SMART WIRELESS ELECTRO-INSTALLATION
The company ELKO EP has been one of the leading European players in the field of residential and industrial electrical devices for more than 23 years. Since 2007, the company has been developing and producing its own system of Smart Home & Building Solutions called iNELS.

At present, ELKO EP employs nearly 300 people, exports to 70 countries around the world and already has 10 foreign branches. The company is justly proud to produce its own components, and to have its own development and innovation of new products. It is also able to offer its customers instantaneous distribution and rapid, flawless service. The company became the Company of the Year in 2012 and earned its place as one of the TOP 100 Czech companies.
Facts and Stats

40% CZECH

30% EXPORT

30% BRANCHES

ANNUAL TURNOVER
20 Mil. EUR

3rd position in Europe

10 BRANCHES OVER THE WORLD

70 EXPORTING COUNTRIES

300 EMPLOYEES

5 000 iNELS INSTALLATION

12 000 000 MANUFACTURED PRODUCTS

www.elkoep.com
RF Control - Wireless RF system is a unique solution of intelligent electrical installation especially for reconstructions of houses, apartments or wiring extensions. Installation can be performed easily without breaking or cutting into the walls. Units (actuators) can be installed directly into suitable wall boxes, lighting covers, switchboards and wherever installation allows you to do so.

Flexible location: ideal for installing in existing buildings, as well as for refurbished and new buildings: thanks to RF Control, you are not limited by the location of a switch, for instance when moving furniture. The wireless wall switch button may be glued to glass, mounted on a beam or just placed on a night table and easily moved elsewhere at anytime.

Controlling lights from your terrace or opening your garage? You will have the keychain - your portable controller - always ready!

The universal transmitter module converts up to 4 potential-free external inputs (buttons) to RF signal, facilitating the connection of the following devices to the system: door switches or buttons, electronic alarm sensors (fire, smoke, door detector...), bells, etc. Property protection and safety. A flood, temperature, fire or gas leakage sensor sends a signal to the actuator, which closes the water or gas supply, switches on ventilation, etc.

Receivers (actuators) may be mounted in an installation box, under the existing switch, light covers or ceiling, or on a DIN rail inside the switchboard.

A smart design of wireless wall switch buttons with plastic, glass, wood, metal or granite finish.
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.

ELKO CLOUD
Your virtual data storage that you can use within the iNELS system for free, bringing you:
- storage for your system settings (settings of the RF smart box)
- data storage (consumed energy)
- remote control by smart phone without needing a public IP address.
iNELS Wireless System

- RF - radiofrequency protocol
- Wi-Fi

Outdoor PTZ camera
Indoor PTZ camera
Indoor camera

Gas meter
Water meter
Electricity panel meter
Energy gateway

Wireless pulse converter
Radiofrequency protocol
Wi-Fi

Video door-phone
Wi-Fi Router

Wireless
Electricity meter
Energy gateway

To energy gateway
To energy gateway
To energy gateway
Overview of wireless system units

Controllers

- RFWB-20/G, RFWB-40/G: Wireless wall controller - 2 button
- RF Key: 4 button controller - keychain
- RF Pilot: Wireless remote controller with display
- RFIM-20B: Wireless contact converter - 2 inputs
- RFIM-40B: Wireless contact converter - 4 inputs
- RFSG-1M: Wireless contact converter

System units

- RF Touch-B: Wireless touch unit - flush mounted
- RF Touch-W: Wireless touch unit - surface mounted
- eLAN-RF-003: Smart RF box
- eLAN-RF-Wi-003: Smart RF box with Wi-Fi
- RFGSM-220M: Multifunctional GSM communicator
- RFRP-20: Repeater to extend the range
- RFPM-2M: Energy gateway

Switches

- RFSA-11B: Wireless switch unit (single-function) - 1 output
- RFSA-61B: Wireless switch unit (multi-function) - 1 output
- RFSA-62B: Wireless switch unit (flush mounted) - 2 outputs
- RFSAI-61B: Wireless switch unit with the input (for a pushbutton)
- RFSA-61M: Wireless switch unit - 1 output
- RFSA-66M: Wireless switch unit - 6 outputs
- RFSC-61: Switching socket (multi-function)
- RFUS-61: Switch unit for outdoor use (multi-function)
- RFJA-12B/230V: Switch unit for shutters
- RFJA-12B/24V DC: Switch unit for shutters

Dimmers

- RFDA-73M/RGB: Dimmer for coloured (RGB) LED strips
- RFDSC-71: Dimming socket (multi-function)
- RFDAC-71B: Analog controller 0(1)-10V
- RFDEL-71B: Universal dimmer (flush mounted)
- RFDEL-71M: Universal dimmer (DIN rail mounted)
Overview of wireless system units

**Lighting**

- **RFATV-1**: Wireless twilight switch
- **RF-RGB-LED-550**: Wireless coloured bulb
- **RF-White-LED-675**: Wireless white bulb

**Temperature control**

- **RFATV-1**: Wireless thermo-valve
- **RFSTI-11B**: Switch unit with a temperature sensor (flush mounted)
- **RFSTI-11/G**: Switch unit with a temperature sensor
- **RFTI-10B**: Wireless temperature sensor
- **RFTC-10/G**: Simple wireless temperature controller
- **RFTC-50/G**: Wireless temperature controllers
- **RFTC-100/G**: Wireless temperature controllers

**Monitoring units**

- **RFSF-1B**: Wireless flood detector
- **RFTM-1**: Wireless pulse converter

**Detectors**

- **RFSD-100 / SD-100**: Smoke detector wireless / wireless
- **RFMD-100 / MD-100**: Motion detector wireless / wireless
- **RFWD-100 / WD-100**: Window / Door detector wireless / wireless

**Accessories**

- **FP-1**: Flood probe
- **TC**: Temperature sensors
- **TZ**: Internal antenna
- **AN-I**: External antenna
- **Telva**: Thermodevice
- **CT50**: Current transformer
- **LS, MS, IRS**: LED sensor Magnetic sensor Infra Red sensor

**Cameras**

- **iNELS Cam**: IP camera

**Supported video cameras**
RF sets - combination of controllers and units

**Basic sets**

**RFSET-SW2-Z1**
- 1x Wireless switch unit RFSA-11B
- 1x Wireless wall controller RFWB-20/G - white

**RFSET-SIM2-Z1**
- 1x Wireless switch unit RFSA-11B
- 1x Wireless contact converter RFIM-20B

**RFSET-SW-F1**
- 1x Wireless switch unit RFSA-61B
- 1x Wireless wall controller RFWB-40/G - white

**RFSET-SK-F1**
- 1x Wireless switch unit RFSA-61B
- 1x Keychan RF Key/B - black

**RFSET-SMK-F1**
- 1x Wireless switch unit RFSA-61M with added antenna A-NI
- 1x Keychan RF Key/B - black

**RFSET-RGB- RFKEY**
- 1x Wireless coloured bulb RF-RGB-LED-550
- 1x Keychan RF Key/B - black

**RFSET-SK-Z1**
- 1x Wireless switch unit RFSA-11B
- 1x Keychan RF Key/B - black
# Catalogue content

## Wireless control system

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Technical parameters

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<td>Supply voltage:</td>
<td>3V CR 2032 battery</td>
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<td>Transmission indication:</td>
<td>red LED</td>
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<td>Number of buttons:</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Transmitter frequency:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
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<tr>
<td>Signal transmission method:</td>
<td>unidirectionally addressed message</td>
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<td>Range in free space:</td>
<td>up to 200 m</td>
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Other data

- Operating temperature: -10 to +50 °C
- Operating position: any
- Mounting: glue / screws
- Protection: IP 20
- Contamination degree: 2

LOGUS90 - Dimensions:

- Frame - plastic: 85 x 85 x 16 mm
- Frame - metal, glass, wood, granite: 94 x 94 x 16 mm
- Weight*: 38g, 39g

Related standards:

- EN 60669, EN 300 220, EN 301 489

*Comes with plastic frame. No installation into multi-frames.

Device description

- The wireless controller is used to control switches and dimmers (lights, gate, garage door, blinds, etc.).
- **RFWB-20/G**: two buttons enable control of two units independently.
- **RFWB-40/G**: four buttons enable control of four units independently.

- The flat design with level base makes it ideal for fast installation on any surface (fixation with adhesive or screws in the installation box).
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Sending a command is indicated by a red LED.
- In LOGUS® switch frame design (plastic, glass, wood, metal, stone).
- Option of setting light scenes, where with a single press, you can control units of INELS RF Control.
- Battery power supply (3V/CR2032 - included in the supply) with battery life of around 5 years based on frequency of use.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

Examples of placement

- On wall
- On wood
- On glass

Choose your own style

Flat wireless switches that can be mounted on glass, tile, furniture ...

Such a quick change of location when you’re moving.
• The key alarm is used to control switches and dimmers (lights, gate, garage door, blinds, etc.).
• When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF/ON, blinds up/down).
• Sending a command is indicated by a red LED.
• Designed in black and white with laser printing.
• Four buttons enable control of four units independently.
• Option of setting light scenes, where with a single press, you can control units of iNELS RF Control.
• Battery power supply (3V/CR2032 - included in the supply) with battery life of around 5 years based on frequency of use.
• Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
• Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th></th>
<th>RF KEY/W</th>
<th>RF KEY/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>3V CR 2032 battery</td>
<td></td>
</tr>
<tr>
<td>Transmission indication</td>
<td>red LED</td>
<td></td>
</tr>
<tr>
<td>Number of buttons</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Transmitter frequency</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td>Signal transmission method</td>
<td>unidirectionally addressed message</td>
<td></td>
</tr>
<tr>
<td>Range in free space</td>
<td>up to 200 m</td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10 to +50 °C</td>
<td></td>
</tr>
<tr>
<td>Operating position</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Color design</td>
<td>white</td>
<td>black</td>
</tr>
<tr>
<td>Protection</td>
<td>IP 20</td>
<td></td>
</tr>
<tr>
<td>Contamination degree</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>64 x 25 x 10 mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>16 g</td>
<td></td>
</tr>
</tbody>
</table>

### Device description

- **Transmitter indication**: 
  - **Control buttons**: 
Combine the RF Pilot remote controller with the RF Touch control unit for maximum utilization of the RF Control system features.

**Technical parameters**

<table>
<thead>
<tr>
<th>Feature</th>
<th>RF Pilot/W</th>
<th>RF Pilot/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>color OLED</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>128 x 128 pixels</td>
<td></td>
</tr>
<tr>
<td>Side ratio</td>
<td>1:1</td>
<td></td>
</tr>
<tr>
<td>Visible surface</td>
<td>26 x 26 mm</td>
<td></td>
</tr>
<tr>
<td>Backlighting</td>
<td>self-illuminating text</td>
<td></td>
</tr>
<tr>
<td>Diagonal</td>
<td>1.5°</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>direction button, control buttons</td>
<td></td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>2 x 1.5V AAA batteries / R03</td>
<td></td>
</tr>
<tr>
<td>Battery life</td>
<td>approx. 3 years, according to the frequency of use and battery type</td>
<td></td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in free space</td>
<td>up to 200 m</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td><strong>Other data</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 to +55 °C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20 to +70 °C</td>
<td></td>
</tr>
<tr>
<td>Color design</td>
<td>white</td>
<td>anthracite</td>
</tr>
<tr>
<td>Protection</td>
<td>IP20</td>
<td></td>
</tr>
<tr>
<td>Operating position</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>130 x 41 x 18 mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>61 g</td>
<td></td>
</tr>
<tr>
<td>Related standards</td>
<td>EN 60730-1</td>
<td></td>
</tr>
</tbody>
</table>

**Device description**

The RF Pilot remote control is a central controller for switching electrical appliances and equipment, dimming lights, controlling blinds, etc.

- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Option of setting light scenes, where with a single press, you can control up to 10 units at once.
- The Favorites mode lets you preset the most frequently used devices on the home screen.
- Option of grouping dimmers (RFDA-73M/RGB), where you can place up to 10 units under a single control panel = control of over 100 m of colored LED strip.
- Designed in white and anthracite with color OLED display.
- Display of room temperature, battery status, date and time directly on display.
- Bidirectional communication, transmits and receives commands and displays the status of units.
- Thanks to the function of measuring the signal between the controller and unit, you can use it for testing the range and signal quality.
- It is possible to combine up to 40 units of INELS RF Control (you can gradually expand the installation from 1 unit).
- Battery power (1.5V 2 x AAA - included in supply) with battery life of around 3 years based on frequency of use and type of batteries.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

**Display description**

Color OLED display

- Date: sun 01.01.12
- Time: 12:54
- Battery indication
- Quick control options
- Indicative current temperature display
- TEMP: 23°C
- Enter menu
**RF Pilot**

- **SCENES**
  - serves to control actuators as a group with a single touch
  - possibility to set up scenes; on activation, for example, window shutters are pulled down and the light will adjust to the required brightness

- **WINDOW SHUTTERS**
  - controlling window shutters, blinds, garage door, etc.
  - window shutters are controlled separately or as a group
  - the window shutter receivers are powered by either 230V or 24V DC (shutters between windows)

- **FAVOURITE**
  - serves to select the most frequently used devices
  - on display activation, the “Favourite” menu pops up automatically to provide you with a quick access to controlling devices

- **SWITCHING**
  - this function serves to switch on/off lights, sockets, electrical appliances and devices
  - intuitive control thanks to customized name options
  - switching actuator function selections: switch on/off, impulse relay, button, delayed ON/OFF (time of delay from 2 seconds to 60 minutes)

- **DIMMING**
  - the regulation of light intensity (light bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable ballast 1–10V)
  - customizable names of individual dimmed circuits (such as “lights” or “living room”)
  - “sunrise/sunset” imitation - light gradually goes on or off during the preset period between 2 seconds and 30 minutes
Wireless contact converter RFIM-20B, RFIM-40B

-RFIM-20B: the wireless contact converter changes your existing button / switch to a wireless one.
  -two inputs enable control of two units independently.
  -battery power supply (3V/CR2477 - included in the supply) with battery life of around 5 years based on frequency of use.
-RFIM-40B: the wireless contact converter changes your existing button to a wireless one.
  -four inputs enable control of four units independently.
  -battery power supply (2 x 3V / CR2032) with battery life of around 5 years based on frequency of use (included in the supply).
  -It can be used to transmit information on switching on the contact (detector, button, technology, logic output).
  -The BOX design lets you mount it right in an installation box under the button or switch.
  -When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
  -Sending a command is indicated by a red LED.
  -Option of setting light scenes, where with a single press, you can control multiple units of iNELS RF Control.
  -Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
  -Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>RFIM-20B</th>
<th>RFIM-40B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply voltage:</strong></td>
<td>1 x 3V battery CR2477</td>
</tr>
<tr>
<td><strong>Battery life:</strong></td>
<td>5 years</td>
</tr>
<tr>
<td><strong>Transmission indication / function:</strong></td>
<td>orange LED</td>
</tr>
<tr>
<td><strong>Number of inputs:</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Transmitter frequency:</strong></td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td><strong>Signal transmission method:</strong></td>
<td>unidirectionally addressed message</td>
</tr>
<tr>
<td><strong>Range in free space:</strong></td>
<td>up to 200 m</td>
</tr>
</tbody>
</table>

### Device description

**RFIM-20B**

-Transmitter indication

**RFIM-40B**

-Transmitter indication

### Connection

RFIM-20B

- Switch
- IN2
- IN1

RFIM-40B

- Buttons
- IN4
- IN2
- IN1
- GND

### Dimensions:

- RFIM-20B: 49 x 49 x 13 mm
- RFIM-40B: 4 x 0.75 mm² 6 x 0.75 mm²
Wireless contact converter RFSG-1M

- This wireless contact converter is especially appropriate for wireless transmission of information on switching HDO.
- Thanks to the network supply, it can also be used for partial transmission of information for control of an appliance or device.
- One-module design of the unit with mounting into switchboard.
- After leading in power to the “S” terminals, it periodically transmits the command switch on in an interval of 10 min. When disconnecting the power supply, immediately switch off.
- The button TEST on the controller is used to assign to a switching unit.
- Option of setting light scenes, where with a single press, you can control multiple units of iNELS RF Control.
- The package includes an internal antenna AN-I, in case of locating the converter in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>RFSG-1M/230V</th>
<th>RFSG-1M/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply voltage:</strong></td>
<td>110-230 V AC / 50-60 Hz</td>
</tr>
<tr>
<td><strong>Apparent input:</strong></td>
<td>2 VA</td>
</tr>
<tr>
<td><strong>Dissipated power:</strong></td>
<td>0.2 W</td>
</tr>
<tr>
<td><strong>Supply voltage tolerance:</strong></td>
<td>+10 % / -25 %</td>
</tr>
<tr>
<td><strong>Power supply indication:</strong></td>
<td>green LED</td>
</tr>
</tbody>
</table>

### Input

- **Control voltage:** AC 12-230V / DC 12-230V
- **Control input power:** AC 0.025VA / DC 0.1W
- **The length of control impulse:** min. 25ms (max. unlimited)
- **Transmitter frequency:** 868 MHz, 915 MHz, 916 MHz
- **Signal transmission method:** unidirectionally addressed message
- **Range in free space:** up to 160 m
- **Minimum control distance:** 20 mm
- **Output for antenna:** SMA connector*

### Other data

- **Operating temperature:** -15 to + 50 °C
- **Operating position:** any
- **Mounting:** DIN rail support EN 60715
- **Protection:** IP20 from the front panel
- **Overvoltage category:** III.
- **Contamination degree:** 2
- **Connecting conductor cross-section (mm²):** max. 1x2.5, max. 2x1.5 / with a hollow max. 1x2.5
- **Dimensions:** 90 x 17.6 x 64 mm
- **Weight:** 62 g
- **Related standards:** EN 60669, EN 300 220, EN 301 489

* Max Tightening Torque for antenna connector is 0.56 Nm.
The wireless touch unit RF Touch is a central controller for heating, switching electrical appliances and equipment, dimming lights, controlling blinds, etc.

- It transmits and receives commands from units and processes set programs for automatic control.
- Thanks to bi-directional communication, it visualizes the current status of individual units.
- Automatic control based on weekly program.
- Touch 3.5" color display.
- It is possible to combine up to 40 units of iNELS RF Control + 30 Oasis detectors (you can gradually expand the installation from 1 unit).
- Power to the touch unit is in the range 100 - 230V AC, (RF Touch/W also supplied via adapter 12V DC (included in the supply)).
- RF Touch/W: wall mounting, secured in an installation box or glued to glass, wood, dry wall, etc.
- RF Touch/B: mounting of unit in installation box.
- Range up to 100 m (in open space), if the signal is insufficient between the RF Touch and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Color design of RF Touch:
  - frames: in basic plastic design (white, black, red) or in the luxury design LOGUS90 - glass, metal (aluminum, nickel, titanium).
  - intermediate frames: in basic white and dark gray with metallic coat - aluminum, pearl, ice and gray.
  - rear cover: in white, ivory, light gray and dark gray
- You can choose your own color combination at e-shop ELKO EP.

In 2011, the RF Touch wireless unit won the prize GOLDEN AMP.
**RF TOUCH**

**HEATING**
- control of heating devices (boilers, thermo valve 0–10V...)
- temperature regulation in the entire house or in individual rooms
- information about outdoor temperature (wireless temperature sensor) - terraces
- possibility to set your own heating program for the whole week
- holiday mode will interrupt the heating program when you are on holiday
- room temperature correction (during the heating program) is performed with a digital thermal regulator command

**DIMMING**
- the regulation of light intensity (light bulbs, LED bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable control gear 1–10V)
- customizable names of individual dimmed circuits (such as “living room lights”)
- “sunrise/sunset” imitation - light gradually goes on or off during the preset period between 2 seconds and 30 minutes

**DETECTORS**
- RF Touch communicates with detectors - window, door, movement...
- possible to combine with switching actuators
- clear control over the entire house

**SWITCHING**
- this function serves to switch on/off lights, sockets, electrical appliances and devices
- intuitive control thanks to customized name options
- switch clock enabling you to switch appliances in real time, even during your absence (simulation of the presence of persons, etc.)
- switching actuator function selections: switch on/off, impulse relay, button, delayed ON/OFF (time of delay from 2 seconds to 60 minutes)

**WINDOW SHUTTERS**
- controlling window shutters, sunblinds, blinds, garage door, etc.
- window shutters are controlled separately or as a group
- setting an independent time schedule for pulling up/down
- the window shutter receivers are powered by either 230V or 24V DC (shutters between windows, etc.)

**QUICK CONTROL**
- serves to control group of actuators with a single touch
- possibility to set up scenes; on activation, for example, window shutters are pulled down and lights are adjusted to required intensity
### Technical parameters

<table>
<thead>
<tr>
<th>eLAN-RF-003</th>
<th>eLAN-RF-Wi-003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface RF Control:</td>
<td></td>
</tr>
<tr>
<td>Communication protocol:</td>
<td>RF Touch Compatible</td>
</tr>
<tr>
<td>Broadcasting frequency:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Signal transfer method:</td>
<td>two-way addressed message</td>
</tr>
<tr>
<td>Output for antenna:</td>
<td>SMA connector*</td>
</tr>
<tr>
<td>Antenna RF:</td>
<td>1 dB (part of supply)</td>
</tr>
<tr>
<td>Indications RF communications:</td>
<td>1 x red RF status LED, 1 x green RF status LED</td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 100 m</td>
</tr>
<tr>
<td>Interface Ethernet:</td>
<td></td>
</tr>
<tr>
<td>ETH operating status indicator:</td>
<td>green LED</td>
</tr>
<tr>
<td>ETH communication indicator:</td>
<td>yellow LED</td>
</tr>
<tr>
<td>Communications interface:</td>
<td>100 Mbps (RJ45)</td>
</tr>
<tr>
<td>Preset IP address:</td>
<td>192.168.1.1</td>
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<tr>
<td>Interface Wi-Fi:</td>
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</tr>
<tr>
<td>Standard:</td>
<td>IEEE 802.11 b/g/n / 2.4 GHz</td>
</tr>
<tr>
<td>Wi-Fi Security:</td>
<td>WEP, WPA-PSK, WPA2-PSK</td>
</tr>
<tr>
<td>Frequency range Wi-Fi:</td>
<td>2.4 GHz</td>
</tr>
<tr>
<td>Antenna Wi-Fi:</td>
<td>R-SMA</td>
</tr>
<tr>
<td>Antenna Wi-Fi:</td>
<td>1 dB (part of supply)</td>
</tr>
<tr>
<td>Indications Wi-Fi communication:</td>
<td>1 x red Wi-Fi status LED</td>
</tr>
<tr>
<td>Range:</td>
<td>in to 200 m</td>
</tr>
<tr>
<td>Supply voltage/current:</td>
<td>10-27 V DC / 200 mA SELV</td>
</tr>
<tr>
<td>Power:</td>
<td>adapter with connector Jack Ø 2.1 mm (part of supply)</td>
</tr>
<tr>
<td>Supply voltage indication:</td>
<td>green LED POWER</td>
</tr>
<tr>
<td>Button RESET:</td>
<td>settings to their defaults</td>
</tr>
<tr>
<td>Power source:</td>
<td>230 VAC / 12 V DC part of supply of device</td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-20 to +50 °C</td>
</tr>
<tr>
<td>Storage temperature:</td>
<td>-25 to +70 °C</td>
</tr>
<tr>
<td>Protection:</td>
<td>IP20</td>
</tr>
<tr>
<td>Contamination degree:</td>
<td>2</td>
</tr>
<tr>
<td>Working position:</td>
<td>any</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>90 x 52 x 65 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>136 g</td>
</tr>
</tbody>
</table>

*Max Tightening Torque for antenna connector is 0.56 Nm.*

### Device description

**eLAN-RF-003**
- Front panel
  - Yellow USB status LED
  - LED indication Ethernet
  - Connector of Ethernet
  - USB B connector
  - Green POWER LED
- Back panel
  - Connector of SMA antenna
  - Red LED
  - RF STATUS

**eLAN-RF-Wi-003**
- Front panel
  - Yellow USB status LED
  - LED indication Ethernet
  - Connector of Ethernet
  - USB B connector
  - Green POWER LED
- Back panel
  - Connector of Wi-Fi SMA antenna
  - Green LED
  - RF STATUS

**eLAN-RF box eLAN-RF-003, eLAN-RF-Wi-003**
- The smart RF box enables you to control your electrical installation by smartphone, tablet or SMART TV.
- It transmits and receives commands of up to 40 units, and it processes set programs for automatic control, (you can gradually expand installation from 1 unit iNELS RF Control).
- Thanks to bi-directional communication, it visualizes the current status of individual units.
- The smart RF box eLAN-RF-003 is connected by network cable LAN to the home network (router) and communicates with your smart phone.
- The smart RF box eLAN-RF-Wi-003 is connected to the home network (router) via the Wi-Fi network and communicates with your smart phone. Connection to the home network is also possible via network LAN cable.
- The intuitive application environment offers central control from one place.
- Function of application iHC-MARF / iHC-MIRF:
  - control of hot water or electric underfloor heating
  - measuring temperature by wireless sensors
  - switching appliances (garage door, blinds, fan, sprinklers, sockets, etc.)
  - dimming lights (LED, energy-saving, halogen or classic lamps)
  - time switching (delayed switching off when leaving room)
  - video camera integration
- - light scenes (make multiple commands at once with a single press).
- If you don’t have a fixed IP address, the Smart RF box will obtain it from DHCP server automatically.
- Power is supplied to the Smart RF box via adapter 10-27 V DC (included in the supply) or PoE by power source (router) 24V DC.
- By connecting two Smart RF boxes by LAN cable, you avoid the problem of lack of signal range.
- Option of setting via web interface or directly in the application iHC-MARF (Android) / iHC-MIRF (iPhone).
- The package includes an internal antenna AN-I, in case the Smart RF box is located in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 100 m (in open space), if the signal is insufficient between the Smart RF box and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Additional notes
- IEEE 802.11 b/g/n / 2.4 GHz
- WEP, WPA-PSK, WPA2-PSK
- R-SMA
- 1 dB (part of supply)
- 1 x red Wi-Fi status LED
- 1 x yellow Wi-Fi status LED
- Up to 200 m
Control application for smart phones with Android operating system - iHC-MARF and for smart phones iPhone - iHC-MIRF

- The application iHC-MARF / iHC-MIRF allows you to control your home easily by smartphone.
- The user-friendly and intuitive application environment offers central control from one place.
- iHC-MARF / iHC-MIRF enables control of RF units by smart phone via a smart RF box, which is connected to the home Internet network.
- The smart RF box controls up to 40 units of iNELS RF Control, (you can gradually expand control from 1 unit of iNELS RF Control).
- If you don’t have a permanently set IP address, the application supports its automatic obtaining from the DHCP server.

Functions of the application iHC-MARF / iHC-MIRF:
- regulation of hot water or electric underfloor heating (setting a weekly program)
- measuring temperature (e.g. by wireless sensors)
- switching appliances (garage door, blinds, fans, sprinklers, sockets, etc.)
- dimming lights (LED, energy-saving, halogen lamps or classic light bulbs)
- time switching (delayed switching off of light when leaving room)
- integration of video cameras
- light scenes (one press to perform multiple commands simultaneously)
- remote control (switch on heating before returning from vacation).

- The application iHC-MARF supports Android versions from 2.3 in your smartphone.

---

**Technical parameters**

<table>
<thead>
<tr>
<th></th>
<th>iHC-MARF</th>
<th>iHC-MIRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application language of iHC:</td>
<td>based on language set in mobile device, tablet or smart phone, and settings in OS Android or iOS</td>
<td></td>
</tr>
<tr>
<td>Optimized for devices with a display resolution of:</td>
<td>800x480</td>
<td></td>
</tr>
</tbody>
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---

**Overview of functions**

- **Temperature regulation**
- **Cameras**
- **Appliances control**
- **Lighting control**
- **Blinds / Shutters**
- **Sockets**
- **Garage doors / gates**
- **Scenes**
- **Video door-phone**
- **Energy control**

---

**Control apps for smartphones**

Technical parameters:

- Optimized for devices with a display resolution of 800x480
- Based on language set in mobile device, tablet or smart phone, and settings in OS Android or iOS

---

**Video door-phone**

Available on the App Store

Available on Google play
Multifunctional GSM communicator RFGSM-220M

**Technical parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFGSM-220M</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply voltage</strong></td>
<td>11–30V DC, backup power supply Li-Ion batteries</td>
</tr>
<tr>
<td><strong>Maximum power consumption</strong></td>
<td>1W in standby mode / power supply and communication max. 18W</td>
</tr>
<tr>
<td><strong>Current consumption</strong></td>
<td>90 mA at 12 V DC</td>
</tr>
<tr>
<td><strong>Consumption during communication</strong></td>
<td>max. 1.5 A at 12 V DC</td>
</tr>
<tr>
<td><strong>Working band of GSM module</strong></td>
<td>850/900/1800/1900 MHz</td>
</tr>
<tr>
<td><strong>Transmitter output power</strong></td>
<td>2W for GSM 900, 1W for GSM 1800</td>
</tr>
<tr>
<td><strong>Control voltage</strong></td>
<td>AC 12–230V or DC 12–230V (separated optocoupler)</td>
</tr>
<tr>
<td><strong>Control input power</strong></td>
<td>AC 0.025 VA / DC 0.1W</td>
</tr>
<tr>
<td><strong>Length of control impulse</strong></td>
<td>min. 50 ms / max. unlimited</td>
</tr>
<tr>
<td><strong>Inputs RF</strong></td>
<td>one-/two-way addressed message 868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td><strong>Number of contacts</strong></td>
<td>2 Switches (AgSnO2)</td>
</tr>
<tr>
<td><strong>Rated current</strong></td>
<td>8 A / AC1</td>
</tr>
<tr>
<td><strong>Switching power</strong></td>
<td>2500VA, 240 W</td>
</tr>
<tr>
<td><strong>Max. switching power DC</strong></td>
<td>500 mW</td>
</tr>
<tr>
<td><strong>Mechanical service life (AC1)</strong></td>
<td>1x10³</td>
</tr>
<tr>
<td><strong>Electrical service life</strong></td>
<td>1x10⁶</td>
</tr>
<tr>
<td><strong>RF outputs</strong></td>
<td>two-way addressed message 868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td><strong>Other data</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Operating system PC</strong></td>
<td>MS Windows XP and higher</td>
</tr>
<tr>
<td><strong>Range of RF module</strong></td>
<td>up to 150 m</td>
</tr>
<tr>
<td><strong>Output for antenna</strong></td>
<td>SMA connector*</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-15 °C up to +50 °C</td>
</tr>
<tr>
<td><strong>Operating position</strong></td>
<td>any</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>DIN rail EN 60715</td>
</tr>
<tr>
<td><strong>Protection</strong></td>
<td>IP 20 from front panel</td>
</tr>
<tr>
<td><strong>Overvoltage category</strong></td>
<td>II</td>
</tr>
<tr>
<td><strong>Contamination degree</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>Cross-section of connecting wires (mm²)</strong></td>
<td>max. 1x2.5, max.2x1.5 with a hollow max 1x2.5</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>90 x 52 x 65 mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>198 g</td>
</tr>
<tr>
<td><strong>Related standards</strong></td>
<td>EN 60720-1</td>
</tr>
</tbody>
</table>

* Max Tightening Torque for antenna connector is 0.56 Nm.

**Device description**

- The multi-function GSM communicator is used for remote switching of heating, lights, gate, garage door, etc.
- GSM communicator can be used in several ways, which can be combined:
  a) control by telephone, where a sent SMS or ringing through once switches an internal relay.
  b) reacts to 1 of 4 potential free wired inputs (detectors, switches), where it is possible to set a consequent reaction.
  c) offers the option of ascertaining the status of units INELS RF Control (ON/OFF, temperature).
  d) control by telephone, where a sent SMS or ringing through once transmits an AF command to the switching unit within range, which then switches something (e.g. heating).
  e) security function (switching on the ALARM) in combination with wireless detectors OASIS, where activation / deactivation takes place by ringing through once or by key alarm.
- The multi-function GSM communicator is used for remote switching of heating, lights, gate, garage door, etc.
- GSM communicator can be used in several ways, which can be combined:
  a) control by telephone, where a sent SMS or ringing through once switches an internal relay.
  b) reacts to 1 of 4 potential free wired inputs (detectors, switches), where it is possible to set a consequent reaction.
  c) offers the option of ascertaining the status of units INELS RF Control (ON/OFF, temperature).
  d) control by telephone, where a sent SMS or ringing through once transmits an AF command to the switching unit within range, which then switches something (e.g. heating).
  e) security function (switching on the ALARM) in combination with wireless detectors OASIS, where activation / deactivation takes place by ringing through once or by key alarm.
- The three-module design of the unit into a switchboard enables connection of a switched load 2x 8A (2x 2000W).
- Settings are performed by SW Connect 1 via mini USB connector
- Li-Ion battery for 30 minute function backup
- The GSM communicator is powered by an adapter in the range 11–30V DC.
- The package includes an internal antenna AN-I, in case of locating the communicator in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 150 m (in open space).
- Communication frequency with bidirectional protocol INELS RF Control.
- Package includes: 2x internal antenna AN-I, mini USB connector, SW Connect 1, adapter 12V 6W.

**Connection**

- Control via SMS or ringing through once
- Receiving signals from RF sensors
- Sending SMS or ringing through once
- Detection of switching on/off of appliance
- Connection of wire detectors/sensors

**Device output**

- Control of appliances
- Power supply 11–30V AC / 500 mA (Terminals)
- Power supply indication
- USB connection
- USB initialization
- RF
- GSM
- Battery indication
Thanks to the GSM communicator, you immediately know what the temperature is at home right now. Just send an SMS or ring the communicator once, the RF signal transfers this command to RF Touch, and from RF Touch an SMS text message reply is sent back to your phone with the current temperature. You can then switch the heating on or off.

By sending an SMS or ringing once, you activate the GSM communicator, which sends an RF command to the temperature actuator, which then switches the heating (cable connection applied between the actuator and heater).

GSM communicator enables you to directly switch on up to 4 appliances. Its usefulness thus expands from simply switching into the area of detectors.

One of 4 inputs receives information from the detector and sends it by SMS to the given telephone number.

GSM communicator features a simple and secure function via dialing or key chain to activate the ARM / DISARM for guarding property.

ARM function = guarding
In the case of detection or changes in the detector, the gateway sends a command to switch the siren, and can send an SMS to the set-up number.
Repeater to extend the range **RFRP-20**

- Radio frequency signal repeater
- This signal repeater is used to extend the range between the controller and unit by up to 200 meters.
- It is designed to transmit a signal to up to 20 units.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket, the through-socket function remains unchanged.
- Indication:
  - green LED - supply voltage
  - red LED - active status (receiving and transmitting an RF signal)
- Programming is performed by a button.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>RFRP-20/230V</th>
<th>RFRP-20/120V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 - 250V / 50-60Hz</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>6 VA</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7W</td>
</tr>
<tr>
<td>Transmitter frequency:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 200 m</td>
</tr>
<tr>
<td>Minimum control distance:</td>
<td>20 mm</td>
</tr>
<tr>
<td>Programming:</td>
<td>button, green LED / red LED</td>
</tr>
</tbody>
</table>

### Other data

- Operating temperature: -20 to +55 °C
- Storage temperature: -30 to +70 °C
- Mounting: plug into a socket
- Protection: IP20 Device
- Dimensions: 62 x 58 x 102 mm
- Weight: 181 g
- Related standards: EN 607 30-1 ED.2

**Produced in 4 designs of sockets and plugs:**

- French CZ, SK, PL, FR
- Schuko HU, DE, RU, AT, RO, ES
- British GB
- US USA

### Controlling up to 20 actuators

- **RF Pilot**
- **RF Touch**
- **eLAN-RF-003**
- **eLAN-RF-Wi-003**
- **RF Key**
- **RFWB-20/G**
- **RFWB-40/G**
The wireless switch unit with 1 output channel is used to control appliances, lights (easy to integrate it to control garage doors or gates).

It can be combined with Control or System units iNELS RF Control.

The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.

It enables connection of the switched load up to 16A (4.000 W).

RFSA-11B: single-function design - switch on / off

RFSA-61B: multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.

The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).

The programming button on the unit is also used for manual control of the output.

Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater BFRP-20.

Communication frequency with bidirectional protocol iNELS RF Control.

**Technical parameters**

<table>
<thead>
<tr>
<th></th>
<th>RFSA-11B/230V</th>
<th>RFSA-11B/120V</th>
<th>RFSA-61B/230V</th>
<th>RFSA-61B/120V</th>
<th>RFSA-61B/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 V AC / 50-60 Hz</td>
<td>120 V AC / 60Hz</td>
<td>230 V AC / 50-60 Hz</td>
<td>120 V AC / 60Hz</td>
<td>230 V AC / 50-60 Hz</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>7 VA / cos φ = 0.1</td>
<td>7 VA / cos φ = 0.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>0.7 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 %; -15 %</td>
<td>+10 %; -15 %</td>
<td>+10 %; -15 %</td>
<td>+10 %; -15 %</td>
<td>+10 %; -15 %</td>
</tr>
</tbody>
</table>

**Output**

- Number of contacts: 1x switching (AgSnO2)
- Rated current: 16 A / AC
- Switching power: 4000 VA / AC1, 384 W / DC
- Peak current: 30 A / <3 s
- Switching voltage: 250 V AC1 / 24 V DC
- Min. DC switching power: 500 mW
- Mechanical service life: 3x10^7
- Electrical service life (AC1): 0.7x10^7

**Control**

- RF, by command from transmitter: 868 MHz, 915 MHz, 916 MHz
- Manual control: PROG (ON/OFF) button
- Range in free space: up to 200 m

**Other data**

- Operating temperature: -15 to + 50 °C
- Operating position: any
- Mounting: free at lead-in wires
- Protection: IP 30
- Overvoltage category: III.
- Contamination degree: 2
- Terminals (CY wire, cross-section): 2x 0.75 mm², 2x 2.5 mm²
- Length of terminals: 90 mm
- Dimensions: 49 x 49 x 21 mm
- Weight: 46 g

**Connection**

RFSA-11B/230V
RFSA-11B/120V

RFSA-61B/230V
RFSA-61B/120V

RFSA-61B/24V
12-24 AC/DC

**Device description**

- The switching unit with 1 output channel is used to control appliances, lights (easy to integrate it to control garage doors or gates).
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4.000 W).
- RFSA-11B: single-function design - switch on / off
- RFSA-61B: multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater BFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

**Function**

For more information, see p. 56
- The switching unit with 2 output channels is used for controlling appliances and light circuits.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of switched load 2 x 8A (2 x 2.000 W).
- Function: button, impulse relay and time function of delayed start and return with time setting range of 2s-60 min.
  It is possible to assign any function to each output relay.
- Each of the channels may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th></th>
<th>RFSA-62B/230V</th>
<th>RFSA-62B/120V</th>
<th>RFSA-62B/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 V AC / 50-60 Hz</td>
<td>120 V AC / 60Hz</td>
<td>12-24V AC/DC 50-60Hz</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>7 VA / cos φ = 0.1</td>
<td>7 VA / cos φ = 0.1</td>
<td>-</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>0.7 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 %; -15 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of contacts:</td>
<td>2 x switching</td>
<td>2 x switching</td>
<td>2 x switching</td>
</tr>
<tr>
<td>Rated current:</td>
<td>8 A / AC1</td>
<td>8 A / AC1</td>
<td>8 A / AC1</td>
</tr>
<tr>
<td>Switching power:</td>
<td>2000 VA / AC1</td>
<td>2000 VA / AC1</td>
<td>2000 VA / AC1</td>
</tr>
<tr>
<td>Peak current:</td>
<td>10 A / &lt;3 s</td>
<td>10 A / &lt;3 s</td>
<td>10 A / &lt;3 s</td>
</tr>
<tr>
<td>Switching voltage:</td>
<td>250 V AC1</td>
<td>250 V AC1</td>
<td>250 V AC1</td>
</tr>
<tr>
<td>Min. DC switching power:</td>
<td>500 mW</td>
<td>500 mW</td>
<td>500 mW</td>
</tr>
<tr>
<td>Mechanical service life:</td>
<td>1x10^7</td>
<td>1x10^7</td>
<td>1x10^7</td>
</tr>
<tr>
<td>Electrical service life (AC1):</td>
<td>1x10^7</td>
<td>1x10^7</td>
<td>1x10^7</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF, by command from transmitter:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual control:</td>
<td>PROG (ON/OFF) button</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 100 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-15 to +30 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating position:</td>
<td>any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting:</td>
<td>free at lead-in wires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection:</td>
<td>IP30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overvoltage category:</td>
<td>III.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contamination degree:</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terminals (CY wire, cross-section):</td>
<td>1 x 2.5 mm², 3 x 0.75 mm²</td>
<td>1 x 2.5, 4 x 0.75 mm²</td>
<td></td>
</tr>
<tr>
<td>Length of terminals:</td>
<td>90 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td>49 x 49 x 21 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>46 g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Function

For more information, see p. 56.

### Device description

- Indication of operating and programming mode
- Neutral conductor
- Phase conductor
- Output relay contacts

### Connection

- RFSA-62B/230V
- RFSA-62B/120V
- RFSA-62B/24V

- 12-24 V AC/DC
Wireless switch unit with the input RFSAI-61B

Technical parameters

<table>
<thead>
<tr>
<th>RFSAI-61B/230V</th>
<th>RFSAI-61B/120V</th>
<th>RFSAI-61B/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply voltage:</strong></td>
<td>230 V AC / 50 - 60 Hz</td>
<td>120 V AC / 60 Hz</td>
</tr>
<tr>
<td><strong>Apparent power:</strong></td>
<td>7 VA / cos φ = 0.1</td>
<td>7 VA / cos φ = 0.1</td>
</tr>
<tr>
<td><strong>Dissipated power:</strong></td>
<td>0.7 W</td>
<td>0.7 W</td>
</tr>
<tr>
<td><strong>Supply voltage tolerance:</strong></td>
<td>+10 %; -15 %</td>
<td>+10 %; -15 %</td>
</tr>
<tr>
<td><strong>Number of contacts:</strong></td>
<td>1x switching (AgSnO2)</td>
<td>1x switching (AgSnO2)</td>
</tr>
<tr>
<td><strong>Rated current:</strong></td>
<td>16 A / AC1</td>
<td>16 A / AC1</td>
</tr>
<tr>
<td><strong>Switching power:</strong></td>
<td>4000 VA / AC1, 384 W / DC</td>
<td>4000 VA / AC1, 384 W / DC</td>
</tr>
<tr>
<td><strong>Peak current:</strong></td>
<td>30 A / &lt;3 s</td>
<td>30 A / &lt;3 s</td>
</tr>
<tr>
<td><strong>Switching voltage:</strong></td>
<td>250 V AC1 / 24 V DC</td>
<td>250 V AC1 / 24 V DC</td>
</tr>
<tr>
<td><strong>Min. switching power DC:</strong></td>
<td>500 mW</td>
<td>500 mW</td>
</tr>
<tr>
<td><strong>Mechanical service life:</strong></td>
<td>3x10^7</td>
<td>3x10^7</td>
</tr>
<tr>
<td><strong>Electrical service life (AC1):</strong></td>
<td>0.7x10^6</td>
<td>0.7x10^6</td>
</tr>
<tr>
<td><strong>Controlling:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RF command from the transmitter:</strong></td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td><strong>Manual control:</strong></td>
<td>button PROG (ON/OFF)</td>
<td>button PROG (ON/OFF)</td>
</tr>
<tr>
<td><strong>External button:</strong></td>
<td>max. 12 m cable *</td>
<td>max. 12 m cable *</td>
</tr>
<tr>
<td><strong>Range in open space:</strong></td>
<td>up to 200 m</td>
<td>up to 200 m</td>
</tr>
<tr>
<td><strong>Other data:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Voltage of open contact:</strong></td>
<td>3V</td>
<td>3V</td>
</tr>
<tr>
<td><strong>Resist. of connection for closed contact:</strong></td>
<td>&lt;1 kΩ</td>
<td>&lt;1 kΩ</td>
</tr>
<tr>
<td><strong>Resist. of connection for open contact:</strong></td>
<td>&gt;10 kΩ</td>
<td>&gt;10 kΩ</td>
</tr>
<tr>
<td><strong>Galvanic isolation of input:</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Operating temperature:</strong></td>
<td>-15 up to + 50 °C</td>
<td>-15 up to + 50 °C</td>
</tr>
<tr>
<td><strong>Working position:</strong></td>
<td>any</td>
<td>any</td>
</tr>
<tr>
<td><strong>Mounting:</strong></td>
<td>free at lead-in wires</td>
<td>free at lead-in wires</td>
</tr>
<tr>
<td><strong>Protection:</strong></td>
<td>IP 30</td>
<td>IP 30</td>
</tr>
<tr>
<td><strong>Overvoltage category:</strong></td>
<td>III.</td>
<td>III.</td>
</tr>
<tr>
<td><strong>Contamination degree:</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Terminals (CY wire, Cross-section):</strong></td>
<td>2x 0.75 mm², 2x 2.5 mm²</td>
<td>2x 0.75 mm², 2x 2.5 mm²</td>
</tr>
<tr>
<td><strong>Terminal length:</strong></td>
<td>90 mm</td>
<td>90 mm</td>
</tr>
<tr>
<td><strong>Dimensions:</strong></td>
<td>49 x 49 x 21 mm</td>
<td>49 x 49 x 21 mm</td>
</tr>
<tr>
<td><strong>Weight:</strong></td>
<td>46 g</td>
<td>46 g</td>
</tr>
<tr>
<td><strong>Related standards:</strong></td>
<td>EN 60669, EN 300 220, EN 301 489</td>
<td>EN 60669, EN 300 220, EN 301 489</td>
</tr>
</tbody>
</table>

* Control button input is at the supply voltage potential.

**Function**

For more information, see p. 56.

**Device description**

- The switching unit with 1 output channel is used for controlling appliances and lights. It is possible to connect the existing button to the internal terminal in the wiring.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4,000 W).
- Function: button, impulse relay and time function of delayed start or return with time setting range of 2s-60min.
- External button is programmed as a wireless button.
- Input is not galvanic isolated.
- The switching unit may be controlled by up to 12 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

**Connection**

- RFSAI-61B/230V
  - L
  - N

- RFSAI-61B/120V
  - L
  - N

- RFSAI-61B/24V
  - L
  - N

12-24 V AC/DC

- **Neutral conductor**
  - **Phase conductor**

- **Terminal for connecting an external button**
- **Output contact relay**

* Control button input is at the supply voltage potential.
Wireless switch unit RFSA-61M, RFSA-66M

• RFSA-61M: the switching unit with 1 output channel is used for controlling appliances, sockets or lights.
  - the one-module design of the unit into a switchboard enables connection of a switched load up to 16A (4,000 W).
  - the switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
• RFSA-66M: the switching unit with 6 output channels is used for independent control of up to 6 appliances, sockets or lights. It is possible to assign any function to each output relay.
  - the three-module design of the unit into a switchboard enables connection of a switched load 6 x 8A (6 x 2000W).
  - it is just right for creating scenes, where with one push of the controller, you can switch on or off all 6 channels simultaneously.
  - each of the channels may be controlled by up to 32 channels (1 channel represents one button on the controller).
  - It can be combined with Control or System units INELS RF Control.
  - The integrated switching contact enables connection, where the controlled appliance may be switched on or off by command.
  - Function: button, impulse relay and time function of delayed start or return with time setting range of 2s-60 min.
  - The programming button on the unit is also used for manual control of the output.
  - The package includes an internal antenna AN-I, in case of locating the element in a metal switchboard, you can use the external antenna AN-E for better signal reception.
  - Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
  - Communication frequency with bidirectional protocol INELS RF Control.

Technical parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFSA-61M/230V</th>
<th>RFSA-61M/24V</th>
<th>RFSA-66M/230V</th>
<th>RFSA-66M/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparent input:</td>
<td>2.7VA / cos φ = 0.6</td>
<td>-</td>
<td>min. 2VA / max. 5VA</td>
<td>-</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>1.62 W</td>
<td>0.8 W</td>
<td>min. 0.5W / max. 2.5W</td>
<td>max. 1.8 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10% / -25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of contacts:</td>
<td>1x switching (AgSnO2)</td>
<td>3x switching (AgSnO2)</td>
<td>3x switching (AgSnO2)</td>
<td>3x switching (AgSnO2)</td>
</tr>
<tr>
<td>Rated current:</td>
<td>16 A / AC1</td>
<td>8 A / AC1</td>
<td>2000 VA / AC1</td>
<td>8 A / AC1</td>
</tr>
<tr>
<td>Switching power:</td>
<td>4000 VA / AC1, 384 W / DC</td>
<td>2000 VA / AC1</td>
<td>2000 VA / AC1</td>
<td>2000 VA / AC1</td>
</tr>
<tr>
<td>Peak current:</td>
<td>30 A / &lt;3 s</td>
<td>10 A / &lt;3 s</td>
<td>10 A / &lt;3 s</td>
<td>10 A / &lt;3 s</td>
</tr>
<tr>
<td>Switching voltage:</td>
<td>250 V AC1 / 24 V DC</td>
<td>250 V AC1</td>
<td>250 V AC1</td>
<td>250 V AC1</td>
</tr>
<tr>
<td>Min. DC switching power:</td>
<td>500 mW</td>
<td>500 mW</td>
<td>500 mW</td>
<td>500 mW</td>
</tr>
<tr>
<td>Mechanical service life:</td>
<td>3x10^6</td>
<td>1x10^5</td>
<td>1x10^5</td>
<td>1x10^5</td>
</tr>
<tr>
<td>Electrical service life (AC1):</td>
<td>0.7x10^6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF, by command from transmitter:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual control:</td>
<td>PROG (ON/OFF) button</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 200 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output for antenna:</td>
<td>SMA connector*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-15 °C to + 50 °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating position:</td>
<td>any</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting:</td>
<td>DIN rail EN 60715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection:</td>
<td>IP20 from the front panel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overvoltage category:</td>
<td>III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contamination degree:</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connecting conductor cross-section (mm²):</td>
<td>max. 1x2.5, max. 2x1.5 / with a hollow max. 1x2.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td>90 x 17.6 x 64 mm</td>
<td>90 x 32 x 65 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>74 g</td>
<td>137 g</td>
<td>264 g</td>
<td>310 g</td>
</tr>
</tbody>
</table>

Function

For more information, see p. 56.

Device description

Power supply terminals

Power supply indication

Antenna connector

Program button (manual control)

Output relay contacts

* Max Tightening Torque for antenna connector is 0.56 Nm.
Switching socket RFSC-61

- The switched socket with 1 output channel is used to control fans, lamps, heaters and appliances, which are connected by a power cord.
- They can be combined with either Control or System units INELS RF Control.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- It enables connection of the switched load up to 16A (4,000 W).
- **RFSC-61:** multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switched socket may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the socket is also used for manual control of the output.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

**Technical parameters**

<table>
<thead>
<tr>
<th>Function</th>
<th>RFSC-61/230V</th>
<th>RFSC-61/120V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 - 2500V / 50-60Hz</td>
<td>1200V AC / 60Hz</td>
</tr>
<tr>
<td>Apparent power:</td>
<td>6 VA</td>
<td></td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7 W</td>
<td></td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 %; -15 %</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of contacts:</td>
<td>1x switching (AgSnO2)</td>
<td></td>
</tr>
<tr>
<td>Rated current:</td>
<td>16 A / AC1</td>
<td></td>
</tr>
<tr>
<td>Switching power:</td>
<td>4000 VA / AC1, 384 W / DC</td>
<td></td>
</tr>
<tr>
<td>Peak current:</td>
<td>30 A / &lt;3 s</td>
<td></td>
</tr>
<tr>
<td>Switching voltage:</td>
<td>250 V AC1 / 24 V DC</td>
<td></td>
</tr>
<tr>
<td>Min. switching power DC:</td>
<td>500 mW</td>
<td></td>
</tr>
<tr>
<td>Mechanical service life:</td>
<td>3x10^7</td>
<td></td>
</tr>
<tr>
<td>Electrical service life (AC1):</td>
<td>0.7x10^2</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF command from the transmitter:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td>Manual control:</td>
<td>button PROG (ON/OFF)</td>
<td></td>
</tr>
<tr>
<td>Range in open space:</td>
<td>up to 200 m</td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>-15 up to + 50 °C</td>
<td></td>
</tr>
<tr>
<td>Working position:</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Mounting:</td>
<td>plug into a socket</td>
<td></td>
</tr>
<tr>
<td>Protection:</td>
<td>IP 30</td>
<td></td>
</tr>
<tr>
<td>Overvoltage category:</td>
<td>III.</td>
<td></td>
</tr>
<tr>
<td>Contamination degree:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td>62 x 58 x 102 mm</td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>151 g</td>
<td></td>
</tr>
</tbody>
</table>

For more information, see p. 56.

**Function**

For more information, see p. 56.

**Device description**
The switching unit with 1 output channel is used for controlling appliances, sockets or lights.

- It can be combined with Control or System units INELS RF Control.
- The increased IP 65 protection is suited to mounting on the wall or in harsh environments such as the cellar, garage or bathrooms.
- It enables connection of the switched load up to 12A (3.000 W).

RFUS-61: multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.

- The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency of with bidirectional protocol INELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFUS-61/230V</th>
<th>RFUS-61/120V</th>
<th>RFUS-61/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>230 V AC / 50 - 60 Hz</td>
<td>120 V AC / 60 Hz</td>
<td>12-24 V AC/DC</td>
</tr>
<tr>
<td>Apparent power</td>
<td>5 VA / cos φ = 0.1</td>
<td>5 VA / cos φ = 0.1</td>
<td>-</td>
</tr>
<tr>
<td>Dissipated power</td>
<td>0.6 W</td>
<td>0.6 W</td>
<td>0.7 W</td>
</tr>
<tr>
<td>Supply voltage tolerance</td>
<td>+10 %; -15 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated current</td>
<td>1 x switching (AgSnO2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of contacts</td>
<td>12 A / AC1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switching power</td>
<td>3000 VA / AC1, 384 W / DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak current</td>
<td>30 A / &lt;3 s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak current</td>
<td>250 V AC1 / 24 V DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. switching power DC</td>
<td>500 mW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical service life</td>
<td>3x10^7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical service life (AC1):</td>
<td>0.7x10^7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF command from the transmitter</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual control</td>
<td>button PROG (ON/OFF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range in open space</td>
<td>up to 200 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-15 up to + 50 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating position</td>
<td>any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>screws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP 65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contamination degree</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-section of connecting wires (mm)</td>
<td>1x2.5, max. 2x1.5 / with a hollow max. 1x2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended power cord</td>
<td>CKY 3x1.5 (CKY 4x1.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>136 x 62 x 34 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>146 g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Function

For more information, see p. 56.

### Device description

- **Antenna**
- **Opening for wall mounting Ø 4.3mm**
- **Indication of operating and programming mode**
- **Output contact relay**

**For manual control:**

- Programming button
- Neutral conductor
- Phase conductor
- Opening for wall mounting Ø 4.3mm

- **For RF command from the transmitter:**

  - Communication frequency with bidirectional protocol INELS RF Control.

**Connection**

- RFUS-61/120V
- RFUS-61/230V
- RFUS-61/24V
Switch unit for shutters RFJA-12B

- The switching unit for blinds has 2 output channels used to control garage doors, gates, blinds, awnings, etc.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or motor drive cover.
- RFJA-12B/230V: connection of switched load 2 x 8A (2 x 2.000 W).
- RFJA-12B/24VDC: contactless quiet switching.
- Short presses of the controller enable tilting of lamellas, and a long press enables you to draw the blinds up or down to the end position.
- Each of the units may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th></th>
<th>RFJA-12B/230V</th>
<th>RFJA-12B/120V</th>
<th>RFJA-12B/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 V AC / 50 - 60 Hz</td>
<td>120 V AC / 60 Hz</td>
<td>12-24 V DC</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>7 VA / cos φ = 0.1</td>
<td>7 VA / cos φ = 0.1</td>
<td>x</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>x</td>
</tr>
<tr>
<td>Power without load:</td>
<td>x</td>
<td>0.5 W</td>
<td></td>
</tr>
<tr>
<td>Power under load:</td>
<td>x</td>
<td>25 W</td>
<td></td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 - 15 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Function description

1. When the control button is pressed for less than 2 seconds, shutters move up (▲) or down (▼).
2. When the control button is pressed for more than 2 seconds, shutters move up (▲) or down (▼) until reaching the final position.

### Device description

- **Device status indicator – LED**
- **Program button** (manual control)
- **Phase conductor**
- **Neutral conductor**
- **Output relay contacts**

### Connection

- **RFJA-12B/230V**
- **RFJA-12B/24VDC**

### Other data

- **Operating temperature:** -15 to + 50 °C
- **Operating position:** any
- **Mounting:** free at lead-in wires
- **Protection:** IP 30
- **Overvoltage category:** III.
- **Contamination degree:** 2
- **Terminals (CT wire, cross section):** 4 x 0.75 mm²
- **Length of terminals:** 90 mm
- **Dimensions:** 49 x 49 x 21 mm
- **Weight:** 46 g
- **Related standards:** EN 60669, EN 300 220, EN 301 489

* Identical with supply voltage
Dimmer for coloured (RGB) LED strips RFDA-73M/RGB

**Technical parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFDA-73M/RGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply terminals</td>
<td>Un+, GND</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>12-24 V DC stabilized</td>
</tr>
<tr>
<td>Maximum power without load</td>
<td>0.8 W</td>
</tr>
<tr>
<td>Output</td>
<td>LED strip 12V/24V with common anode</td>
</tr>
<tr>
<td>Dimmed load</td>
<td>RGB LED strips 12V, 24V with common anode</td>
</tr>
<tr>
<td>Number of channels</td>
<td>3</td>
</tr>
<tr>
<td>Rated current</td>
<td>3 x 5 A</td>
</tr>
<tr>
<td>Peak current</td>
<td>3 x 10 A</td>
</tr>
<tr>
<td>Switching voltage</td>
<td>Un</td>
</tr>
<tr>
<td>Control</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Ext. signal</td>
<td>0-10 V, 1-10V</td>
</tr>
<tr>
<td>Range in open space</td>
<td>up to 160 m</td>
</tr>
<tr>
<td>Load capacity of output +10V</td>
<td>10 mA</td>
</tr>
<tr>
<td>Output for antenna</td>
<td>SMA connector*</td>
</tr>
<tr>
<td>Other data</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20 up to + 50 °C</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-30 up to + 70 °C</td>
</tr>
<tr>
<td>Working position</td>
<td>any</td>
</tr>
<tr>
<td>Mounting</td>
<td>DIN rail EN 60715</td>
</tr>
<tr>
<td>Protection</td>
<td>IP 20 from front panel</td>
</tr>
<tr>
<td>Contamination degree</td>
<td>2</td>
</tr>
<tr>
<td>Cross-section of connecting wires</td>
<td>max 1x2.5, max 2x1.5/with a hollow max. 1x2.5</td>
</tr>
<tr>
<td>Dimensions</td>
<td>90 x 52 x 65 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>130 g</td>
</tr>
<tr>
<td>Related standards</td>
<td>EN 60730-1; EN 60730-2-11</td>
</tr>
</tbody>
</table>

* Max Tightening Torque for antenna connector is 0.56 Nm.

**Device description**

- The dimmer for LED strips is used for independent control of 3 single-color LED strips or one RGB LED strip.
- The expanded selection of control modes enables it to be combined with:
  - Controllers and System units INELS RF Control
  - Control signal 0(1)-10V
  - Connecting to INELS BUS using DAC converters.
- The unit’s three-module design with switchboard mounting enables connection of dimmed load 3 x 5A, which represents:
  - single-color LED strip 7.2W (ELKO Lighting) – 3 x 8 m
  - RGB LED strip 14.2W (ELKO Lighting) – 10 m.
- 6 light functions - smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- The dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The power supply of the unit is in the range of 12-24V DC, and is indicated by a green LED.
- The package includes an internal antenna AN-I, in case of locating the unit in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

**Function**

For more information, see p. 57.
Dimmer for coloured (RGB) LED strips  RFDA-73M/RGB

Control modes

**RF RGB**

Switch settings in MODE:

RF RGB mode for controlling RGB LED strips.
In the RF RGB programming mode, colors are automatically assigned to individual transmitter buttons.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-40/G, RF KEY, RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.

**RF COLOR**

Switch settings in MODE:

RF COLOR mode for controlling RGB LED strips, where you can choose the color for individual transmitter buttons. A long press of the button starts the color search mode. After releasing the button, the current color is set for the given button.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-40/G, RF KEY RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.

**RF WHITE**

Switch settings in MODE:

This works in a mode where it acts like three independent dimmers for 12-24V. Each channel can be programmed independently of one another and has its own address. For more information, see p. 57.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-20/G, RFWB-40/G, RF KEY, RFIM-20B, RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.

**TERM 0-10V and TERM 1-10V**

Switch settings in MODE:

Modes TERM 0-10V and TERM 1-10V.
Inputs 0-10V and 1-10V used to control one RGB LED strip or three independent single-color LED strips (see modes above) from the iNELS BUS System. For controlling, you can use ballasts DAC3-04M or DAC3-04B.
For controlling, it is appropriate to use the wall touch unit EST3, the controller WSB3-40, the glass touch controller GSB3-40, the application IMM on the TV screen or the application iHC for smartphones and tablets.

Control options

**TERM 0(1)-10V DC**
- monochrome LED strips

**TERM 0(1)-10V DC**
- RGB LED strips
Universal dimmer RFDEL-71B

- The universal built-in dimmer is used to regulate light sources:
  - R – classic lamps
  - L – halogen lamps with wound transformer
  - C – halogen lamps with electronic transformer
  - ESL – dimmable energy-efficient fluorescent lamps
  - LED – LED light sources (230V).
- It can be combined with Controllers or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.
- 6 light functions - smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- Connection of the existing button on the control input, S*, enables combination of wireless control with classic (wired) control.
- The programming button on the controller is also used for manual control of the output.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Function

For more information, see p. 57.

Device description

- LED, ESL, R

<table>
<thead>
<tr>
<th>Technical parameters</th>
<th>RFDEL-71B/230V</th>
<th>RFDEL-71B/120V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 V AC / 50 Hz</td>
<td>120 V AC / 60 Hz</td>
</tr>
<tr>
<td>Apparent power:</td>
<td>1.1 VA</td>
<td>1.1 VA</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.8 W</td>
<td>0.8 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10/-15 %</td>
<td></td>
</tr>
<tr>
<td>Connection:</td>
<td>4-wire, with “NEUTRAL”</td>
<td></td>
</tr>
<tr>
<td>Dimmed load:</td>
<td>R,L,C, LED, ESL</td>
<td></td>
</tr>
</tbody>
</table>

Control

- RF command from the transmitter: 868 MHz, 915 MHz, 916 MHz
- Range in open space: up to 160 m
- Manual control: button PROG (ON/OFF), external button
- Glow lamp connection: No

Other data

- Operating temperature: -20 up to +35°C
- Storage temperature: -30 up to +70°C
- Operating position: any
- Mounting: free at lead-in wires
- Protection: IP 30 under normal conditions

Overvoltage category: III.

Contamination degree: 2

Terminals (w/ wire, Cross-section): 4 x 0.75 mm²
Terminal length: 90 mm
Dimensions: 49 x 49 x 21 mm
Weight: 40 g

Related standards: EN 607 30-1 ED.2

Connection

- The power factor of dimmable LEDs and ESL bulbs ranges from cos φ = 0.95 up to 0.4.
- An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.
- You can find the list of dimmable light sources here www.elkoep.com/Solutions

* Capacity for power factor cos φ=1.
Universal dimmer RFDEL-71M

Technical parameters | RFDEL-71M/230V | RFDEL-71M/120V
--- | --- | ---
Supply voltage: | 230 V AC / 50 Hz | 120 V AC / 60 Hz
Apparent power: | 2.5 VA | 1.1 VA
Dissipated power: | 0.8 W | 0.6 W
Supply voltage tolerance: | +10/-15% |  
Dimmed load: | R, L, C, LED, ESL | 
Output Contactless: | 2 x MOSFET | 
Load capacity: | 600 W* | 300 W*

Controlling
By RF command from the transmitter: 868 MHz, 915 MHz, 916 MHz
Range in open space: up to 160 m
Output for antenna: SMA connector**
Manual control: 5W (ON/OFF) button, external button, potentiometer
Glow lamps connection: No
Analog control: 0 (1) - 10V

Other data
Operating temperature: -20 up to +35 °C
Storage temperature: -30 up to +70°C
Operating position: vertical
Mounting: DIN rail EN 60715
Protection: IP 20 under normal conditions
Overvoltage category: II
Contamination degree: 2
Cross-section of connecting wires: max 1x2.5, max 2x1.5 / with a hollow max. 1x2.5
Dimension: 90 x 52 x 65 mm
Weight: 125g
Related standards: EN 607 30-1 ed.2

* Due to the huge amount of type of light sources, the maximum load depends on internal construction of dimmable LED and ESL bulbs and their power factor \( \cos \varphi \). The power factor of dimmable LEDs and ESL bulbs ranges from \( \cos \varphi = 0.95 \) up to 0.4. An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

You can find the list of dimmable light sources here [www.elkoep.com/Solutions](http://www.elkoep.com/Solutions).

** Max Tightening Torque for antenna connector is 0.56 Nm.

- The universal modular dimmer is used to regulate light sources:
  - R – classic lamps
  - L – halogen lamps with wound transformer
  - C – halogen lamps with electronic transformer
  - ESL – dimmable energy-efficient fluorescent lamps
  - LED – LED light sources (230V).

- Control can be performed by:
  - a) Controllers and System units iNELS RF Control
  - b) by control signal 0(1)-10V
  - c) potentiometer
  - d) existing button in the installation.

- The unit’s three-module design with switchboard mounting enables connection of a dimmed load of up to 600 W.

- 6 light functions - smooth increase or decrease with time setting 2s-30 min.

- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.

- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.

- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).

- The programming button on the controller is also used for manual control of the output.

- The package includes an internal antenna AN-I, in case of locating the unit in a metal switchboard, you can use the external antenna AN-E for better signal reception.

- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.

- Communication frequency with bidirectional protocol INELS RF Control.

Function
For more information, see p. 57.

Device description

External control by potentiometer  
or 0-10V

Output mode

Manual control/program

Potentiometer to set
min. brightness

Indication of device mode

Switch to select light source

Operating mode indication

Program button

External control by button

Connection

[Diagram of device connections]

[Diagram of device connections]
Dimming socket RFDSC-71

### Technical parameters

<table>
<thead>
<tr>
<th>RFDSC-71/230V</th>
<th>RFDSC-71/120V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 - 250V / 50-60Hz</td>
</tr>
<tr>
<td>Apparent power:</td>
<td>1.1 VA</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.8 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10/ -15 %</td>
</tr>
<tr>
<td>Dimming load:</td>
<td>R, L, C, LED, ESL</td>
</tr>
<tr>
<td>Output</td>
<td>2 x MOSFET</td>
</tr>
<tr>
<td>Load capacity:</td>
<td>300 W*</td>
</tr>
<tr>
<td>Control</td>
<td>RF command from the transmitter: 868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Range in open space:</td>
<td>up to 160 m (more on range on p. 53)</td>
</tr>
<tr>
<td>Manual control:</td>
<td>button PROG (ON/OFF)</td>
</tr>
<tr>
<td>Other data</td>
<td>Operating temperature: -20 up to + 35 °C</td>
</tr>
<tr>
<td></td>
<td>Storage temperature: -30 up to +70°C</td>
</tr>
<tr>
<td></td>
<td>Working position: any</td>
</tr>
<tr>
<td></td>
<td>Mounting: plug into a socket</td>
</tr>
<tr>
<td></td>
<td>Protection: IP 30</td>
</tr>
<tr>
<td></td>
<td>Overvoltage category: III</td>
</tr>
<tr>
<td></td>
<td>Contamination degree: 2</td>
</tr>
<tr>
<td></td>
<td>Dimensions: 62 x 58 x 102 mm</td>
</tr>
<tr>
<td></td>
<td>Weight: 129 g</td>
</tr>
</tbody>
</table>

* Capacity for power factor cos Φ=1.

The power factor of dimmable LEDs and ESL bulbs ranges from cos Φ = 0.95 up to 0.4.
An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.
A list of test light sources can be found here: www.elkoep.com/solutions

### Function

For more information, see p. 57.

### Device description

- The dimmed socket is used to control light sources that are connected by power cord - especially lamps:
  - R – classic lamps
  - L – halogen lamps with wound transformer
  - C – halogen lamps with electronic transformer
  - ESL – dimmable energy-efficient fluorescent lamps
  - LED – LED light sources (230V),
- It can be combined with Controllers or System units INELS RF Control.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- Output load 300W.
- RFDSC-71: multi-function 6 light functions - smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the socket is also used for manual control of the output.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Produced in 4 designs of sockets and plugs:
  - French CZ, SK, PL, FR
  - Schuko HU, DE, RU, AT, RO
  - British GB
  - US USA

### Settings

- Potentiometer for setting minimum brightness
- Switch for light source selection
- LED
- ESL
- LOAD
- Program button
- Supply voltage indication
- Device status indication
- Socket for connecting a light source
### Technical parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFDAC-71B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supply voltage:</strong></td>
<td>110 - 230 V AC / 50 - 60 Hz</td>
</tr>
<tr>
<td><strong>Apparent input:</strong></td>
<td>3 VA</td>
</tr>
<tr>
<td><strong>Dissipated power:</strong></td>
<td>1.2 W</td>
</tr>
<tr>
<td><strong>Supply voltage tolerance:</strong></td>
<td>+10 / -15 %</td>
</tr>
<tr>
<td><strong>Potential-free analog output/max.current:</strong></td>
<td>0(1)-10 V / 10 mA</td>
</tr>
</tbody>
</table>

#### Control
- **RF, by command from transmitter:** 868 MHz, 915 MHz, 916 MHz
- **Manual control:** PROG (ON/OFF) button
- **Range in free space:** up to 200 m
- **Minimum control distance:** 20 mm
- **Contact relay:** 1x AgSnO₂, switches the phase conductor
- **Rated current:** 16A / AC1
- **Switching power:** 4000VA / AC1
- **Switching voltage:** 230VAC
- **Mechanical service life:** 3x10⁷
- **Electrical service life:** 0.7x10⁸
- **Indication:** red LED / green LED
- **Output selection:** 0(1)-10V / PROG button

#### Other data
- **Operating temperature:** -15 to + 50 °C
- **Operating position:** any
- **Mounting:** free at lead-in wires
- **Protection:** IP 30
- **Overvoltage category:** III.
- **Contamination degree:** 2
- **Terminals (C1 wire, cross-section):** 3 x 0.75 mm², 2 x 2.5 mm²
- **Length of terminals:** 90 mm
- **Dimensions:** 49 x 49 x 21 mm
- **Weight:** 52 g
- **Related standards:** EN 60669, EN 300 220, EN 301 489

### Device description

**Function**

For more information, see p. 57.

**Device status indicator**

**Connection example:**
- Dimming of fluorescent tubes with dimmable ballast
- Dimming LED panels when using a suitable dimmed source up to 50 units LP-6060-3K/6K.
- Control of thermal actuators (TELVA).
- Control of other controllers (e.g. performance dimmers DIM-6).
- It can be combined with Controllers or System units INELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.
- Potential free analog output 10 mA, contact relay 16A.
- 6 light functions - smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- The analog controller may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the controller is also used for manual control of the output.
- The unit power supply is in the range 110-230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

**Connection example:**
- Dimming fluorescent tubes with dimmable ballast
- Dimming LED panels with thermo valve
RF-RGB-LED-550
- The colored lamp with RF module enables you to create an atmosphere for reading, watching a movie, hosting a party with friends, etc.
- The lamp has an implemented wireless unit, which receives commands from system units of iNELS RF Control (link) and sends a signal for visualization of the current status ON/OFF, brightness.
- Luminous flux up to 550Lm, with power 9W and life of 30,000 hours.
- RGB lamp function:
  - colored light scenes
  - option of setting brightness in a range of 0-100%
  - circus mode, used for automatic blending of colors

RF-White-LED-675
- The white wireless lamp with RF module is used for everyday illumination.
- The lamp has an implemented wireless unit, which receives commands from system units of iNELS RF Control (link) and sends a signal for visualization of the current status ON/OFF, brightness.
- Luminous flux up to 675Lm, with power 10W and life of 30,000 hours.
- White wireless lamp functions:
  - option of setting brightness in a range of 0-100%
  - setting color warm white / cold white

Description of functions
RGB LED and White bulbs can be controlled through transmitters RF KEY, RFWB, RF Pilot and RF Touch. Using buttons or touch panel, it is possible to choose the desired color from the RGB spectrum or desired brightness.

Technical parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RF-RGB-LED-550</th>
<th>RF-White-LED-675</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>100–240V AC, 50/60 Hz</td>
<td>100–240V AC, 50/60 Hz</td>
</tr>
<tr>
<td>Maximum power</td>
<td>9 W</td>
<td>10 W</td>
</tr>
<tr>
<td>Power factor</td>
<td>&lt;0.6</td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting power</td>
<td>6 W</td>
<td>8 W</td>
</tr>
<tr>
<td>Luminous flux</td>
<td>550 Lm</td>
<td>675 Lm</td>
</tr>
<tr>
<td>Color temperature</td>
<td>RGB</td>
<td>2600, 5000</td>
</tr>
<tr>
<td>Brightness regulation</td>
<td>0–100%</td>
<td></td>
</tr>
<tr>
<td>Durability</td>
<td>30,000 hours</td>
<td></td>
</tr>
<tr>
<td>Controlling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>By RF command from transmitter</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td>Free space range</td>
<td>up to 20 m</td>
<td></td>
</tr>
<tr>
<td>Other data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 up to + 50 °C</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-30 up to + 70 °C</td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td>socket E27</td>
<td></td>
</tr>
<tr>
<td>Operating position</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Dimension</td>
<td>65 x 115 mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>150 g</td>
<td></td>
</tr>
</tbody>
</table>

Dimension

65 mm
115 mm
Wireless twilight switch RFSOU-1

---

**Technical parameters**

**RFSOU-1**

- **Power supply**: 2 x 1.5 battery AAA
- **Battery Life**: Appr. 2 years, according to the number of controlled units
- **Setting the range of light levels**
  - **Function 1 (twilight switch)**
    - Range 1: 1 ... 10 lx
    - Range 2: 10 ... 100 lx
    - Range 3: 100 ... 1,000 lx
  - **Function 2 (light switch)**
    - Range 1: 100 ... 1,000 lx
    - Range 2: 1,000 ... 10,000 lx
    - Range 3: 10,000 ... 100,000 lx
- **Function setting**: rotary switch
- **The level of lighting gently**: 0.1 ... 1 x range
- **Fine adjustment of lighting levels**: potentiometer
- **The time delay t**: 0 / 1 min. / 2 min.
- **Setting the delay time t**: rotary switch
- **Output**:
  - **Sending RF communication packet**: 868 MHz, 915 MHz, 916 MHz
  - **Range in free space**: up to 160 m
- **Other data**
  - **Working temperature**: -20 to +50°C
  - **Storage temperature**: -30 to +70°C
  - **Operating position**: sensor side down
  - **Protection**: IP65
  - **Degree of pollution**: 2
  - **Dimension**: 72 x 62 x 34 mm
  - **Weight**: 104 g

---

*Note: pay attention to the operating temperature of batteries.*

---

### Device description

- The wireless twilight dimmer measures the light intensity and based on a set value, it sends the command to switch on the lights or pull the blinds up or down.
- It can be combined with multifunctional switching units and blind switches.
- The increased IP 65 protection is suited to mounting on the wall or in harsh environments.
- Integrated sensor for measuring illumination, settable in 3 ranges 1 – 100,000 lx.
- **Selection of function:**
  - a) twilight switch – automatically switches on upon a decrease in ambient light intensity, switches off upon an increase (appropriate for garden lights, advertisements, public lighting, etc.)
  - b) light switch – automatically switches on upon an increase in ambient light intensity, switches off upon a decrease (appropriate for offices, restaurants, rooms, etc.)
- Settable delay up to 2 minutes to eliminate unwanted switching caused by surrounding influences.
- The twilight switch may control up to 32 units in the installation.
- The programming button on the regulator is used for:
  - a) setting a function with a switching or blind unit
  - b) ascertaining battery status
  - c) ascertaining signal quality between the unit and dimmer.
- **Battery power** (1.5V / 2 x AAA - included in supply) with battery life of around 2 years based on the number of controlled units.
- **Range up to 160 m** (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- **Communication frequency with bidirectional protocol iNELS RF Control.**

---

- **Battery**: 2 x AAA 1.5 V
- **Mounting hole Ø 4.3 mm wall**
- **Fine adjustment of the lighting intensity lighting within the range**
- **Selection of (Lx), the choice between light / twilight**
- **Select function with RF unit signal repeater, RF touch**
- **Ambient light sensor**
Wireless thermo-valve RFATV-1

Technical parameters

<table>
<thead>
<tr>
<th>RFATV-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
</tr>
<tr>
<td>Battery life:</td>
</tr>
</tbody>
</table>

Control

| Broadcasting frequency: | 868 MHz, 915 MHz, 916 MHz |
| RF command from the transmitter: | RF Touch, eLAN-RF, RFTC-100/G |
| Range in open space:     | up to 100 m |

Other data

| Operating temperature:             | 0 up to +50 °C |
| Working position:                  | any |
| Protection:                        | IP 40 |
| Dimensions:                        | 65 x 65 x 48 mm |
| Thermostat end:                    | M 30 x 1.5 |
| Piston stroke:                     | max. 4 mm |
| Controlling force:                 | max. 100 N |
| Related standards:                 | EN 60730 |

Package contents

- Thermo-valve
- Key
- 2x battery AA 1.5V
- Adaptors
- Manual

Device description

- The wireless thermostat measures room temperature by internal sensor; based on a set program in the system unit, it opens / closes the radiator valve.
- It can be combined with one of three system units: smart RF box eLAN-RF, wireless controller RFTC-100/G or touch unit RF Touch.
- It measures temperature in a range of 0.. +32°C and sends it to the system unit in regular 5-min. intervals.
- Monitoring function Open window, where upon a sudden change in temperature, it shuts the valve for a preset period.
- Setting the hysteresis and offset is performed in the system unit or application.
- Low battery indicator on the display of the system unit or in the application.
- Mounting directly on the valve of the heater (radiator).
- Battery power (1.5V / 2 x AA – included in supply) with battery life of around 1 year based on frequency of use.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Package includes: adapters Danfoss RAV, RA, RAVL; 2x batteries AA 1.5V; key.

Adapters

<table>
<thead>
<tr>
<th>Type of valve</th>
<th>Type of adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danfoss RAV</td>
<td>(the valve plunger must be fitted with the enclosed pin)</td>
</tr>
<tr>
<td>Danfoss RA</td>
<td></td>
</tr>
<tr>
<td>Danfoss RAVL</td>
<td></td>
</tr>
</tbody>
</table>
Wireless temperature sensor RFTI-10B

Technical parameters
- **RFTI-10B**
- **Supply voltage:** 1 x 3V CR 2477 battery
- **Battery life:** 1 year
- **Transmission indication / function:** red LED
- **Temperature measurement:** 1x internal NTC thermistor, 1x external TZ/TC temperature sensor input
- **Temp. measurement range and accuracy:** -20 to +50°C, 0.5 °C in the range
- **Transmitter frequency:** 868 MHz, 915 MHz, 916 MHz
- **Signal transmission method:** unidirectionally addressed message
- **Range in free space:** up to 160 m
- **Other data:**
  - **Operating temperature:** -10 to +50 °C
  - **Operating position:** any
  - **Mounting:** glued / free-standing
  - **Protection:** IP30
  - **Contamination degree:** 2
  - **Dimensions:** 49 x 49 x 13 mm
  - **Weight:** 45 g

**Device description**
- **Device status indicator**
- **Terminal for the connection of external sensor TC/TZ**

**Recommended external sensors**
- **see p. 54**

**Sensor location**
- **on a wall**
- **in a box**
- **in a panel**
- **in a pipe**
- **in a tank**

- The temperature sensor measures the temperature by internal sensor, which it sends in regular intervals to the system unit. Option of connecting an external sensor to the terminals THERM.
- The temperature sensor can be used in one of two ways:
  - For displaying the measured temperature (from a garage, balcony, cellar, garden) on the display of the system unit or in the application.
  - For measuring temperature, which it sends to the system unit, which may control the heating circuit based on the set temperature program (electric underfloor heating, air conditioning, boiler, etc.).
- It measures temperature in a range of -20 - 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Battery power (3V / 1 x CR 2477 - included in supply) with battery life of around 1 year based on frequency of use.
- The temperature sensor can be placed anywhere thanks to battery power.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency 868 MHz with bidirectional protocol INELS RF Control.
- External sensor TC (0...+70 °C) or TZ (-40...+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.
**Switch unit with a temperature sensor RFSTI-11B**

- The temperature unit measures the temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RF Touch.
- It measures temperature in a range of -20 - 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4,000 W).
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- External sensor TC (0...+70 °C) or TZ (-40...+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

**Technical parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>RFSTI-11B/230V</th>
<th>RFSTI-11B/120V</th>
<th>RFSTI-11B/24V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>230 V AC / 50-60 Hz</td>
<td>120 V AC / 60Hz</td>
<td>12-24 V AC/DC/50-60Hz</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>7 VA / cos φ = 0.1</td>
<td>7 VA / cos φ = 0.1</td>
<td>-</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.7 W</td>
<td>0.7 W</td>
<td>0.7 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 %; -15 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature measurement input:</td>
<td>1x external TZ/TC temperature sensor input *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temp. measurement range and accuracy:</td>
<td>-20 to +50 °C, 0.5 °C of the range</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Output**

- Number of contacts: 1x switching (AgSnO2)
- Rated current: 16 A / AC1
- Switching power: 4000 VA / AC1, 384 W / DC
- Peak current: 30 A / <3 s
- Switching voltage: 250 V AC1 / 24 V DC
- Min. DC switching power: 500 mW
- Mechanical service life: 3x10^5
- Electrical service life (AC1): 0.7x10^8

**Control**

- RF, by command from transmitter: 868 MHz, 915 MHz, 916 MHz
- Range: up to 160 m
- Operating temperature: -15 to + 50 °C
- Status indication: red LED
- Operating position: any
- Mounting: free at lead-in wires
- Protection: IP 30
- Overvoltage category: III.
- Contamination degree: 2
- Outlets (CT wire, cross-section, length): 2x 0.75mm², 2x 2.5mm², 90 mm
- Dimensions: 49 x 49 x 21 mm
- Weight: 46 g

**Related standards:** EN 60669, EN 300 220, EN 301 489


* Temperature sensor input is at the supply voltage potential.

**Recommended external sensors**

see p. 54
Technical parameters RFSTI-11/G

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>110-230 V AC / 50 - 60 Hz</td>
</tr>
<tr>
<td>Apparent input</td>
<td>7 VA / cos φ = 0.1</td>
</tr>
<tr>
<td>Dissipated power</td>
<td>0.7 W</td>
</tr>
<tr>
<td>Supply voltage tolerance</td>
<td>+10 %; -15 %</td>
</tr>
<tr>
<td>Temperature measurement input</td>
<td>1x internal NTC thermistor; 1x external TZ/TC temperature sensor input</td>
</tr>
<tr>
<td>Temp. measurement range and accuracy</td>
<td>-20 to +50 °C, 0.5 °C of the range</td>
</tr>
<tr>
<td>Number of contacts</td>
<td>1x switching (AgSnO2)</td>
</tr>
<tr>
<td>Rated current</td>
<td>8 A / AC1</td>
</tr>
<tr>
<td>Switching power</td>
<td>2000 VA / AC1; 240 W / DC1</td>
</tr>
<tr>
<td>Peak current</td>
<td>30 A / &lt;3 s</td>
</tr>
<tr>
<td>Min. DC switching power</td>
<td>0.50 mW</td>
</tr>
<tr>
<td>Mechanical service life (AC1)</td>
<td>3x10⁸</td>
</tr>
<tr>
<td>Electrical service life (AC1)</td>
<td>0.7x10⁵</td>
</tr>
<tr>
<td>Control RF, by command from transmitter</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Manual control</td>
<td>buttons</td>
</tr>
<tr>
<td>Range</td>
<td>up to 160 m</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-15 to + 50 °C</td>
</tr>
<tr>
<td>Status indication</td>
<td>blue, red LED</td>
</tr>
<tr>
<td>Operating position</td>
<td>vertical</td>
</tr>
<tr>
<td>Mounting</td>
<td>in an installation box</td>
</tr>
<tr>
<td>Protection</td>
<td>IP 20</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>III.</td>
</tr>
<tr>
<td>Contamination degree</td>
<td>2</td>
</tr>
<tr>
<td>Cross-section of connecting cables</td>
<td>max. 1x2.5 mm², max. 2x1.5 mm² / with a hollow max. 1x2.5 mm²</td>
</tr>
<tr>
<td>Dimensions</td>
<td>84 x 89 x 42 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>68 g</td>
</tr>
<tr>
<td>Related standards</td>
<td>EN 60669, EN 300 220, EN 301 489</td>
</tr>
</tbody>
</table>

Recommended external sensors

see p. 54

- The thermo-regulation drive measures the (internal/external) temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- Function:
  - Internal – measures temperature by internal sensor and sends it to the system unit.
  - External – measures temperature by external sensor and sends it to the system unit.
  - Combo – measures room temperature by internal sensor and monitors critical floor temperature by external sensor.
- These can be combined with system units: smart RF box eLAN-RF or touch unit RF Touch.
- Manual control of temperature directly using buttons on the unit, where by pressing the upper button, a command is sent for automatic switching to the mode Party (preset temperature), and a press of the lower button sends a signal for switching to energy-saving mode (the change in temperature applies until the next set change of the heating program).
- Indication of status switched ON/OFF is provided by (red/blue) LED, which is found under the transparent cover of the temperature unit.
- It measures temperature in a range of -20 to 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- Switch design (design LOGUS®) offers mounting in an installation box.
- It enables connection of the switched load up to 8A (2.000 W).
- The unit power supply is 110-230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Color combination of heating unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).
- External sensor TC (0 .. +70 °C) or TZ (-40 .. +125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

Device description

- The thermo-regulation drive measures the (internal/external) temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
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  - Internal – measures temperature by internal sensor and sends it to the system unit.
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- Switch design (design LOGUS®) offers mounting in an installation box.
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Device description

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- Switch design (design LOGUS®) offers mounting in an installation box.
- It enables connection of the switched load up to 8A (2.000 W).
- The unit power supply is 110-230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Color combination of heating unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).
- External sensor TC (0 .. +70 °C) or TZ (-40 .. +125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

Device description

- The thermo-regulation drive measures the (internal/external) temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- Function:
  - Internal – measures temperature by internal sensor and sends it to the system unit.
  - External – measures temperature by external sensor and sends it to the system unit.
  - Combo – measure room temperature by internal sensor and monitors critical floor temperature by external sensor.
- These can be combined with system units: smart RF box eLAN-RF or touch unit RF Touch.
- Manual control of temperature directly using buttons on the unit, where by pressing the upper button, a command is sent for automatic switching to the mode Party (preset temperature), and a press of the lower button sends a signal for switching to energy-saving mode (the change in temperature applies until the next set change of the heating program).
- Indication of status switched ON/OFF is provided by (red/blue) LED, which is found under the transparent cover of the temperature unit.
- It measures temperature in a range of -20 to 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- Switch design (design LOGUS®) offers mounting in an installation box.
- It enables connection of the switched load up to 8A (2.000 W).
- The unit power supply is 110-230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Color combination of heating unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).
- External sensor TC (0 .. +70 °C) or TZ (-40 .. +125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

Device description

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  - External – measures temperature by external sensor and sends it to the system unit.
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- It measures temperature in a range of -20 to 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- Switch design (design LOGUS®) offers mounting in an installation box.
- It enables connection of the switched load up to 8A (2.000 W).
- The unit power supply is 110-230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.
- Color combination of heating unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).
- External sensor TC (0 .. +70 °C) or TZ (-40 .. +125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.
Simple wireless temperature controller RFTC-10/G

- The simple controller in design LOGUS™ measures the room temperature by internal sensor, and based on the set temperature, it sends a command to control heating.
- The temperature controller can be used in one of two ways:
  - For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
  - For sufficient temperature correction (+/- 10 °C) over the course of the program set in the system unit (change in temperature applies until the following set change of the heating program in the system unit).
- Manual control by buttons on the unit.
- Range of measured temperature 0 - 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, etc.
- Battery power (1.5V / 2 x AAA - included in supply) with battery life of around 1 year based on frequency of use.
- The flat rear side of the device enables its placement anywhere in the room where you wish to measure temperature.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control
- Color combination of heating unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).

### Technical parameters

**RFTC-10/G**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>2 x 1.5V AAA battery</td>
</tr>
<tr>
<td>Battery life</td>
<td>1 year</td>
</tr>
<tr>
<td>Temperature offset</td>
<td>± 5 °C</td>
</tr>
<tr>
<td>Display</td>
<td>LCD, characters / see Display description</td>
</tr>
<tr>
<td>Backlighting</td>
<td>YES / active – blue</td>
</tr>
<tr>
<td>Transmission indication / function</td>
<td>symbols</td>
</tr>
<tr>
<td>Temperature measurement input</td>
<td>1x internal sensor</td>
</tr>
<tr>
<td>Temp. measurement range and accuracy</td>
<td>0 to +55 °C; 0.3 °C of the range</td>
</tr>
<tr>
<td>Transmitter frequency</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Signal transmission method</td>
<td>bidirectionally addressed message</td>
</tr>
<tr>
<td>Range in free space</td>
<td>up to 100 m</td>
</tr>
<tr>
<td>Minimum control distance</td>
<td>20 mm</td>
</tr>
<tr>
<td>Max. number of control. RFSA-6x</td>
<td>1</td>
</tr>
<tr>
<td>Program</td>
<td>x</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 to +55 °C</td>
</tr>
<tr>
<td>Operating position</td>
<td>wall-mounted</td>
</tr>
<tr>
<td>Mounting</td>
<td>glue / screws</td>
</tr>
<tr>
<td>Protection</td>
<td>IP20</td>
</tr>
<tr>
<td>Contamination degree</td>
<td>2</td>
</tr>
<tr>
<td>Dimensions: frame - plastic</td>
<td>85 x 85 x 20 mm</td>
</tr>
<tr>
<td>Frame - metal, glass, wood, granite</td>
<td>94 x 94 x 20 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>66 g (without batteries)</td>
</tr>
</tbody>
</table>

### Device description

- **Display**:
  - Circuit temperature measured
  - Circuit temperature set
  - Circuit status indicator
  - Temperature/time indication

- **Control buttons**:
  - Signal strength
  - Battery status indication
  - Locked for adjustment
  - Temperature measured in °C/°F

- **Programming button**:
  - Battery status indication
  - Locked for adjustment
  - Temperature measured in °C/°F

### Compatibility

<table>
<thead>
<tr>
<th>Type</th>
<th>Supply</th>
<th>Weekly program</th>
<th>RF Touch</th>
<th>eLAN</th>
<th>RFSA-6x</th>
<th>RFSTI-11B</th>
<th>RSATV-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFTC-10/G</td>
<td>battery</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>RFTC-50/G</td>
<td>battery</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>RFTC-100/G</td>
<td>AC 230V</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Wireless temperature controller RFTC-50/G

- The wireless controller in design LOGUS® measures the room temperature by internal sensor, and based on the set temperature, it sends a command for heating / cooling.
- Option of setting a daily/weekly automatic control program.
- The temperature controller can be used in one of two ways:
  - For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
  - For control of floor heating, when the internal sensor scans the room temperature, and based on the value, controls the heating unit RFSTI-11B, which monitors the critical floor value by external sensor.
- Manual control by buttons on the unit.
- Range of measured temperature 0 - 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- Battery power (1.5V / 2 x AAA - included in supply) with battery life of around 1 year based on frequency of use.
- The flat rear side of the device enables its placement anywhere in the room where you wish to measure temperature.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Color combination of temperature unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).

**Technical parameters - RFTC-50/G**

- Supply voltage: 2 x 1.5V AAA battery
- Battery life: up to 1 year according to the number of controlling actuators
- Temperature offset: ± 5 °C
- Display: LCD, characters / see Display description
- Backlighting: YES / active – blue
- Transmission indication / function: symbols
- Temperature measurement input: 1x internal sensor
- Temp. measurement range and accuracy: 0 to +35 °C; 0.3 °C of the range
- Transmitter frequency: 868 MHz, 915 MHz, 916 MHz
- Signal transmission method: bidirectionally addressed message
- Range in free space: up to 100 m
- Minimum control distance: 20 mm
- Max. number of controlling actuators: 4
- Program: Weekly
- Operating temperature: 0 to +35 °C
- Operating position: on the wall
- Mounting: by gluing / screwing
- Protection: IP20
- Contamination degree: 2
- Dimensions: frame - plastic: 85 x 85 x 20 mm; frame - metal, glass, wood, granite: 94 x 94 x 20 mm
- Weight: 66 g (without batteries)
- Related standards: EN 60669, EN 300 220, EN 301 489 directive

**Device description**

- Displaying the day of the week
- Displaying the time
- Indication of manual mode
- The heating function
- Indicates the state of connection with actuators
- Temperature units °C
The wireless controller in design LOGUS® measures the room temperature by internal sensor, and based on the set temperature, it sends a command for heating / cooling.

- Option of setting a daily/weekly automatic control program.
- The temperature controller can be used in one of two ways:
  - For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
  - For control of floor heating, when the internal sensor scans the room temperature, and based on the value, controls the heating unit RFSTI-11B, which monitors the critical floor value by external sensor.
- Manual control by buttons on the unit.
- Range of measured temperature 0 - 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- The unit power supply is 100-230V AC.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Color combination of temperature unit in design of frames LOGUS® (plastic, glass, wood, metal, stone).

**Technical parameters**

<table>
<thead>
<tr>
<th>Property</th>
<th>RFTC-100/G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>100-230 V AC / 50 - 60 Hz</td>
</tr>
<tr>
<td>Apparent input:</td>
<td>3 VA / cos φ = 0.1</td>
</tr>
<tr>
<td>Dissipated power:</td>
<td>0.3 W</td>
</tr>
<tr>
<td>Supply voltage tolerance:</td>
<td>+10 %; -15 %</td>
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<td>± 5 °C</td>
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<tr>
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<td>Signal transmission method:</td>
<td>bidirectionally addressed message</td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 100 m</td>
</tr>
<tr>
<td>Minimum control distance:</td>
<td>20 mm</td>
</tr>
<tr>
<td>Other data</td>
<td></td>
</tr>
<tr>
<td>Max number of controlling actuators:</td>
<td>4</td>
</tr>
<tr>
<td>Program</td>
<td>Weekly</td>
</tr>
<tr>
<td>Operating temperature:</td>
<td>0 to +55 °C</td>
</tr>
<tr>
<td>Operating position:</td>
<td>vertical</td>
</tr>
<tr>
<td>Mounting</td>
<td>in an installation box</td>
</tr>
<tr>
<td>Protection</td>
<td>IP20</td>
</tr>
<tr>
<td>Contamination degree:</td>
<td>2</td>
</tr>
<tr>
<td>Cross-section of connecting-cables:</td>
<td>max. 1x2.5, max. 2x1.5 / with a hollow max. 1x2.5</td>
</tr>
<tr>
<td>Dimensions/Frame - plastic</td>
<td>85 x 85 x 46 mm</td>
</tr>
<tr>
<td>Frame - metal, glass, wood, granite</td>
<td>94 x 94 x 46 mm</td>
</tr>
<tr>
<td>Weight:*</td>
<td>172 g</td>
</tr>
<tr>
<td>Related standards</td>
<td>EN 60669, EN 300 220, EN 301 489 directive</td>
</tr>
</tbody>
</table>

*Comes with plastic frame. No installation into multi-frames.
### Wireless flood detector RFSF-1B

- Monitors areas (e.g. bathrooms, basements, shafts or tanks) to provide flood warning.
- Upon detecting water, the flood detector immediately sends a signal to the switched unit, which further switches on a pump, GSM gate (link to RFGSM-220M) or closes a pipe valve. (Link to valve in accessories).
- Option of connecting an external probe FP-1 (not included in supply - max. wire length 30m).
- The programming button on the detector is used to:
  a) setting the function with switching unit
  b) ascertaining battery status
  c) ascertaining signal quality between the unit and detector.
- Battery power supply (1.5V/CR2477 - included in the supply) with battery life of around 1 year based on frequency of use.
- The detector can be placed anywhere thanks to battery power.
- Range up to 160 m (in open space); if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>Technical parameters</th>
<th>RFSF-1B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage:</td>
<td>1 x 3V battery CR 2477</td>
</tr>
<tr>
<td>Battery life:</td>
<td>1 year</td>
</tr>
<tr>
<td>Indications / transfer function:</td>
<td>red LED</td>
</tr>
<tr>
<td>Reset after flooding:</td>
<td>JUMPER - Manual/Automatic</td>
</tr>
<tr>
<td>Programming:</td>
<td>with Prog button/ based batteries</td>
</tr>
<tr>
<td>Measuring input:</td>
<td>terminal 0.5 - 1mm²</td>
</tr>
<tr>
<td>Voltage measuring input:</td>
<td>3 V</td>
</tr>
<tr>
<td>Resistance measuring input for detecting flooding:</td>
<td>≤20 kΩ</td>
</tr>
<tr>
<td>Resistance measuring input for flushing detection:</td>
<td>≥40 kΩ</td>
</tr>
<tr>
<td>Probe cable length:</td>
<td>max. 30 m</td>
</tr>
<tr>
<td>Frequency:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td>Signal transmission method:</td>
<td>two-way addressed message</td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 160 m</td>
</tr>
<tr>
<td>More information</td>
<td></td>
</tr>
<tr>
<td>Working temperature:</td>
<td>-10 to +50 °C</td>
</tr>
<tr>
<td>Operating position:</td>
<td>any</td>
</tr>
<tr>
<td>Mounting:</td>
<td>glue / freely</td>
</tr>
<tr>
<td>Protection:</td>
<td>IP30</td>
</tr>
<tr>
<td>Degree of pollution:</td>
<td>2</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>49 x 49 x 13 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>45 g</td>
</tr>
<tr>
<td>Standards:</td>
<td>EN 60730-1, EN 300 220, EN 301 489 directive</td>
</tr>
</tbody>
</table>

### Device description

- Jumper to select the alarm reset mode
- Terminal for connection level probe
- Program button

### Location of the detector and probe

- In an installation box
- On the wall
- Freely
- 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 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, which can be displayed in the form of kWh or financial costs.
- Option of setting reaction to specific consumption to switch the output on or off (RFSA-6x and C3).
- The unit enables connecting up to three current transformers CT50 to each other for measuring electricity.
- Direct connection to INELS BUS using integrated CIB terminals.
- 3-module design, mounted on a DIN rail into the switchboard.
- The supply includes an internal antenna AN-I, if the unit is installed in a metal switchboard, you can use the external antenna AN-E to enhance the signal.
- The device supply voltage is provided from monitored phases.
- Range up to 100m (in open space), if the signal between the controller and the user is weak, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol INELS RF Control.

**Connection**

- Connection to the system INELS BUS
- CT transformers

**Device description**

<table>
<thead>
<tr>
<th>Terminals for connecting current measuring probes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIB connection</strong></td>
</tr>
<tr>
<td><strong>Connection Ethernet</strong></td>
</tr>
<tr>
<td><strong>Communication indication Wi-Fi</strong></td>
</tr>
<tr>
<td>- red LED</td>
</tr>
<tr>
<td><strong>Wi-Fi antenna</strong></td>
</tr>
<tr>
<td><strong>Closed relay indication</strong></td>
</tr>
<tr>
<td>- red LED</td>
</tr>
<tr>
<td><strong>Program button</strong></td>
</tr>
<tr>
<td><strong>Relay output</strong></td>
</tr>
</tbody>
</table>

**Table: Tariff Indication - RGB LED**

<table>
<thead>
<tr>
<th>Tariff</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARIF 1:</td>
<td>red</td>
</tr>
<tr>
<td>TARIF 2:</td>
<td>green</td>
</tr>
<tr>
<td>TARIF 3:</td>
<td>blue</td>
</tr>
<tr>
<td>TARIF 4:</td>
<td>yellow</td>
</tr>
</tbody>
</table>

**Table: Phase Status Indicator L1, L2, L3 - R/G LED**

<table>
<thead>
<tr>
<th>Status</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure (outage):</td>
<td>red</td>
</tr>
<tr>
<td>Active phase:</td>
<td>green</td>
</tr>
</tbody>
</table>
## Technical parameters

**RFPM-2M**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>230 V AC / 50-60Hz</td>
</tr>
<tr>
<td>Supply voltage tolerance</td>
<td>+15/-20%</td>
</tr>
<tr>
<td>Closed relay power input</td>
<td>5 VA</td>
</tr>
<tr>
<td>Measuring interval</td>
<td></td>
</tr>
<tr>
<td>Grid</td>
<td>15-31</td>
</tr>
<tr>
<td>Frequency</td>
<td>50-60Hz / ±10%</td>
</tr>
<tr>
<td>Measuring accuracy</td>
<td>Class 1.0</td>
</tr>
<tr>
<td>Current measuring coil</td>
<td>max. 50 A</td>
</tr>
<tr>
<td>Wire diameter</td>
<td>max. 16 mm</td>
</tr>
<tr>
<td>Output RELIE</td>
<td></td>
</tr>
<tr>
<td>Number of contacts</td>
<td>1N/O/N, switches L1</td>
</tr>
<tr>
<td>Max. current</td>
<td>16 A / AC1</td>
</tr>
<tr>
<td>Switching power</td>
<td>4000 VA (AC1)</td>
</tr>
<tr>
<td>Mechanical service life</td>
<td>3 x 10°</td>
</tr>
<tr>
<td>Electrical service life</td>
<td>0.7 x 10°</td>
</tr>
<tr>
<td>Relay reaction</td>
<td>programmable settings, see instruction manual</td>
</tr>
</tbody>
</table>

## Interface RF Control

**Communication protocol:** RF Touch Compatible

**Broadcasting frequency:** 868 MHz, 915 MHz, 916 MHz

**Signal transfer method:** two-way addressed message

**Output for antenna:** SMA - FEMALE**

**Antenna RF:** 1 dB (part of supply)

**Range in open space:** up to 100 m

## Controlling

**Settings:** Ethernet, Wi-Fi, CIB

**Ethernet:** iNELS3 - iDM3 / WEB (cloud)

**Wi-Fi:** WEB / mobile application

**CIB:** CU3 - iDM3

**Interface Wi-Fi**

**Wi-Fi mode:** AP / Client

**Standard:** IEEE 802.11 b/g/n / 2.4 GHz

**Wi-Fi Security:** WEP, WPA-PSK, WPA2-PSK

**Frequency range Wi-Fi:** 868 MHz, 915 MHz, 916 MHz

**Antenna Wi-Fi:** 1 dB (part of supply)

**Range:** up to 20 m

## Interface Ethernet

**Connection:** LAN (static IP / DHCP Client)

**Transfer speed:** 10 / 100 Mbit / s

**Connector:** RJ45

**Preset IP address:** 192.168.1.1

**CIB interface**

**Compatible with:** iNELS3

**Consumption:** <10mA

## Measuring

**Pulse inputs:** PULS1, PULS2 - max. 1 kHz

**Tariff inputs:** TARF1, TARF2 - binary combination

**Option of switching inputs:** switching by contact / opening by collector

**Separation by isolation of power and control circuits:** reinforced insulation

**Probes measuring current:** 3 x SCT-T16 isolation 3kV / 50/60Hz

**Wireless consumption sensor:** RFTM-1

## Current transformer CT50

The package includes the current transformer CT50. See p. 55.

* Pulse and tariff inputs have a common contact COM (-).

** Max Tightening Torque for antenna connector is 0.56 Nm.
The wireless pulse converter detects home energy meters (electric, water, gas) by means of sensors, and sends them to the wireless unit RFPM-2M.

The energy gateway RFPM-2M acts as an interface between the meter and a smartphone.

Measured values are displayed in the application iHC-MARF/MIRF, in daily, weekly or monthly overview in graphs.

The sensor is designed for use on existing meters and even without the impulse output “SO”.

RFPM-1 transfers consumption from meters using sensors - LS (LED sensor), MS (Magnetic sensor), IRS (IR sensor) or by impulse output.

For each consumption meter, it is necessary to have one pulse converter RFTM-1.

The increased IP 65 protection is appropriate for mounting in risers, switchboards and other demanding environments.

Battery power (1.5V / 2 x AAA - included in package) with average battery life of around 2 years (based on amount of transmitted information - pulses).

Range up to 160 m (in open space), if the signal between the controller and the user is weak, use the signal repeater RFRP-20.

Communication frequency with bidirectional protocol iNELS RF Control.

### Technical parameters

<table>
<thead>
<tr>
<th>RFTM-1</th>
<th>Power supply</th>
<th>2x1.5 battery AAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Life:</td>
<td>Aprr. 2 years, according to the number of controlled units</td>
<td></td>
</tr>
<tr>
<td><strong>SENSOR STATUS</strong></td>
<td>red LED</td>
<td>- flashes during impulse registration by the sensor</td>
</tr>
<tr>
<td><strong>RF STATUS</strong></td>
<td>green LED</td>
<td>- flashes when sending an RF signal</td>
</tr>
<tr>
<td>Functions settings (of the sensor):</td>
<td>rotary switch</td>
<td></td>
</tr>
<tr>
<td>Connection of the sensor:</td>
<td>terminals, wires 0.5 - 1 mm²</td>
<td></td>
</tr>
<tr>
<td>Supported sensors*:</td>
<td>LS (LED sensor) MS (magnetic sensor) IRS (IR sensor)</td>
<td></td>
</tr>
<tr>
<td>Sending RF communication packet:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td>Protocol:</td>
<td>iNELS RF Control</td>
<td></td>
</tr>
<tr>
<td>Range in free space:</td>
<td>up to 160 m</td>
<td></td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>Battery</td>
<td>2x AAA 1.5 V</td>
</tr>
<tr>
<td><strong>Other data</strong></td>
<td>Working temperature:</td>
<td>-20..+50°C**</td>
</tr>
<tr>
<td>Storage temperature:</td>
<td>-30..+70°C</td>
<td></td>
</tr>
<tr>
<td>Operating position:</td>
<td>any</td>
<td></td>
</tr>
<tr>
<td>Protection:</td>
<td>IP65</td>
<td></td>
</tr>
<tr>
<td>Degree of pollution:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Dimension:</td>
<td>72 x 62 x 34 mm</td>
<td></td>
</tr>
<tr>
<td>Weight:</td>
<td>104 g</td>
<td></td>
</tr>
</tbody>
</table>

* not included in the supply.

** Note: pay attention to the operating temperature of batteries.
**Methods of sensing meters**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CT (Current transformer)</strong></td>
<td>Opening pliers open/close on the existing wire of the measured circuit, most frequently at the main supply at the electricity meter.</td>
</tr>
<tr>
<td><strong>LS (LED sensor)</strong></td>
<td>The LED sensor scans LED impulses on the meter, which indicates consumption by flashing.</td>
</tr>
<tr>
<td><strong>MS (Magnetic sensor)</strong></td>
<td>The magnetic sensor scans movement of the numeral, upon which a permanent magnet is placed.</td>
</tr>
<tr>
<td><strong>IRS (Infra Red sensor)</strong></td>
<td>The IR sensor senses the reflective curtain placed on the moving number of the meter or senses the rotating indicator (mainly on water meters).</td>
</tr>
<tr>
<td><strong>IMP (Output „S0“)</strong></td>
<td>Meters with impulse output indicated as „S0“ connected by wires to terminals GND and DATA1 on the sensor RFTM-1.</td>
</tr>
</tbody>
</table>
Detectors

RFSD-100 SD-100

**Smoke detector**

- The smoke detector is used for timely warning against a fire started in residential and commercial buildings.
- The detector uses a scanning method by means of an optical chamber having a more sensitive reaction to detection of smoke.
- **Use:**
  - autonomous fire detector with internal siren
  - in combination with a switching unit for external signaling (light, appliance, siren)
  - by means of the Smart RF box, detection can be displayed on your smart phone, in the form of a notification; alarms are stored in the history, which is visualized in the application iHC.
- The autotest function notifies of a fault with the detector, thereby eliminating its lack of function in case of fire.
- **Anti-tamper function:** an alarm is triggered if there is an unauthorized interference to detector (disassembly, power outage, …)
- **Power supply:**
  - RFSD-100: battery 2 x 1.5V AAA, the battery life is around 1 year, … thanks to the ability to turn off the LED indicator it is possible to extend up to 3 years.
  - SD-100: 9 - 24 V DC.
- Communication frequency with bidirectional protocol iNELS RF Control.
- “Low Battery” Alerts by double LED flashing or on iHC App.

**Technical parameters**

<table>
<thead>
<tr>
<th></th>
<th>RFSD-100</th>
<th>SD-100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power supply:</strong></td>
<td>battery 2 x 1.5V AAA</td>
<td>9 - 24 V DC</td>
</tr>
<tr>
<td><strong>Drained battery indicator:</strong></td>
<td>yes</td>
<td>x</td>
</tr>
<tr>
<td><strong>Transmission frequency:</strong></td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td>max. 40 m²</td>
</tr>
<tr>
<td><strong>Detection area:</strong></td>
<td>max. 40 m²</td>
<td>max. 40 m²</td>
</tr>
<tr>
<td><strong>Optical indication:</strong></td>
<td>redLED</td>
<td></td>
</tr>
<tr>
<td><strong>Assembly height:</strong></td>
<td>max. 7 m</td>
<td></td>
</tr>
<tr>
<td><strong>Storage temperature:</strong></td>
<td>-10...+50°C</td>
<td></td>
</tr>
<tr>
<td><strong>Protection:</strong></td>
<td>IP20</td>
<td></td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>white</td>
<td></td>
</tr>
<tr>
<td><strong>Dimension:</strong></td>
<td>Ø 125 x 34 mm</td>
<td></td>
</tr>
</tbody>
</table>

RFMD-100 MD-100

**Motion detector**

- The motion detector PIR is used to detect persons moving inside the building interior.
- **Use:**
  - in combination with a switching unit for automatic control of lighting or triggering an alarm.
  - by means of the Smart RF box, detection can be displayed on your smart phone in the form of a notification; alarms are stored in the history, which is visualized in the application iHC.
- **Sensitivity settings of the PIR detector for eliminating unwanted triggering.**
- **Integrated lighting sensor, thanks to which you can set the detector’s reaction time.**
- **Option of activation / deactivation of the LED indicator on the detector cover.**
- **Anti-tamper function:** an alarm is triggered if there is an unauthorized interference to detector (disassembly, power outage, …)
- **Power supply:**
  - RFMD-100: battery 2 x 1.5V AA, the battery life is around 1 year, … thanks to the ability to turn off the LED indicator it is possible to extend up to 3 years.
  - MD-100: 9 - 24 V DC.
- Communication frequency with bidirectional protocol iNELS RF Control.
- “Low Battery” Alerts by double LED flashing or on iHC App.

**Technical parameters**

<table>
<thead>
<tr>
<th></th>
<th>RFMD-100</th>
<th>MD-100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power supply:</strong></td>
<td>battery 2 x 1.5V AA</td>
<td>9 - 24 V DC</td>
</tr>
<tr>
<td><strong>Loading outputs TAMPER, ALARM:</strong></td>
<td>x</td>
<td>100 mA at max. 60 V</td>
</tr>
<tr>
<td><strong>Drained battery indicator:</strong></td>
<td>yes</td>
<td>x</td>
</tr>
<tr>
<td><strong>Transmission frequency:</strong></td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
</tr>
<tr>
<td><strong>Detection angle:</strong></td>
<td>105°</td>
<td></td>
</tr>
<tr>
<td><strong>Detection distance:</strong></td>
<td>max. 12 m</td>
<td></td>
</tr>
<tr>
<td><strong>Recommended working height:</strong></td>
<td>max. 2.2 m</td>
<td></td>
</tr>
<tr>
<td><strong>Working temperature:</strong></td>
<td>-10...+50°C</td>
<td></td>
</tr>
<tr>
<td><strong>Cross-section of connecting wires:</strong></td>
<td>0.2 – 0.75 mm² (24-18 AWG)</td>
<td></td>
</tr>
<tr>
<td><strong>Protection:</strong></td>
<td>IP20</td>
<td></td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>white</td>
<td></td>
</tr>
<tr>
<td><strong>Dimension:</strong></td>
<td>105 x 46 x 42 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Detection field**
### Detectors / Accessories

**RFWD-100**

**WD-100**

<table>
<thead>
<tr>
<th>Technical parameters</th>
<th>RFWD-100</th>
<th>WD-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>battery 1 x 3 V CR2032</td>
<td>9 - 24 V DC</td>
</tr>
<tr>
<td>Drained battery indicator:</td>
<td>yes</td>
<td>x</td>
</tr>
<tr>
<td>Transmission frequency:</td>
<td>868 MHz, 915 MHz, 916 MHz</td>
<td></td>
</tr>
<tr>
<td>Working temperature:</td>
<td>-10...+50°C</td>
<td></td>
</tr>
<tr>
<td>Cross-section of connecting wires:</td>
<td>0.2 - 0.75 mm² (24-18 AWG)</td>
<td></td>
</tr>
<tr>
<td>Protection:</td>
<td>IP20</td>
<td></td>
</tr>
<tr>
<td>Color:</td>
<td>white</td>
<td></td>
</tr>
<tr>
<td>Dimension:</td>
<td>25 x 66 x 18 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Window / Door detector**

- The window / door detector is used to detect opening where activation occurs when the magnet and the sensor become separated.
- Use:
  - in combination with the switching unit for automatic light control (cellar, garage, etc.), or switching on a GSM gate
  - by means of the Smart RF box, detection can be displayed on your smart phone in the form of a notification; alarms are stored in the history, which is visualized in the application iHC.
- Anti-tamper function: an alarm is triggered if there is an unauthorized interference to detector (disassembly, power outage, ...)
- Power supply:
  - RFWD-100: battery 3V / CR2032, the battery life is around 1 year, ...thanks to the ability to turn off the LED indicator it is possible to extend up to 3 years.
  - WD-100: 9 - 24 V DC.
- Communication frequency with bidirectional protocol iNELS RF Control.
- "Low Battery" Alerts on Your iHC App.

**Connection**

- ALARM JUMPER
- double balancing
- single balancing
- TAMPER

**iNELS Cam**

<table>
<thead>
<tr>
<th>Technical parameters</th>
<th>iNELS Cam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>5 V DC adapter</td>
</tr>
<tr>
<td>Resolution:</td>
<td>640 x 480 px</td>
</tr>
<tr>
<td>Night light:</td>
<td>yes</td>
</tr>
<tr>
<td>Max. cameras in app:</td>
<td>up to 10</td>
</tr>
</tbody>
</table>

**IP camera**

- The cloud video camera DCS-933L, capable of scanning both day and night, is a universal monitoring solution for your home or office.
- As opposed to a standard web camera, D-Link is an independent system, which can transmit high quality images without the need for a computer connection.
- It is equipped with a motion detector, and features the function of a Wi-Fi extender/repeater, enabling improvement in range and coverage of your existing home or office wireless network.

Supported video cameras: Axis, D-link.
Temperature sensors

- The temperature sensors contain a NTC thermistor filled in a metal hollow with a heat-conducting putty (TZ) or inside a PVC terminal (TC), high electric strength meeting which meets the double insulation requirements.
- TC sensor - supply cable to the TC sensor is made of a 2Dx0.5 mm CYSY conductor.
- TZ sensor - 2Dx0.5 mm VO3SS-F cable with silicone isolation.
  - suitable particularly for use under extreme temperatures.

**Technical parameters**

<table>
<thead>
<tr>
<th>Sensor</th>
<th>TC</th>
<th>TZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range:</td>
<td>0..+70 °C</td>
<td>-40..+125 °C</td>
</tr>
<tr>
<td>Sensor:</td>
<td>NTC 12K 5%</td>
<td>NTC 12K 5%</td>
</tr>
<tr>
<td>In air / water:</td>
<td>(165) 92 s / 23 s</td>
<td>(165) 62 s / 8 s</td>
</tr>
<tr>
<td>In air / water:</td>
<td>(195) 306 s / 56 s</td>
<td>(195) 216 s / 23 s</td>
</tr>
<tr>
<td>Cable material:</td>
<td>Heat-resistant PVC</td>
<td>silicone</td>
</tr>
<tr>
<td>Terminal material:</td>
<td>Heat-resistant PVC</td>
<td>nickel-plated copper</td>
</tr>
<tr>
<td>Terminal:</td>
<td>IP 67</td>
<td>IP 67</td>
</tr>
</tbody>
</table>

\(\tau_{65}(95)\): the time when the sensor is heated to 65 (95)% of the temperature environment in which the sensor is placed.

Types of temp. sensors for range from 0 till +70 °C; connectible directly in the terminal block

<table>
<thead>
<tr>
<th>Sensor</th>
<th>TC</th>
<th>TZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC-0 - length 110 mm, weight 5 g</td>
<td>TZ-0 - length 110 mm, weight 4.5 g</td>
<td></td>
</tr>
<tr>
<td>TC-3 - length 3 m, weight 108 g</td>
<td>TZ-3 - length 3 m, weight 106 g</td>
<td></td>
</tr>
<tr>
<td>TC-6 - length 6 m, weight 213 g</td>
<td>TZ-6 - length 6 m, weight 216 g</td>
<td></td>
</tr>
<tr>
<td>TC-12 - length 12 m, weight 466 g</td>
<td>TZ-12 - length 12 m, weight 418 g</td>
<td></td>
</tr>
</tbody>
</table>

Types of temp. sensors for range from -40 till +125°C; connectible directly in the terminal block

**NTC sensor warming up - by air**

- PVC - response to air temperature increase from 22.5 °C to 58 °C
- Silicone - response to air temperature increase from 22.5 °C to 63.5 °C

**Resistive values of sensors in depending on temperature**

<table>
<thead>
<tr>
<th>Temperature (°C)</th>
<th>Sensor NTC (kΩ)</th>
<th>Sensor PT100 (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>14.7</td>
<td>107.8</td>
</tr>
<tr>
<td>30</td>
<td>9.8</td>
<td>111.7</td>
</tr>
<tr>
<td>40</td>
<td>6.6</td>
<td>115.5</td>
</tr>
<tr>
<td>50</td>
<td>4.6</td>
<td>119.4</td>
</tr>
<tr>
<td>60</td>
<td>3.2</td>
<td>123.2</td>
</tr>
<tr>
<td>70</td>
<td>2.3</td>
<td>127.1</td>
</tr>
</tbody>
</table>

NTC 12 kΩ tolerance is ± 5% at 25 °C

Long-term stability of the sensor resistance PT100 is 0.05% (10.000 Hrs).
**Telva 230 V**

**Telva 24 V**

---

### Accessories

**EAN code**

TELVA 230V, NC: 8595180164010
TELVA 230V, NO: 8595180164027
TELVA 24V, NC: 8595180164034
TELVA 24V, NO: 8595180164041

---

### Technical Parameters

<table>
<thead>
<tr>
<th>Operating Voltage</th>
<th>Telva 230 V</th>
<th>Telva 24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Voltage</td>
<td>230 V, 50/60 Hz</td>
<td>24 V AC, 50/60 Hz</td>
</tr>
<tr>
<td>Operating Input</td>
<td>1.8 W / 300 mA for max 2 min</td>
<td>1.8 W / 250 mA for max 2 min</td>
</tr>
<tr>
<td>Settings</td>
<td>4 mm</td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>IP54/II</td>
<td></td>
</tr>
<tr>
<td>Conductor</td>
<td>2 x 0.75 mm²</td>
<td></td>
</tr>
<tr>
<td>Stopping Force</td>
<td>100 N ±5 %</td>
<td></td>
</tr>
<tr>
<td>Cable Length</td>
<td>1 m</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>white RAL 9003</td>
<td></td>
</tr>
<tr>
<td>Dimensions h/w/l</td>
<td>55+5 x 44 x 61 mm</td>
<td></td>
</tr>
</tbody>
</table>

- The thermo-regulation drive TELVA is used to control underfloor and radiator hot-water heating.
- It is known for its quiet operation. It has a built-in valve position indicator.
- By mounting using the VA valve adapter, the thermo-regulation drive TELVA is applicable for a wide range of thermostatic valves available on the market.
- Design:
  - without voltage open (NO)
  - without voltage closed (NC)
- Type of use:
  Underfloor heating - wireless controller RFTC-50/G measures the room temperature, and based on the set program, sends a command to the switching unit RFSA-66M to open / close the thermo-regulation drive TELVA at the distribution.

### Current Transformer

<table>
<thead>
<tr>
<th>Technical Parameters</th>
<th>CT50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>50 A</td>
</tr>
<tr>
<td>Output</td>
<td>0.333 V</td>
</tr>
<tr>
<td>Accuracy</td>
<td>1.0</td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz</td>
</tr>
<tr>
<td>Insulation Accuracy</td>
<td>3 KV</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>-15 ... 60 °C</td>
</tr>
<tr>
<td>Dimension</td>
<td>31 x 46 x 32 mm</td>
</tr>
</tbody>
</table>

- The LED sensor scans LED impulses on the meter, which indicates consumption by flashing.
- The sensor’s scanner is affixed with glue above the LED diode of the meter signaling indication of consumption.
- The sensor is affixed on the terminal inside the converter RFTM-1.

### LS (LED sensor)

- The LED sensor scans LED impulses on the meter, which indicates consumption by flashing.
- The sensor’s scanner is affixed with glue above the LED diode of the meter signaling indication of consumption.
- The sensor is affixed on the terminal inside the converter RFTM-1.

### MS (Magnetic sensor)

- The magnetic sensor scans movement of the numeral, upon which a permanent magnet is placed.
- The sensor’s scanner is affixed with glue above the unit dial of the meter.
- The sensor is affixed on the terminal inside the converter RFTM-1.

### IRS (Infra Red sensor)

- The IR sensor senses the reflective curtain placed on the moving number of the meter or senses the rotating indicator (mainly on water meters).
- The sensor’s scanner is affixed with glue above the dial or the meter’s rotating indicator.
- The sensor is affixed on the terminal inside the converter RFTM-1.

*The standard supplied length of 1.5m can be custom ordered in an extended version of up to 5 m.*
Switches

Single function RFSA-11B

Function button ON/OFF

The output contact closes by pressing one button position, and opens by pressing the other button position.

Multi function RFSA-61B, RFSA-62B, RFSA-66M, RFSAI-61B, RFSC-61, RFUS-61

Function 1 - button

The output contact will be closed by pressing the button and opened by releasing the button.

Function 2 - switch on

The output contact will be closed by pressing the button.

Function 3 - switch off

The output contact will be opened by pressing the button.

Function 4 - impulse relay

The output contact will be switched to the opposite position by each press of the button. If the contact was closed, it will be opened and vice versa.

Function 5 - delayed off

The output contact will be closed by pressing the button and opened after the set time interval has elapsed. $t = 2s...60min.$

Function 6 - delayed on

The output contact will be opened by pressing the button and closed after the set time interval has elapsed. $t = 2s...60min.$

Loadability products

<table>
<thead>
<tr>
<th>Load type</th>
<th>AC1</th>
<th>AC2</th>
<th>AC3</th>
<th>AC5a without compensation</th>
<th>AC5a with compensation</th>
<th>AC5b</th>
<th>AC6a</th>
<th>AC7b</th>
<th>AC12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact material AgSnO2, Contact 8A</td>
<td>250V / 8A</td>
<td>250V / 5A</td>
<td>250V / 4A</td>
<td>x</td>
<td>x</td>
<td>250V</td>
<td>250V / 4A</td>
<td>250V / 1A</td>
<td>250V / 1A</td>
</tr>
<tr>
<td>Contact material AgSnO2, Contact 8A</td>
<td>x</td>
<td>250V / 4A</td>
<td>250V / 3A</td>
<td>30V / 8A</td>
<td>240V / 3A</td>
<td>30V / 2A</td>
<td>30V / 2A</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Load type</th>
<th>AC1</th>
<th>AC2</th>
<th>AC3</th>
<th>AC5a without compensation</th>
<th>AC5a with compensation</th>
<th>AC5b</th>
<th>AC6a</th>
<th>AC7b</th>
<th>AC12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact material AgSnO2, Contact 14A</td>
<td>250V / 14A</td>
<td>250V / 5A</td>
<td>250V / 3A</td>
<td>230V / 3A (690VA) up to max input $C=14uF$</td>
<td>230V / 3A (690VA) up to max input $C=14uF$</td>
<td>1000W</td>
<td>x</td>
<td>250V / 3A</td>
<td>x</td>
</tr>
<tr>
<td>Contact material AgSnO2, Contact 14A</td>
<td>x</td>
<td>250V / 6A</td>
<td>250V / 6A</td>
<td>240 / 10A</td>
<td>240 / 3A</td>
<td>240 / 2A</td>
<td>240 / 2A</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Load type</th>
<th>AC1</th>
<th>AC2</th>
<th>AC3</th>
<th>AC5a without compensation</th>
<th>AC5a with compensation</th>
<th>AC5b</th>
<th>AC6a</th>
<th>AC7b</th>
<th>AC12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact material AgSnO2, Contact 16A</td>
<td>250V / 16A</td>
<td>250V / 5A</td>
<td>250V / 3A</td>
<td>230V / 3A (690VA) up to max input $C=14uF$</td>
<td>230V / 3A (690VA) up to max input $C=14uF$</td>
<td>1000W</td>
<td>x</td>
<td>250V / 3A</td>
<td>250V / 10A</td>
</tr>
<tr>
<td>Contact material AgSnO2, Contact 16A</td>
<td>x</td>
<td>250V / 6A</td>
<td>250V / 6A</td>
<td>240 / 10A</td>
<td>240 / 3A</td>
<td>240 / 2A</td>
<td>240 / 2A</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
Dimmers

Multi function RFDA-73M/RGB, RFDEL-71B, RFDEL-71M, RFDSC-71, RFDAC-71B

Light scene function 1

a) By pressing the programmed button for less than 0.5s, the light illuminates; it goes out by pressing again.
b) By pressing the programmed button for more than 0.5s, fluid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
c) It is possible to readjust the change in intensity at any time by a long press of the programmed button. The actuator remembers the adjusted value even after disconnecting from the power supply.

Light scene function 2

a) By pressing the programmed button for less than 3s, the light illuminates; it goes out by pressing again.
b) In order to limit undesirable control of brightness, fluid brightness regulation occurs only by pressing a programmed button for over 3s. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
c) It is possible to readjust the change in intensity at any time by pressing the programmed button for over 3s. The actuator remembers the adjusted value even after disconnecting from the power supply.

Light scene function 3

a) By pressing the programmed button for less than 0.5s, the light fluidly illuminates for a period of 3s (at 100% brightness). By pressing the button again, the light will continuously switch off for 3 seconds.
b) By pressing the programmed button for more than 0.5s, fluid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
c) It is possible to readjust the change in intensity at any time by a long press of the programmed button. The actuator remembers the adjusted value even after disconnecting from the power supply.

Light scene function 4

a) By pressing the programmed button for less than 0.5s, the light fluidly illuminates. By pressing the button again, the light will continuously switch off for 3 seconds (at 100% brightness).
b) By pressing the programmed button for more than 0.5s, fluid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
c) It is possible to readjust the change in intensity at any time by pressing the programmed button. The actuator remembers the adjusted value even after disconnecting from the power supply.

Function sunrise

After pressing the programmed button, the light begins to illuminate in the programmed time interval in a range of 2 seconds to 30 minutes.

Function sunset

After pressing the programmed button, the light begins to dim in the programmed time interval in a range of 2 seconds to 30 minutes.

Function ON/OFF

If the light is switched off, pressing the programmed button will switch it on. If the light is switched on, pressing the programmed button will switch it off.

Rating of the light source ELKO lighting on dimmers ELKO EP

<table>
<thead>
<tr>
<th>LED bulb</th>
<th>LED spot lights</th>
<th>LED panels</th>
<th>LED / RGB strip</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDV-30/E27-</td>
<td>DLSL-GU10-</td>
<td>LP-6000-3K</td>
<td>LED strip 7.2W</td>
</tr>
<tr>
<td>806-2K</td>
<td>350-3K</td>
<td></td>
<td>LED strip 14.4W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LED strip 19.2W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LED strip 28.8W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LED strip RGB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>strip 7.2W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>strip 14.4W</td>
</tr>
<tr>
<td>RFDA-73M/RGB</td>
<td>✔️ 21 ✔️ 21 ✔️ 45 ✔️ 25 ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
</tr>
<tr>
<td>RFDEL-71B</td>
<td>✔️ 11 ✔️ 11 ✔️ 25 ✔️ 13 ✔️ 13</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
</tr>
<tr>
<td>RFDC-71</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
</tr>
<tr>
<td>RFDC-71B</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️</td>
</tr>
</tbody>
</table>

WARNING!
May lead to different results based on the state of network cable length and other factors.
This table contains the results of tests that were conducted internally and therefore is ONLY for customers only informative.
The products were tested in test laboratories ELKO EP, and therefore the company assumes no responsibility for any imitation test environment.
Inductive and capacitive loads must not be connected simultaneously!
Communication between units (transmitters and receivers) takes place wirelessly on a frequency of 868 – 916 MHz based on standards in the given country on an entirely unique protocol RF IO. RF IO is a proprietary wireless protocol of ELKO EP, which is unique for its structure. In the USA, there is also available a variety of units with the protocol Z-Wave (915 MHz), which is compatible also with other producers of similar devices on the same protocol.

### Available frequency for individual territories:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>868.3 MHz</td>
<td>EU and rest of the world</td>
</tr>
<tr>
<td>868.1 MHz</td>
<td>Ukraine, Russia, Belarus, Kazakhstan</td>
</tr>
<tr>
<td>915 MHz</td>
<td>USA</td>
</tr>
<tr>
<td>915 MHz/Z-Wave</td>
<td>USA</td>
</tr>
<tr>
<td>916 MHz</td>
<td>Australia, New Zealand</td>
</tr>
</tbody>
</table>

### Advantages of the RFIO protocol:

- Reliable transfer of small data packets with transfer speed of up to 100 kbit/s
- No fees or licenses required
- Used frequencies do not collide with Wi-Fi /Bluetooth devices and wireless units at 2.4 GHz (ZigBee)
- It does not needlessly overwhelm communications space with unaddressed commands
- Low power radio
- Routing - Data transfer between wireless units takes place by a system where other receivers within range help transfer information (packets) to the distant receiver, which itself would be out of range. It is thus possible to cover larger buildings and increase reliability of transmission for more complex buildings.
Instructions for use

For correct and faultless functioning and safe operation of the product, it is necessary to observe the following principles:

- Do not install in outdoor or wet spaces
- During maximum load, sufficient cooling must be ensured for RFDEL-71M and RFDEL-71B
- Do not install RF components into metal switchboard and steel lighting panels (the metal is an obstacle to the RF signal)
- Keep in mind that the radio signal range for RF installations depends on the building structure, materials used and the manner of unit location in the area.
- Actuators protection: Actuators are equipped with thermal protection, which disconnects output when the temperature inside the device exceeds a certain level.

Programming the controller and unit

1. Insert the batteries into the controller.
   Installation of unit based on requirement and unit design (in an installation box, switchboard, appliance cover, etc.). Abide by the principles of correct installation location.

2. By pressing the programming button using a suitable tool (no sharp point) on the unit for longer than 1 second, the unit enters programming mode.
   The LED on the unit starts to flash at half-second intervals. This flashing indicates that the unit is ready to receive a signal of any button of the RF controller.

3. The number of presses of the chosen controller button assigns the required function. Sending the signal is indicated by the flashing LED on the controller. The programming unit confirms receipt of the command by the LED going out briefly. It is then possible to repeat step 3 for programming the other buttons on the controller or even other controllers. The program function can be set as you wish to any controller position. One unit can be controlled by up to 32 channels (1 channel represents 1 button on a controller). The controller need not be bound only to one unit, but can control an unlimited number of elements that are within range of the RF signal by functions to which it is programmed.

4. Pressing the programming button on the unit for shorter than 1 second closes the programming mode. The LED goes out.

More detailed information is available in the user manuals of individual products.
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
- RFSC-50/G
- RFSD-100
- RFMD-100
- RFWD-100

2) Flush mounted
- RF Touch-B
- RFSTI-11/G
- RFTC-100/G

3) DIN Rail mounted
On DIN rail according to EN60715.
- RFSG-1M
- RFSGM-220M
- RFPM-2M
- RFDA-73M/RGB
- RFDEL-71M
- RFSA-61M
- RFSA-66M

4) Mounted to or in the installation box
- RFIM-20B
- RFIM-40B
- RFDAC-71B
- RFDEL-71B
- RFSA-11B
- RFSA-61B
- RFSA-62B
- RFSAI-61B
- RFJA-12B/230V
- RFJA-12B/24V
- RFSAI-61B
- RFJA-12B/230V
- RFJA-12B/24V

5) Mounted into the cover of appliance
- RFDAC-71B
- RFDEL-71B
- RFSA-11B
- RFSA-61B
- RFSA-62B
- RFSAI-61B
- RFJA-12B/230V
- RFJA-12B/24V

6) Surface mounted
- RFSOU-1
- RFUS-61
- RFTM-1
- RFSD-100
- RFMD-100
- RFWD-100
- RF Touch-W
- RFWB-20/G
- RFWB-40/G
- RFTC-10/G
- RFSC-50/G
- RFSD-100
- RFMD-100
- RFWD-100
LARA is a music and internet radio player. We have registered 40 favorite Czech radios stations as presets stations, however you can easily change it using the configurator. LARA plays the music, which is stored in the NASA storage or in the external source (phone, MP3 player) that is connected through a cable on the front panel of the device. Built-in amplifier that allows direct connection of speakers (in the same LOGUS90 design) or allows connection of external in-wall or ceiling speakers.

KIT TO CONTROL LIGHTS VIA SMARTPHONE

It’s never been easier to set the appropriate ambience for reading a book or, watching a movie or a party with friends. All you need is wireless bulbs and a smart box, then you can control every device from the comfort of your smartphone, tablet or smart TV. You can’t just control colored or white light bulbs, but also other appliances too.

ONE CONTROLLER FOR ALL

The kit “House under the thumb” which you’re holding in your hands is the basic starter kit for you, which would like to make your home more comfortable. The starter kit consists of 2 colored wireless bulbs, 1 x switching socket and 1 x camera, which allows you to try the basic units of iNELS RF Control – wireless solution. Everything is preset to ensure fast and easy control.

VIRTUAL KITS

The virtual kit is a set of wireless units that are packed individually (as an individual product), but on the other hand, they are preset together (they are meant to work together) to ensure a simple installation. They are offered at a discounted price and it is not possible to separate any unit from this price.

UNDERFLOOR HEATING - BY WATER

Any wireless temperature regulator measures the room temperature, it compares with set temperature and time program, then sends a command to switch on the units. Based on the command from the temperature regulator, 6-channels switching unit is able to control up to 6 thermostats corresponding to heating circuits.

KIT CONSISTS OF:
Wireless temperature controller RFTC-50/G, wireless switch unit (6 outputs) RFSA-66M, thermodriver TELVA/230V.

UNDERFLOOR HEATING - BY ELECTRICITY

Temperature and switching unit (two in one) measures the floor temperature via external sensor (built-in). Then it sends data to wireless touch unit RF Touch, which compares it with the temperature set along with the time schedule and then sends a command back to switch on/off the heating circuits. It is possible to connect up to 4 temperature/switching units.

Advice 1) If just one reference temperature is enough for you, so then it can be measured by temperature sensor RFSTI-10B and to switch up to 6 independent heating circuits you can use 6-channels switching actuator RFSA-66M.

Advice 2) The wireless unit RF Touch can be replaced by Smart RF box and all can be controlled via your smartphone. Both solution can be used together.

KIT CONSISTS OF:
Switching actuator with thermosensor RFSTI-11/G, Wireless touch unit RF Touch.
HEATING WITH SAVINGS

1x WIRELESS CONTROL UNIT RF TOUCH
3x WIRELESS THERMOVALVES

KIT TO CONTROL HEATING VIA WIRELESS RF TOUCH UNIT

Includes 3 wireless thermovalves that are installed instead the standard radiator valves. It measures the room temperature and sends it to the RF Touch control unit. RF Touch compares it with the temperature set along with time schedule and sends a command to open or close the valve. You can set heating programs in the weekly schedule, separately for each circuit (room).

REMOTE HEATING

1x SMART RF BOX
3x WIRELESS THERMOVALVES

KIT TO CONTROL HEATING VIA SMARTPHONE

It includes 3 wireless thermovalves that are installed instead the standard radiator valves. They measures the room temperature and send it to the Smart RF box. The Smart RF box compares it with the temperature set along with the time schedule in the application of your phone and sends a command to open or close the valve. You can always turn on the heating circuit via an app, whether you’re at home, or just going to visit your cottage and do not want to come to unheated place.

EASY HEAT REGULATION

1x TEMPERATURE CONTROLLER
1x SWITCHING SOCKET

KIT FOR WIRELESS TEMPERATURE REGULATION IN THE HOME

This kit enables convenient and quick control of heater, oil heater, panel heater or portable air conditioner. Just plug the device into controlled switching sockets and appropriately place your controller RFTC-50/G. The desired temperature is set on the controller, that compares it with the current record and it sends a command to turn the device ON.

VIRTUAL KITS

AGAINST THE FLOOD

A wireless sensor monitors the water leaks or flooding in the critical places (basement, pits, shafts, bathroom, laundry room,...) and sends immediately a command to the switching unit to close the solenoid valve of the main water supply. You can be also informed of that accident through a GSM gateway by sending SMS text messages.

The Kit CONSISTS OF:
Switch unit RFUS-61, wireless flood detector RFSF-1B,flood probe FP-1.

We recommend: solenoid valve: MPW SS 304 - 1/2 (3/4) 230V AC.

COLORED RGB LED STRIP

The app in your smartphone can send (through RF smart box) the commands to the dimming unit to which the RGB strip is connected. From your app it is possible to switch ON/OFF, to set the color or to run the scene of automatic color blending.

Advice 1) The colored RGB strip can be controlled through RF Pilot by controllers RFWB-20/40, RF Key, ...
Advice 2) If you do not want the colored RGB strip, we can replace it by monochromatic (warm white, cool white, red, ...) Then you can connect 8 m of monochromatic strip (power 7.2W/m) to RFDA-73M/RGB to each output.

KIT CONSISTS OF:
Smart RF box, dimmer RFDA-73M/RGB, 2 x 5m coloured RGB strip 7.2W/m, power supply 230V/12V/100W.

TECH. SUPPORT

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