - switching with a micro-button

**Touch unit**
- RF Touch
  - power: 100—230 V AC
  - from the wall 24 V DC
  - setting with up to 40 units + 30 detectors
  - central unit with autocontrol
  - status visualization
  - coloured TFT LCD display, 3.5”

**Remote controller with display**
- RF Pilot
  - power: 2x 1.5 V AAA batteries
  - setting with up to 40 units
  - infrared temperature sensor
  - scene function
  - status visualization
  - colour OLED display

**4 button controller - keychain**
- RF Key
  - power: 3 V CR 2032 battery
  - scenes function
  - command LED indication

**Wireless dimmer switch**
- RFDW-71
  - power: 230 V AC/50—60 Hz, 120 V AC/60 Hz, 24 V DC
  - load: 2x 8 A
  - 2 independent channels
  - time-functions (2 s—60 min)
  - each channel can be controlled by up to 12 controllers

**Dual Band wireless switching component input button**
- RFSAI-62B
  - supply voltage AC / DC 12 - 24, AC 120 V or AC 230 V.
  - load 2x 8 A
  - 2 independent channels
  - 2x switching contacts (AgSnO2)
  - time-functions (2 s - 60 min)
  - each channel can be controlled by up to 12 controllers

**Wireless twilight switch**
- RFSOU-1
  - power: 2x 1.5 battery AAA
  - range: 1-100 000 lx
  - twilight and light switch function
  - time delayed setting (0—2 min)
  - IP65 protection
Protocol and compatibility

The communication between the components is wireless at 868—916 MHz (according to country standards/regulations), using the unique RFIO and RFIO2 protocols. Both are proprietary wireless protocols from ELKO EP, which have a completely unique structure. RFIO2 is an extension of the RFIO protocol and allows users to use newly introduced features, such as unit signals (repeater), for selected features. This protocol is fully compatible with the previous version of the protocol (RFIO).

**Available frequency for individual territories:**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Territories</th>
</tr>
</thead>
<tbody>
<tr>
<td>868 MHz</td>
<td>India</td>
</tr>
<tr>
<td>868 MHz</td>
<td>EU, Ukraine, Russia, Middle East</td>
</tr>
<tr>
<td>916 MHz</td>
<td>South and North America, Australia, New Zealand</td>
</tr>
</tbody>
</table>

**Benefits of RFIO:**
- Communication is low-energy and reliably transfers small data packets
- Fees or licenses are not required
- No overlapping of communication space with unaddressed commands
- Frequency used does not interfere with Wi-Fi/Bluetooth devices
- Setting communication between components is not conditional on working with a computer or system

**Benefits of RFIO2:**
- Products labeled as "RFIO2" will allow newly set selected components such as unit signals (repeaters)
- For components, you can easily update FW using the RFAF/USB service device
- Enables communication with RFMD-100, RFWD-100 and RFSD-100/RFSD-101
- Data transfer between wireless components takes place in such a way that other receivers within range can help transfer the information (packet) to a remote receiver that is out of reach. It is possible to cover large-scale objects (real estate) and also increase the reliability of transmission in more demanding buildings
- Backward compatibility with RFIO elements is retained
### Product dimensions

- **RF Touch-W**
- **RF Touch-B**
- **RF Pilot**
- **RF Key**
- **1Modul**
- **MINI**
- **Detector**
- **RFSD-100**
- **RFSD-101**

### Installation possibilities

#### 1) Surface mounted
- Wall mounted or in an installation box with spacing of 65 mm.
  - **RF Touch-W**
  - **RFWB-20/G**
  - **RFWB-40/G**
  - **RFTC-10/G**
  - **RFTC-50/G**

#### 2) Flush mounted
- **RF Touch-B**
  - **RFTC-100/G**
  - **RFSTI-11/G**
  - **RFDW-71**

#### 3) DIN Rail mounted
- On DIN rail according to EN 60715.
  - **RFSG-1M**
  - **RFDEL-71M**
  - **RFSGM-220M**
  - **RFPM-2M**
  - **RFDA-73M/RGB**

#### 4) Mounted to or in the installation box
- **RFIM-20B**
- **RFIM-40B**
- **RFDEL-71B**
- **RFSTI-11B**
- **RFDAC-71B**
- **RFSF-1B**
- **RFSTI-111B**

#### 5) Mounted into the cover of appliance
- **RFDEL-71B**
- **RFSTI-11B**
- **RFSTI-111B**
- **RFSD-100**
- **RFSD-101**
- **RFMD-100**

#### 6) Surface mounted
- **RFSD-100**
- **RFSD-101**
- **RFK-1B**
- **RFSD-100**
- **RFSD-101**
- **RFMD-100**
- **RFK-1B**