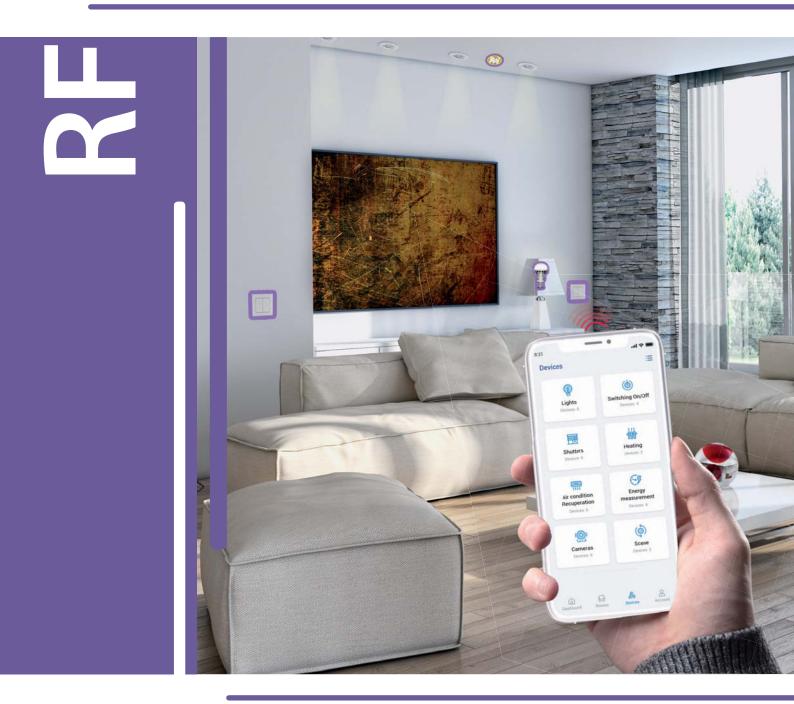




# WIRELESS ELECTRO-INSTALLATION





# **ELKO EP**



We are traditional, innovative and purely Czech development manufacturer of electronic devices and we have been your partner in the field of electroinstallations for 28 years.



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

Millions of relays, thousands of satisfied customers, hundreds of our own employees, twenty seven years of research, development and production, fifteen foreign branches, one company. ELKO EP, innovative- a purely Czech company based in Holešov, where development, production, logistics, service and support go hand in hand. We primarily focus on developing and manufacturing systems for building automation in the residential, commercial and industrial sector, a wide range of Smart city facilities and the so-called Internet of Things (IoT).

# **Facts and stats**



330 **EMPLOYEES** 

15 000 **INELS INSTALLATION** 

12 000 000

MANUFACTURED PRODUCTS



2<sup>nd</sup> position in Europe with timers/time relays



# **SUPPORT**

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



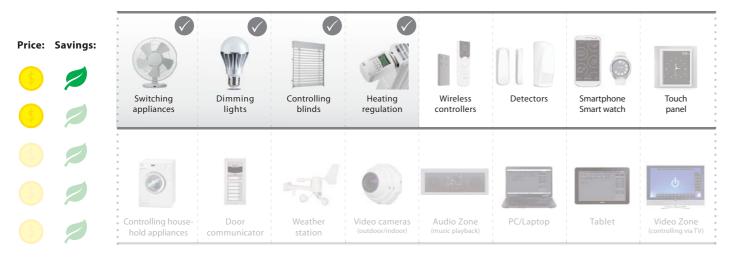
# **SELLERS**

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

# CLASSIC ELECTRO-INSTALLATION

# www.elkoep.com/relays

Electricity is our everyday guide. In our range you will find electronic modular devices from time relays to thermostats. We build on solid foundations and have been developing and manufacturing for more than 27 years.



# WIRELESS ELECTRO-INSTALLATION

www.elkoep.com/wireless

An ideal solution for completed houses, when it is no longer possible to intervene in the structure. Communication works wirelessly through the central brain, the RF Touch unit. From this unit you control thermostats and can control up to a range of 200 m.



# WIRED ELECTRO-INSTALLATION

www.elkoep.com/wired

If you are building a new house, this electrical installation is tailor-made for you. The data wire (bus) is routed in the walls through the entire house. The advantage is the possibility of expansion with a multimedia superstructure or connection of third parties (appliances, cameras, etc.)



# Wireless electroinstallation

It does not matter what you control, but how easily you control it. us who often move around the house In the garden, the RF Pilot With us you can control the devices and appliances in many ways, remote control in your pocket will surely be appreciated. Touch unit one at a time or combine them at will. is again designed for those who like everything in one place with a – 3.5 "display securely holding all the necessary buttons within For those conservatives amongst us, there are buttons in the form the frame. An interesting and often preferred option is the driver's of switches exactly as we know and are used to them, for those of smartphone - which most of us already have in our pocket.

# YOU CAN CONTROL INELS WITH:





Wireless wall controller

# • 2 or 4 buttons

- simple installation can be attached or fixed anywhere
- in LOGUS<sup>90</sup> design (natural materials and colour combinations)

**Touch glass** 

# controller

- wall controller in elegant glass desian
- 2 or 4 buttons
- · two side tape installation or wall box installation
- signal range up to 200 m





Smartphone

· here marks the start of home automation

Remote controller

with display

- the remote controller with OLED colour display offers control of up to 40 household appliances
- · lights, sockets, garage doors, sprinklers, blinds, awnings, etc.

- your home under control thanks to Android application
- you no longer have to worry about unpleasant surprises after downloading the Android or iOS application for free



Wireless touch unit **RF** Touch

- wireless touch unit for wall box
   4 button controller installation
- it will become a central, wireless intuitively controlled home
- coloured 3,5" TFT display





- pocket controller for every day
- in colour white or black



Smart watch

- the only controller that comes free
- your home under control thanks to Android application
- you no longer have to worry about unpleasant surprises after downloading the Samsung Gear app



# Smart TV SAMSUNG

- first application in the world for controlling iNELS in Samsung TV
- free download on Samsung Hub
- comfortably control not only the elements in individual rooms, but also outdoor cameras

Cata	logue	contei	nt
------	-------	--------	----

iNELS RF Control: units overview	V
----------------------------------	---

# Controllers

RFWB-20/G, RFWB-40/G   On-wall button controllers	14
RFOWB-20   Outdoor controller, 2 buttons – (IP65) - <b>NEW!</b>	15
RFGB-20/W, RFGB-20/B, RFGB-40/W, RFGB-40/B   Glass touch controllers, SHARP - NEW!	16
RFGB-220/W, RFGB-220/B, RFGB-240/W, RFGB-240/B   Glass touch controllers, ROUND - NEW!	17
RFDW-71/W, RFDW-71/B   Glass touch controller with dimmer, SHARP - <b>NEW!</b>	18
RFDW-271/W, RFDW-271/B   Glass touch controller with dimmer, ROUND - NEW!	19
RF KEY-40/W, RF KEY-40/B, RF KEY-60/W, RF KEY-60/B   Controller – key fob - <b>NEW!</b>	21
RF Pilot/W, RF Pilot/B   Remote RF controller with display	22

# Switches

RFSA-11B, RFSA-61B   Switch unit, 1-channel – (BOX)	24
RFSA-62B   Switch unit, 2-channels – (BOX)	25
RFSAI-62B   Switch unit, 2-channels with external input – (BOX)	26
RFJA-32B   Switch unit for shutters – (BOX)	27
RFSA-61MI, RFSA-61M   Switching units, 1-channel – (1-MODULE) - <b>NEW!</b>	28
RFSA-66MI, RFSA-66M   Switching units, 6-channels – (3-MODULE) - <b>NEW!</b>	29
RFUS-61   Switch unit with increased protection	30
RFSC-61   Switching socket-plug	31
RFOSC-61   Switching sockets with increased protection – (IP65) - <b>NEW!</b>	32

# Dimmers

RFDEL-71B   Universal dimmer, 1-channel – (BOX)	33
RFDAC-71B   Analog controller, 0(1)-10 V - (BOX)	34
RFDEL-71M   Universal dimmer, 1-channel – (3-MODULE)	35
RFDEL-76M   Universal dimmer, 6-channels – (6-MODULE) - NEW!	36
RFDA-73M/RGB   Dimming actuator for LED (RGB) strips, 3-channels – (3-MODULE)	38
RFDSC-71   Dimming socket-plug	40

# Temperature control

RFTC-10/G   System temperature controller – (LOGUS <sup>90</sup> )	41
RFTC-50/G   Autonomous temperature controller – (LOGUS <sup>90</sup> )	42
RFSTI-11B   Switch unit with a external temperature sensor – (BOX)	43
RFTI-10B   Temperature sensor – (BOX)	44
TC, TZ   Temperature sensors	45
TELVA-2 230V, TELVA-2 24V   Thermodrive	46

# Converters

RFIM-20B, RFIM-40B   Input contacts converter – (I	3OX)	47
RFSG-1M   Input contact converter (1-MODULE) .		48

# Detectors

RFSF-1B   Level switch – (BOX)	50
FP-1   Liquid probe	50
RFSF-100   Flood detector	51
RFSOU-1   Twilight switch – (IP65)	52
RFMD-100   Motion detector	53
RFWD-100   Window/door detector	54

# System units

8

RF Touch   Wireless touch unit
RFRP-20 Repeater to extend the range
eLAN-RF-103, eLAN-RF-Wi-103   Smart RF gateway - INNOVATION!

# Hotel Retrofit (HRESK)

RFTC-150/G   Temperature controller – (LOGUS <sup>90</sup> )
RFSAI-161B   Ligting control unit with pair detectors and external butto
RFSTI-111B   Overheating/overcooling switch unit with advanced fun
RFSA-166M   Switch unit for fancoil, 6-channels – (3-MODULE)

Applications	
Voice assistants	5

# Accessories

AN-I   Internal antenna
Extension cable for external antenna - NEW!
AN-E3   External antenna - NEW!
AN-E1   External antenna
RFAF/USB   Service Key
Supported video cameras, Supported intercoms
RF Sets

# **Overview of functions**

Switches
Dimmers
Protocol and compatibility
Installation possibilities
Product dimension
EAN codes

	61
tton input – (BOX)	62
unctions – (BOX)	64
	65
	66

68
 68
 68
 69
 70
 13

 - 74
76
 77
 78
02

.... 67

# **iNELS RF Control: units overview**

# Controllers

8



RFWB-20/G On-wall button controller

- 2 buttons

NEW



RFWB-40/G RFOWB-20 On-wall button controller Outdoor controller – 2 buttons



RF KEY-40/W - white RF KEY-40/B - black Controller – key fob -4 buttons

Switches

insit, • ····· g ce

RFSA-11B

Dimmers

RF KEY-60/W - white RF KEY-60/B - black Controller – key fob – 6 buttons

RFSA-61B

Switch unit, 1-channel

– 1× 16 A, multifunction



NEW

RF Pilot/A - anthracite Remote RF controller with display

RFSA-62B

Switch unit, 2 channels

– 2x 8 A, multifunction

...

Universal dimmer,

- R, L, C, LED, ESL

1-channel – 1x 600 VA



RFSAI-62B Switch unit, 2-channels with external input

SHARE

RFGB-20/W - white glass

RFGB-20/B - black glass

Glass touch controller, SHARP

– 2 buttons

NEW





RFJA-32B Switch unit for shutters



SHARP

RFGB-40/W - white glass

RFGB-40/B - black glass

Glass touch controller, SHARP

– 4 buttons

NEW





TC TZ Temperature sensors

# **iNELS RF Control: units overview**



RFGB-220/W - white glass RFGB-220/B - black glass Glass touch controller, ROUND – 2 buttons



RFGB-240/W - white glass RFGB-240/B - black glass Glass touch controller, ROUND – 4 buttons





RFSA-61M RFSA-61MI Switching units, 1-channel – multifunction, 1× 16 A

68

RFDSC-71

- 1x 300 VA

– R, L, C, LED, ESL

Dimming socket-plug

Switching units, 6-channels – multifunction, 6× 8 A



Switch unit, 1-channel

– 1× 16 A, singlefunction



RFDAC-71B Analog controller, 0(1)-10 V - multifunction

# **Temperature control**



RFTC-10/G System temperature controller



RFDEL-71B

Universal dimmer,

- R, L, C, LED, ESL

1-channel – 1x 160 VA

RFTC-50/G **RFSTI-11B** Autonomous temperature Switch unit with a external controller temperature sensor



RFDEL-76M Universal dimmer, 6-channels – 6 x 150 VA

1.5



RFTI-10B Temperature sensor (internal + external)



RFDA-73M/RGB Dimming actuator for LED (RGB) strips, 3-channels













RFDW-71/W - white glass **RFDW-71/B** - black glass Glass touch controller with dimmer, SHARP



RFDW-271/W - white glass **RFDW-271/B** - black glass Glass touch controller with dimmer, ROUND



RFUS-61 Switch unit with increased protection, 1x 12 A, multifunction



RFSC-61 Switching socket-plug, – 1× 16 A, multifunction



RFOSC-61 Switching sockets with increased protection

# iNELS RF Control: units overview

# **iNELS RF Control: units overview**



RFIM-20B Input contacts converter - 2x permanent contacts

RFIM-40B Input contacts converter - 4x instantaneous contacts

**RF Touch-W** 

– on the wall

RFSAI-161B

Wireless touch unit

Context secondary RFIM-4005 MINES INCLS CON

CE

**RFSG-1M** Input contact converter -1x permanent contact





RFSF-1B Level switch

Detectors



FP-1 Liquid probe



RFSF-100 Flood detector



RFSOU-1 Twilight switch



RFWD-100 Window/Door detector

# System units



**RF Touch-B** Wireless touch unit – flush mounted

# Hotel Room Energy Saving Kit



RFTC-150/G Temperature controller

# Ligting control unit with pair detectors and external button input

# Accessories



**RFAF/USB** Service Key

# Supported video cameras



Protocols MJPEG, RTSP, ONVIF

AN-I

Internal antenna

Gain: 2.1 dBi





2N



NEW

external antenna 10 m

Extension cable for

HIK VISION



AN-E

Gain: 5 dBi

External antenna

eLAN-RF-103

Smart RF gateway

with LAN

RFSA-166M Switch unit for fancoil, 6-channels

VEN

AN-E3

External antenna

Gain: 3 dBi, IP67



RFRP-20 the range

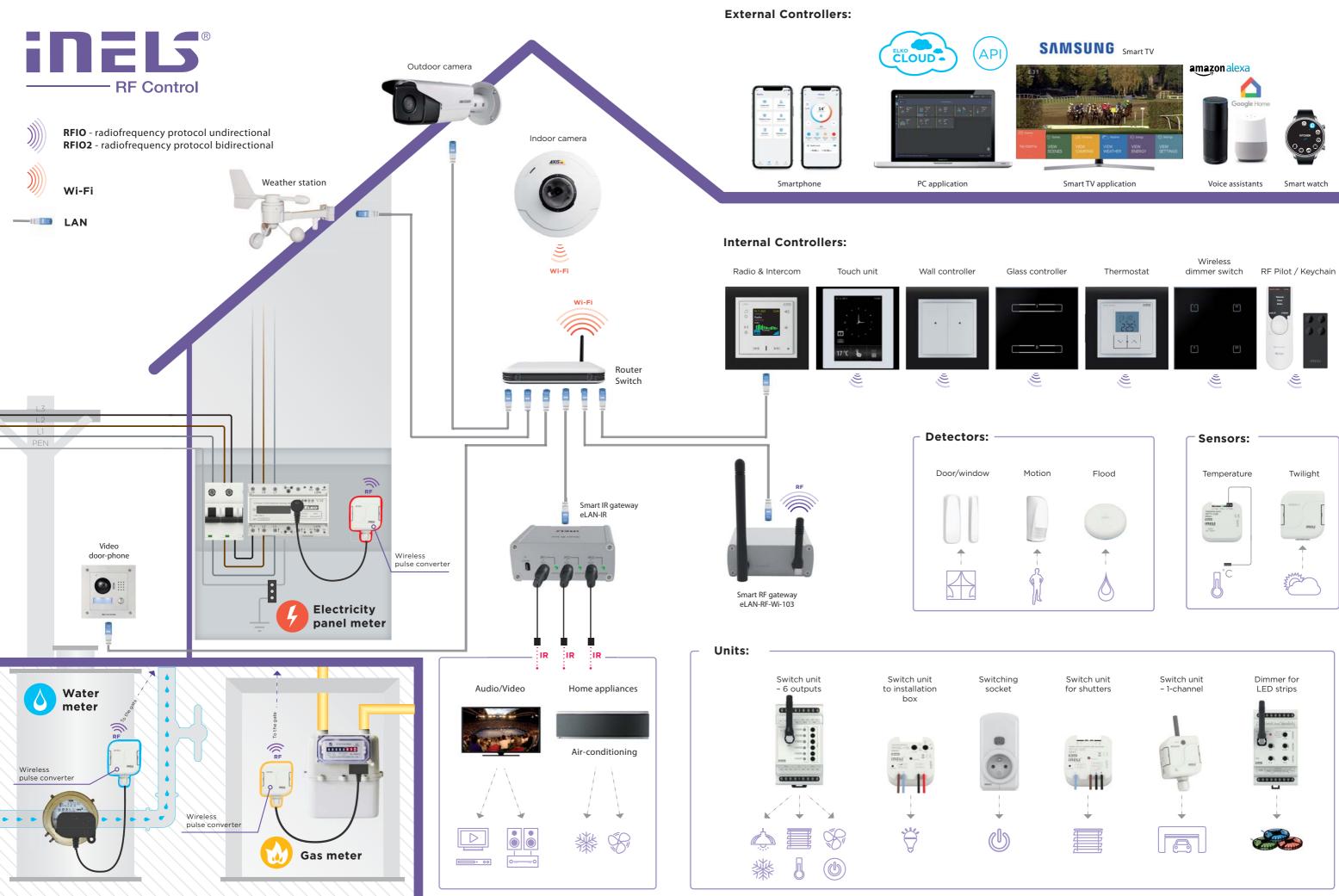
# eLAN-RF-Wi-103 Smart RF gateway

Repeater to extend

# with LAN & WiFi



RFMD-100 Motion detector

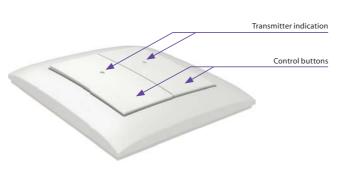




Technical parameters	RFWB-20/G	RFWB-40/G	
Supply voltage:	3 V CR 2032 battery		
Battery life:	around 5 years based on frequency of use		
Transmission indication:	red	LED	
Number of buttons:	2 4		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Signal transmission method:	unidirectionally addressed message		
Range:	in open space up to 200 m		
Other data			
Operating temperature:	-10 to +50 °C		
Operating position:	any		
Mounting:	glue/screws		
Protection:	IP20		
Contamination degree:	2		
Dimensions frame			
- plastic:	85 x 85 x 16 mm		
- metal, glass, wood, granite:	94 x 94 x 16 mm		
Weight (plastic):*	38 g	39 g	
Related standards:	EN 60669, EN 300 220, EN	301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)		

- On-wall button 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<sup>90</sup> 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 (3 V CR 2032 battery 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- $\bullet$  RFWB enables communication (RFIO2) and can thus communicate with the CU3-02M.

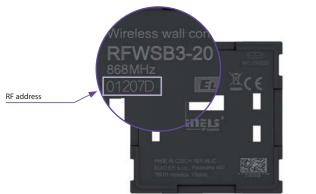
# Device description

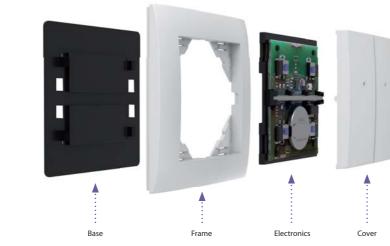




RFOWB-20 | Outdoor controller, 2 buttons

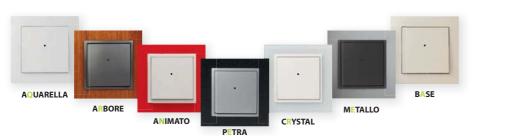
Technical parameters	RFOWB-20	
Supply voltage:	3 V CR 2032 battery	
Battery life:	around 5 years based on frequency of use	
Transmission indication:	Integrated red LED	
Number of buttons:	2	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Mounting:	screws/double sided tape	
Colour design:	white (RAL 9003)	
Protection:	IP65	
Contamination degree:	2	
Dimensions frame:	64 x 74 x 44 mm	
Weight:	112 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	







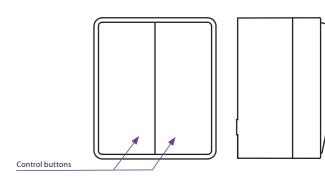
**Choose your own style** Flat wireless switches that can be mounted on glass, tile, furniture ... Such a quick change of location when you're moving.



Controllers

- The wireless push-button controller with IP65 protection is used to control iNELS RF components and protect them from the outdoor environment.
- 2 buttons allow (independently of each other) control of an unlimited number of components (actuators).
- The controller is suitable for control from the pool, garden, terrace, and pergola. It can be used as an uncovered bell button.
- Fastening with screws or double-sided tape.
- Battery power supply (3 V CR 2032 battery included in the supply) with battery life of around 5 years based on frequency of use.

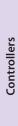
#### **Device description**



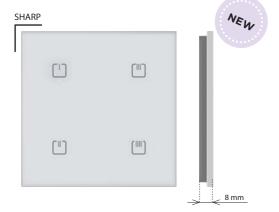


# RFGB-20/W, RFGB-20/B, RFGB-40/W, RFGB-40/B | Glass touch controllers, SHARP





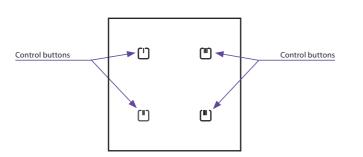
16



Technical parameters	RFGB-20	RFGB-40
Supply voltage:	2x 3 V CR 2032 batteries	
Battery life:	around 2 years based on frequency of use	
Transmission indication:	red LED	
Number of capacitive buttons:	2	4
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for mor	e information see p. 76)
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	a	ny
Mounting:	glue/s	screws
Protection:	IP	20
Contamination degree:	2	
Dimensions:	94 x 94 x 8 mm	
Weight:	107 g	107 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

- The glass touch controller is a design RF (wireless) Control unit and is available in elegant black and white variants.
- Only 8 mm thick.
- RFGB-20: 2 capacitive buttons allows to control 2 devices.
- RFGB-40: 4 capacitive buttons allows to control 4 devices.
- 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 units of iNELS RF Control.
- · The rear base allows to be attached to installation using screws, double-sided tape or keeping controller on the table.
- Battery power supply (2x 3 V CR 2032 batteries included in the supply) with battery life of around 2 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

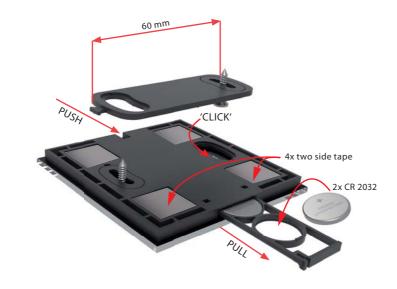
#### **Device description**

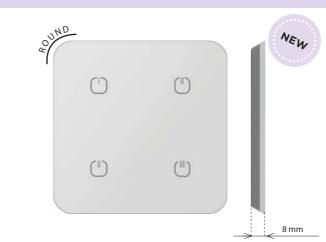




RFGB-40/W







Technical parameters	RFGB-220	RFGB-240
Supply voltage:	2x 3 V CR 2032 batteries	
Battery life:	around 2 years based on frequency of use	
Transmission indication:	red LED	
Number of capacitive buttons:	2	4
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to	+50 °C
Operating position:	a	ny
Mounting:	glue/screws	
Protection:	IP20	
Contamination degree:	2	
Dimensions:	100 x 100 x 8 mm	
Weight:	108 g	108 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

RFGB-240/W

Variants



Variants











RFGB-40/B

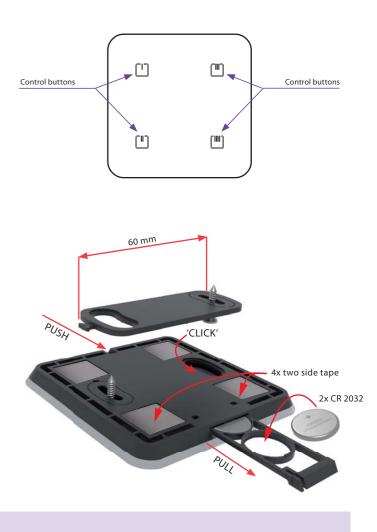
RFGB-220/W

RFGB-240/W

17

- The glass touch controller is a design RF (wireless) Control unit and is available in elegant black and white variants.
- Only 8 mm thick.
- RFGB-220: 2 capacitive buttons allows to control 2 devices.
- RFGB-240: 4 capacitive buttons allows to control 4 devices.
- 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 units of iNELS RF Control.
- The rear base allows to be attached to installation using screws, double-sided tape or keeping controller on the table.
- Battery power supply (2x 3 V CR 2032 batteries included in the supply) with battery life of around 2 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

#### **Device description**



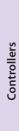




RFGB-240/B

# RFDW-71/W, RFDW-71/B | Glass touch controller with dimmer, SHARP

# RFDW-271/W, RFDW-271/B | Glass touch controller with dimmer, ROUND



18

SHARP

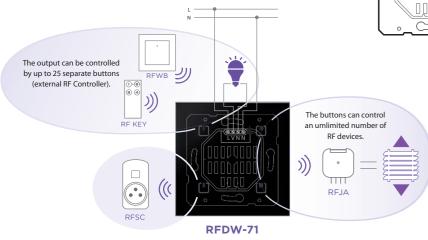
["]



25 mm

Technical parameters	RFDW-71/230V	RFDW-71/120V
Supply voltage:	230 V AC/50 Hz	120 V AC/60 Hz
Apparent power:	1.1 VA	1.1 VA
Dissipated power:	0.8 W	0.8 W
Supply voltage tolerance:	±1(	0 %
Dimmed load:	R,L,C, L	ED, ESL
Input		
Temperature measuring:	YES, built-in terr	perature sensor
Scope and accuracy of temp.		
measurement:	0 to +55 °C; 0.3 °	C from the range
Output		
Contactless:	2 x M	OSFET
Load capacity:*	max. 160 W	max. 80 W
Control		
Wireless:	up to 25-chan	nels (buttons)
Communication protocol:	RF	102
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	y	es
Manual control:	4 touch keys,	button PROG
Indications touch keys:	red/gre	en LED
Indications PROG:	colour adjustal	ble prog. mode
Range:	in open spac	e up to 160 m
Connection		
Terminals:	0.5–1	mm <sup>2</sup>
Other data		
Operating temperature:	-20 to	+35 °C
Storing temperature:	-30 to +70 °C	
Protection degree:	IP20	
Overvoltage category:	н.	
Pollution degree:	2	
Operation position:	any	
Installation:	into instal	lation box
Dimensions:	94 x 94 x 36 mm	
Weight:	155 g	

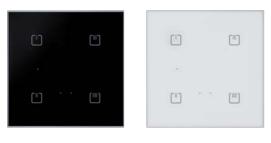
\* See page 75 for the load chart for each light source.



- · Glass touch controller with integrated dimming component which serves to regulate light sources:
- R classic lamps (resistive load)
- L halogen lamps with wound transformer (inductive load)
- C halogen lamps with electronic transformer (capacity load)
- ESL dimmable energy-efficient fluorescent lamps
- LED LED light sources (230 V) equipped with LED.
- · 4-channels switch version allows you to control the integrated dimmer as well as other components of the installation.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- 6 light functions smooth increase or decrease with time setting 2 s – 30 min. Function description can be found on page 75.
- 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 25-channels.
- The programming button on the controller is also used for manual control of the output.
- · Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.

Communication frequency with bidirectional protocol RFIO2.

# **Colour variants**

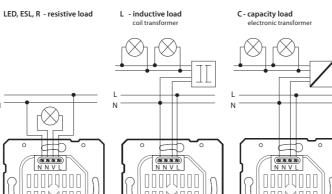


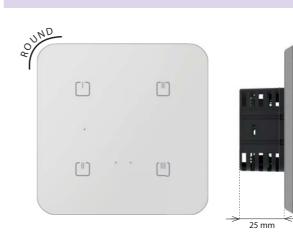
RFDW-71/B

RFDW-71/W



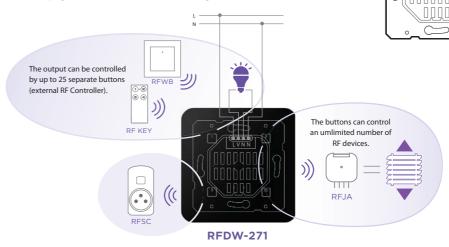
L - inductive load





Technical parameters	RFDW-271/230V	RFDW-271/120V
Supply voltage:	230 V AC/50 Hz	120 V AC/60 Hz
Apparent power:	1.1 VA	1.1 VA
Dissipated power:	0.8 W	0.8 W
Supply voltage tolerance:	±10	0 %
Dimmed load:	R,L,C, LED, ESL	
Input		
Temperature measuring:	YES, built-in tem	perature sensor
Scope and accuracy of temp.		
measurement:	0 to +55 °C; 0.3 °C	C from the range
Output		
Contactless:	2 x M0	OSFET
Load capacity:*	max. 160 W	max. 80 W
Control		
Wireless:	up to 25-channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Manual control:	4 touch keys, button PROG	
Indications touch keys:	red/gre	en LED
Indications PROG:	colour adjustal	ole prog. mode
Range:	in open spac	e up to 160 m
Connection		
Terminals:	0.5–1	mm <sup>2</sup>
Other data		
Operating temperature:	-20 to	+35 °C
Storing temperature:	-30 to	+70 °C
Protection degree:	IP20	
Overvoltage category:	И.	
Pollution degree:		2
Operation position:	ar	ıy
Installation:	into installation box	
Dimensions:	100 x 100 x 36 mm	
Weight:	155 g	

#### \* See page 75 for the load chart for each light source.



Controllers

19

 Glass touch controller with integrated dimming component which serves to regulate light sources: R – classic lamps (resistive load)

L – halogen lamps with wound transformer (inductive load) C – halogen lamps with electronic transformer (capacity load) ESL – dimmable energy-efficient fluorescent lamps LED - LED light sources (230 V) equipped with LED.

- · 4-channels switch version allows you to control the integrated dimmer as well as other components of the installation.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- · 6 light functions smooth increase or decrease with time setting 2 s – 30 min. Function description can be found on page 75.
- 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 25-channels.
- The programming button on the controller is also used for manual control of the output.
- · Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.

Communication frequency with bidirectional protocol RFIO2.

**Colour variants** 





RFDW-271/B

RFDW-271/W

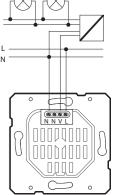
#### Connection

LED, ESL, R resistive load

LHT

L - inductive load





# ["] (III)

# RFDW-271/B | Glass touch controller



# RF KEY-40/W, RF KEY-40/B, RF KEY-60/W, RF KEY-60/B | Controller – key fob



Technical parameters	RF KEY-40	RF KEY-60
Supply voltage:	3 V CR 2032 battery	
Battery life:	around 5 years based on frequency of use	
Transmission indication:	red LED	
Number of buttons:	4	6
Communication protocol:	R	FIO2
Transmitter frequency:	866–922 MHz (for mo	re information see p. 76)
Signal transmission method:	unidirectionally	addressed message
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Colour design:	white, black	
Protection:	IP20	
Contamination degree:	2	
Dimensions:	64 x 25 x 10 mm	
Weight:	16 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000	Coll. (Directive 1999/EC)

Variants

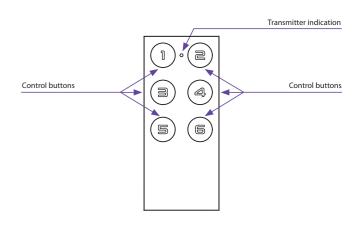


RF KEY-40/W

RF KEY-60/W

- Key fob sized remote control, available in black and white.
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF/ON, blinds up/down).
- RF KEY-40: four buttons enable control of four units independently.
- RF KEY-60: six buttons enable control of four units independently. • Battery power supply (3 V CR 2032 battery - included in the supply)
- with battery life of around 5 years based on frequency of use.

# Device description





RF KEY-40/B

RF KEY-60/B

# RF Pilot/W, RF Pilot/A | Remote RF controller with display

# RF Pilot/W, RF Pilot/A | Remote RF controller with display

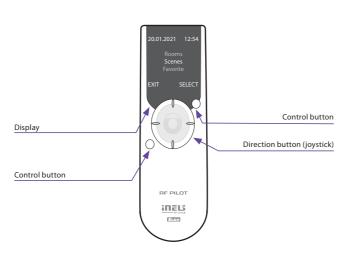




Technical parameters	RF Pilot/W	RF Pilot/A	
Display			
Туре:	colour	OLED	
Resolution:	128 x 12	28 pixels	
Side ratio:	1:	:1	
Visible surface:	26 x 2	6 mm	
Backlighting:	self-illumir	nating text	
Diagonal:	1.	5"	
Control:	direction button, control buttons		
Power supply			
Power supply:	2 x 1.5 V AAA batteries/R03		
Battery life:	approx. 3 years,		
	according to the frequency of use and battery type		
Control			
Range:	in open space	e up to 200 m	
Communication protocol:	RF	10	
Frequency:	866–922 MHz (for more	e information see p. 76)	
Other data			
Operating temperature:	0 to +	-55 ℃	
Storage temperature:	-20 to +70 °C		
Colour design:	white	anthracite	
Protection:	IP20		
Operating position:	any		
Dimensions:	130 x 41 x 18 mm		
Weight:	61 g		
Related standards:	EN 60730-1		

- The Remote RF controller with display is a central controller for switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- Designed in white and anthracite with colour OLED display.
- 4 directional joystick + 2 buttons for intuitive operation.
- Option of setting light scenes, where with a single press, you can control up to 40 units at once.
- Display of room temperature, battery status, date and time directly on display.
- The Favorites mode lets you preset the most frequently used devices on the home screen.
- 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.
- Battery power (2x 1.5 V AAA batteries 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

# Device description



**RF Pilot** 

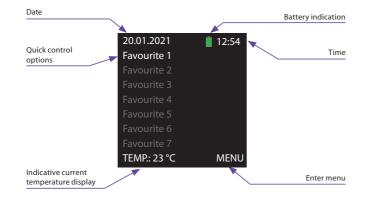


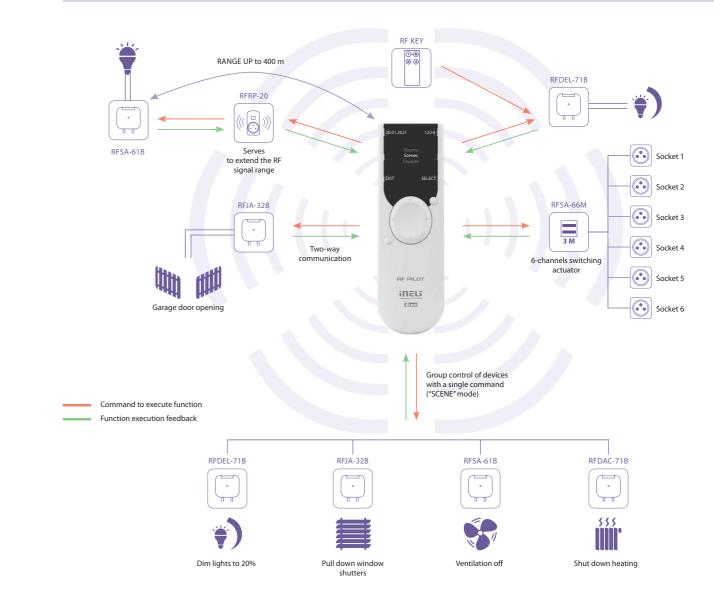
20.01.2021 12:54 On Off Brightness: 0% White RGB BACK PROCEED



# Display description

Colour LED display





# 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



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



 on display activation, the "Favourite" menu pops up automatically to provide you with a quick access to controlling devices

22



# 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)



- the regulation of light intensity (light bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable ballast 1–10 V)
- 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

Euro

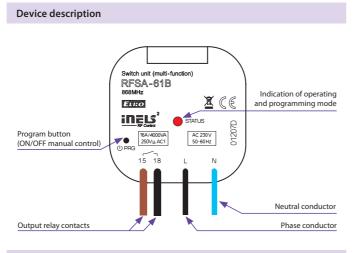
inels

24



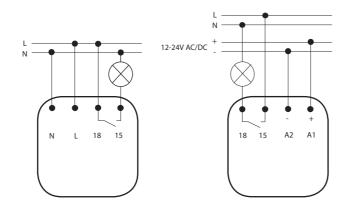
Technical parameters	RFSA-11B/230V RFSA-61B/230V	RFSA-11B/120V RFSA-61B/120V	RFSA-11B/24V RFSA-61B/24V	
Supply voltage:	230 V AC	120 V AC	12-24 V AC/DC	
Supply voltage frequency:	50–60 Hz	60 Hz	50-60 Hz	
Apparent input:	7 VA/cos φ= 0.1	7 VA/cos $\phi$ = 0.1	-	
Dissipated power:	0.7 W	0.7 W	0.7 W	
Supply voltage tolerance:		+10 %; -15 %		
Output				
Number of contacts:	1)	switching (AgSnC	) <sub>2</sub> )	
Rated current:		16 A/AC1		
Switching power:	40	00 VA/AC1, 384 W/	DC	
Peak current:		30 A/<3 s		
Switching voltage:		250 V AC1/24 V DC		
Max. DC switching power:		500 mW		
Mechanical service life:	3x 10 <sup>7</sup>			
Electrical service life (AC1):	0.7x 10⁵			
Control				
Wireless:	up to 25-channels (buttons)			
Communication protocol:	RFIO2			
Frequency:	866–922 MHz	(for more informa	tion see p. 76)	
Repeater function:	yes			
Manual control:	button PROG (ON/OFF)			
Range:	in open space up to 200 m			
Other data				
Operating temperature:		-15 to +50 °C		
Operating position:		any		
Mounting:	f	ree at lead-in wire	s	
Protection:		IP30		
Overvoltage category:		III.		
Contamination degree:		2		
Terminals (CY wire, cross-section):	2x	0.75 mm², 2x 2.5 m	im²	
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 R&TTE Directive,			
	Order. No 426/2000 Coll. (Directive 1999/EC)			

- The switching unit with 1 output channel 16 A is used to control appliances, lights (easy to integrate it to control garage doors or gates).
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- RFSA-11B: singlefunction design switch on/off.
- RFSA-61B: multifunction design button, impulse relay and time function of delayed ON or OFF with time setting of 2 s - 60 min. Function description can be found on page 74.
- The switching unit may be controlled by up to 25-channels.
- The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.



# Connection

RFSA-11B/230V, RFSA-61B/230V RFSA-11B/120V, RFSA-61B/120V



RFSA-61B/24V

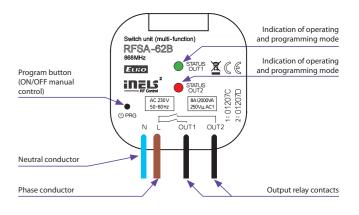


Technical parameters	RFSA-62B/230V	RFSA-62B/120V	RFSA-62B/24V
Supply voltage:	230 V AC	120 V AC	12-24 V AC/DC
Supply voltage frequency:	50-60 Hz	60 Hz	50-60 Hz
Apparent input:	7 VA/cos φ= 0.1	7 VA/cos $\phi$ = 0.1	-
Dissipated power:	0.7 W	0.7 W	0.7 W
Supply voltage tolerance:		+10 %; -15 %	
Output			
Number of contacts:	2:	switching (AgSn	O₂)
Rated current:		8 A/AC1	
Switching power:		2000 VA/AC1	
Peak current:		10 A/<3 s	
Switching voltage:		250 V AC1	
Max. DC switching power:		500 mW	
Mechanical service life:		1x10 <sup>7</sup>	
Electrical service life (AC1):		1x10 <sup>5</sup>	
Control			
Wireless:	each of the outputs up to 12-channels (buttons)		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Manual control:	bu	tton PROG (ON/O	FF)
Range:	in o	pen space up to 10	00 m
Other data			
Operating temperature:		-15 to +50 °C	
Operating position:		any	
Mounting:	f	ree at lead-in wire	S
Protection:	IP30		
Overvoltage category:		III.	
Contamination degree:	2		
Terminals (CY wire, cross-section):	1x 2.5 mm²,	3x 0.75 mm <sup>2</sup>	1x2.5, 4x0.75 mm <sup>2</sup>
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 R&TTE Directive,		R&TTE Directive,
	Order. No 426/2000 Coll. (Directive 1999/EC)		

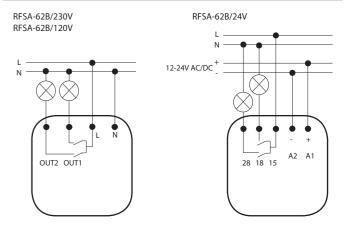
# **RFSA-62B** | Switch unit, 2-channels

- The switching unit with 2 output channels 8 A used to control two independent appliances.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Function: button, impulse relay and time function of delayed start and return with time setting range of 2 s – 60 min. Function description can be found on page 74.
- Each of the channels may be controlled by up to 12-channels.
- The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.

#### **Device description**



#### Connection



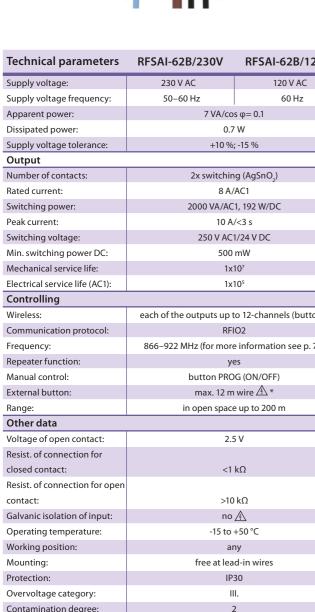
0

ELEO

.

INELS





# RFSAI-62B/120V each of the outputs up to 12-channels (buttons) 866–922 MHz (for more information see p. 76)

Mounting:	free at lead-in wires	
Protection:	IP30	
Overvoltage category:	Ш.	
Contamination degree:	2	
Terminals (CY wire, Cross-section):	3x 0.75, 1x 2.5 mm <sup>2</sup>	
Terminal length:	90 mm	
Dimensions:	49 x 49 x 21 mm	
Weight:	46 g	
Related standards:	EN 60669, EN 300220, EN 301489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

\* We recommend using a twisted pair cable for this distance.

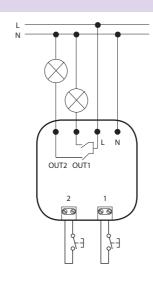
A The external button inputs are at the potential of the main supply voltage.

- The switch with 2 output 8 A contacts is used to control 2 independent appliances. Is equipped with inputs for connecting to external buttons for local control.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- · Function: button, impulse relay and time function of delayed start or return with time setting range of 2 s - 60 min. It is possible to assign any function to each output relay. Function description can be found on page 74.
- · External button is programmed as a wireless button.
- Input is not galvanic isolated!
- · Each output can be controlled by up to 12-channels.
- · Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.

#### Terminal for connecting Terminal for connecting an external button 2 an external button 1 ₽₹ E C Device status indication Switch unit with the inputs (multi-fund for channel 1 RFSAI-62B ELKO Device status indication STATUS inęs' for channel 2 Programming buttor (manual control ON/OFF) 8A/2000\ AC 230 V 50-60 Hz • 250V µ AC1 Neutral conductor Phase conductor Output contact relay

# Connection

**Device description** 





Technical parameters	RFJA-32B/230V	RFJA-32B/120V	RFJA-32B/24V
Supply voltage:	230 V AC	120 V AC	5-24 V DC
Supply voltage frequency:	50–60 Hz	60 Hz	x
Apparent input:	7 VA/cos φ= 0.1	7 VA/cos φ= 0.1	х
Dissipated power:	0.7 W	0.7 W	x
Power without load:	:	x	0.5 W
Power under load:	:	x	20 W
Supply voltage tolerance:		+10 %; -15 %	
Input			
Input:		2x switch or GND	
Output			
Number of contacts:	2 x switchi	ing (AgSnO <sub>2</sub> )	contactless
Rated current:	8 A/	/AC1	1 A
Switching power:	2000 \	/A/AC1	х
Peak current:	10 A	/<3 s	1.5 A/<3 s
Switching voltage:	250	V AC1	5-24 V DC*
Mechanical service life:	1x10 <sup>7</sup>		х
Electrical service life (AC1):	1x10 <sup>5</sup>		х
Control			
Wireless:	up to 25-channels (buttons)		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Manual control:		DG (STOP, ▲, STOP	
External button:	n	nax. 12 m wire 🛆	**
Range:	in d	open space up to 1	00 m
Other data			
Operating temperature:		-15 to +50 °C	
Operating position:		any	
Mounting:	free at lead-in wires		S
Protection:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals:	0.5–1 mm <sup>2</sup>		
Terminals (CY wire, cross section):	4 x 0.75 mm <sup>2</sup>		
Length of terminals:	90 mm		
Dimensions:	49 x 49 x 21 mm		49 x 49 x 13 mm
Weight:	4	6 g	22 g
Related standards:	EN 60669, EN 30	00 220, EN 301 489	R&TTE Directive,
	Order. No 426/2000 Coll. (Directive 1999/EC)		tive 1999/EC)

\* Identical with supply voltage

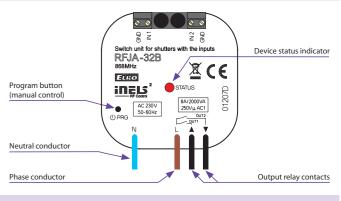
\*\* We recommend using a twisted pair cable for this distance.

A The external button inputs are at the potential of the main supply voltage.

Switches

- 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.
- RFJA-32B/230V (120V): relay contacts 2x 8 A (2x 2000 W), with the possibility of connecting external buttons. The relays block each other (only one direction of movement at a time).
- RFJA-32B/24VDC: contactless quiet switching with the ability to connect existing buttons. The drive is controlled by changing the polarity.
- Short presses (<2 s) of the controller enable tilting of lamellas, and a long press (>2 s) enables you to draw the blinds up or down to the end position.
- Each of the units may be controlled by up to 25-channels.
- 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or motor drive cover.

#### **Device description**



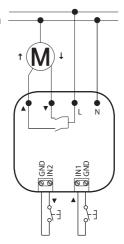
#### **Function description**

- 1. Short presses (<2 s) of the control allow the slats to be tilted.
- 2. When the control button is pressed >2 s shutters move up ( $\blacktriangle$ ) or down  $(\mathbf{\nabla})$  until reaching the final position. The travel time of the blinds is set with the programming button.

5-24V DC

#### Connection

RFJA-32B/230V, RFJA-32B/120V



RFJA-32B/24VDC 7 Z IN1 GND IN2 0000000

# RFSA-61MI, RFSA-61M | Switching units, 1-channel

28

Switches



Technical parameters	RFSA-61MI/230V	RFSA-61M/230V
Supply voltage:	110–23	0 V AC
Supply voltage frequency:	50-6	i0 Hz
Apparent input:	2.7 VA co	os φ= 0.6
Dissipated power:	1.62	2 W
Supply voltage tolerance:	+10%/	/-25 %
Output		
Number of contacts:	1x chan	geover
Rated current:	16 A,	/AC1
Switching power:	4000 VA/AC	1, 384 W/DC
Peak current:	30 A,	/<3 s
Switching voltage:	250 V AC	1/24 V DC
Contact material:	AgS	nO <sub>2</sub>
Mechanical service life:	3x10 <sup>7</sup>	
Electrical service life (AC1):	0.7x10 <sup>5</sup>	
Control		
Wireless:	up to 25-channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Manual control:	PROG (ON/OFF) button	
Range:	in open spac	e up to 200 m
RF Antenna:	integrated	external *
Other data		
Operating temperature:	-15 °C to	o +50 °C
Operating position:	ar	ıy
Mounting:	DIN rail E	EN 60715
Protection:	IP20 from the front panel	
Overvoltage category:	Ш.	
Contamination degree:	2	
Connecting conductor	max. 1x 2.5, max. 2x 1.5/	
cross-section (mm <sup>2</sup> ):	with a hollow	v max. 1x 2.5
Dimensions:	90 x 17.6	x 64 mm
Weight:	69 g	75 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

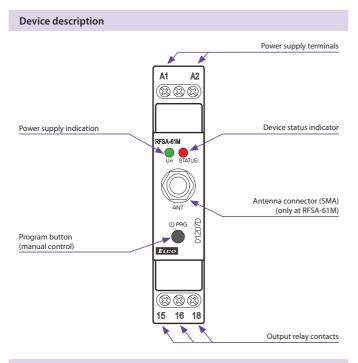
\* AN-I antenna (with SMA connector) is part of packaging. Other antennas with cable are available on the page 69. Max tightening torque for antenna's connector is 0.56 Nm.

- RFSA-61M: the switching unit with 1 output channel 16 A is used for controlling appliances, sockets or lights.
- the 1-MODULE design of the unit into a switchboard.
- the switching unit may be controlled by up to 25-channels.
- 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, see accessories on page 75.
- RFSA-61MI: same design and function as RFSA-61M, but with integrated antenna. It is suitable for placement in cabinets with plastic doors.
- 6 function: button, impulse relay and time function of delayed start or return with time setting range of 2 s – 60 min. Function description can be found on page 74.
- The programming button on the unit is also used for manual control of the output.
- · Memory status can be pre-set in the event of a power failure.

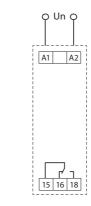


Technical parameters	RFSA-66MI/ 230V	RFSA-66MI/ 24V	RFSA-66M/ 230V	RFSA-66M/ 24V
Supply voltage:	110-230 V AC	12-24 V AC/DC	110-230 V AC	12-24 V AC/DC
SELV:	no	yes	no	yes
Supply voltage frequency:		AC 50-	-60 Hz	
Apparent input:	min. 2 VA/		min. 2 VA/	
	max. 5 VA	-	max. 5 VA	-
Dissipated power:	min. 0.5W/		min. 0.5W/	
	max. 2.5W	max. 1.8 W	max. 2.5W	max. 1.8 W
Supply voltage tolerance:		+10%/	/-25 %	
Output				
Number of contacts:		3x changeove	r, 3x switching	9
Rated current:		8 A/	AC1	
Switching power:		2000 V	/A/AC1	
Peak current:		10 A	/<3 s	
Switching voltage:		250 \	/ AC1	
Contact material:		AgSnO <sub>2</sub>		
Mechanical service life:	1x10 <sup>7</sup>			
Electrical service life (AC1):	1x10 <sup>5</sup>			
Control				
Wireless:	up to 25-channels (buttons)			
Communication protocol:		RFI	02	
Frequency:	866–922 MHz (for more information see p. 76)			
Repeater function:		ye	es	
Manual control:		PROG (ON/O	OFF) button	
Range:		in open spac	e up to 200 m	1
RF Antenna:	integrated	external *	integrated	external *
Other data				
Operating temperature:		-15 °C to	o +50 °C	
Operating position:		ar	ny	
Mounting:		DIN rail EN 60715		
Protection:	IP20 from the front panel			
Overvoltage category:	III.			
Contamination degree:	2			
Connecting conductor	max. 1x 2.5, max. 2x 1.5/			
cross-section (mm <sup>2</sup> ):	with a hollow max. 1x 2.5			
Dimensions:		90 x 52 x	c 65 mm	
Weight:	17	'1 g	179	9 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,			
	Order. No 426/2000 Coll. (Directive 1999/EC)			

\* AN-I antenna (with SMA connector) is part of packaging. Other antennas with cable are available on the page 69. Max tightening torque for antenna's connector is 0.56 Nm.

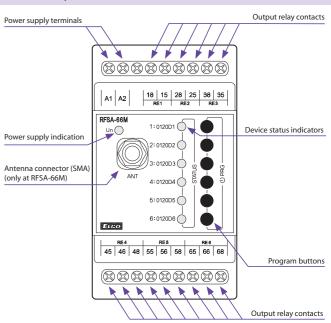


Connection

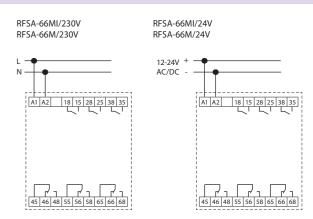


- RFSA-66M: the switching unit with 6 output channels 8 A is used for independent control of up to 6 appliances, sockets or lights. - the 3-MODULE design of the unit into a switchboard.
- each of the channels may be controlled by up to 25-channels.
- the package includes an internal antenna AN-I, in case of locating the element in a metal switchboard, you can use the external antenna AN-E for better signal reception, see accessories on page 75.
- RFSA-66MI: same design and function as RFSA-61M, but with integrated antenna. It is suitable for placement in cabinets with plastic doors.
- 6 function: button, impulse relay and time function of delayed start or return with time setting range of 2 s – 60 min. Function description can be found on page 74.
- The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.

#### Device description



#### Connection

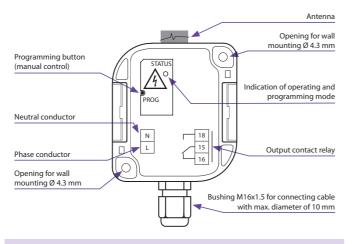




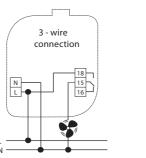
Technical parameters	RFUS-61/230V	RFUS-61/120V	
Supply voltage:	230 V AC	120 V AC	
Supply voltage frequency:	50-60 Hz	60 Hz	
Apparent power:	5 VA/cos φ= 0.1	5 VA/cos φ= 0.1	
Dissipated power:	0.6 W	0.6 W	
Supply voltage tolerance:	+10 %	; -15 %	
Output			
Rated current:	1x switchin	ıg (AgSnO <sub>2</sub> )	
Number of contacts:	12 A,	/AC1	
Switching power:	3000 VA/AC	1, 384 W/DC	
Peak current:	30 A,	/<3 s	
Switching voltage:	250 V AC	1/24 V DC	
Min. switching power DC:	500	mW	
Mechanical service life:	3х	10 <sup>7</sup>	
Electrical service life (AC1):	0.7x10 <sup>5</sup>		
Control			
Wireless:	up to 25-channels (buttons)		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Manual control:	PROG (ON/OFF) button		
Range:	in open space up to 200 m		
Other data			
Operating temperature:	-15 to -	+50 °C	
Operating position:	ar	ıy	
Mounting:	scre	2WS	
Protection:	IP	65	
Overvoltage category:	11	Ι.	
Contamination degree:	2	2	
Cross-section of connecting	max. 1x 2.5,	max. 2x 1.5/	
wires (mm <sup>2</sup> ):	with a hollov	v max. 1x 2.5	
Recommended power cord:	CYKY 3x1.5 (	CYKY 4x1.5)	
Dimensions:	136 x 62	x 34 mm	
Weight:	140	δg	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive		
	Order. No 426/2000 Co	oll. (Directive 1999/EC)	

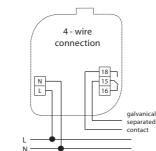
- The switching unit with 1x 12 A output channel is used for controlling appliances, sockets or lights.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Multi-function design button, impulse relay and time function of delayed ON or OFF with time setting of 2 s 60 min. Function description can be found on page 74.
- The switching unit may be controlled by up to 25-channels.
- 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 RFRP20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The increased IP 65 protection is suited to mounting on the wall or in harsh environments such as the cellar, garage or bathrooms.

# Device description



# Connection







Technical parameters	RFSC-61/230V	RFSC-61/120V	
Supply voltage:	230–250 V AC	120 V AC	
Supply voltage frequency:	50-60 Hz	60 Hz	
Apparent power:	6	/A	
Dissipated power:	0.7	W	
Supply voltage tolerance:	+10 %	; -15 %	
Output			
Number of contacts:	1x switchin	g (AgSnO <sub>2</sub> )	
Rated current:	16 A	/AC1	
Switching power:	4000 VA/AC	1, 384 W/DC	
Peak current:	30 A	/<3 s	
Switching voltage:	250 V AC	1/24 V DC	
Min. switching power DC:	500 mW		
Mechanical service life:	3x10 <sup>7</sup>		
Electrical service life (AC1):	0.7x10 <sup>5</sup>		
Control			
Wireless:	up to 32-channels (buttons)		
Communication protocol:	RFIO		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	no		
Manual control:	button PROG (ON/OFF)		
Range:	in open space	e up to 200 m	
Other data			
Operating temperature:	-15 to	+50 °C	
Working position:	aı	ıy	
Mounting:	plug into a socket		
Protection:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Dimensions:	60 x 120 x 80 mm		
Weight:	19	5 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive		
	Order. No 426/2000 Co	oll. (Directive 1999/EC)	

Switches

30

# RFSC-61 | Switching socket-plug

- The switched socket with 16 A output channel is used to control fans, lamps, heaters and appliances, which are connected by a 16 A power cord.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Multi-function design button, impulse relay and time function of delayed ON or OFF with time setting of 2 s 60 min. Function description can be found on page 74.
- The switched socket may be controlled by up to 32-channels.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- The programming button on the socket is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

Produced in 3 designs of sockets/plugs:

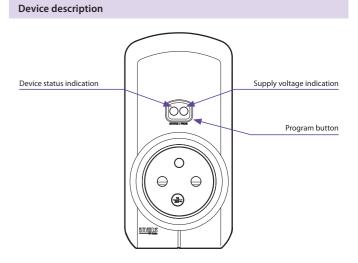




Schuko

British

French



# **RFOSC-61** | Switching sockets with increased protection

# RFDEL-71B | Universal dimmer, 1-channel



32



- Switching socket in IP65 design is intended for installation in the outdoor environment.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- The switched socket may be controlled by up to 25-channels.
- 6 function: button, impulse relay and time function of delayed start or return with time setting range of 2 s 60 min. Function description can be found on page 74.
- The programming button on the socket is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.

Produced in 2 designs:



# Device description





Technical parameters	RFDEL-71B/230V	RFDEL-71B/120V	
Supply voltage:	230 V AC	120 V AC	
Supply voltage frequency:	50 Hz	60 Hz	
Apparent power:	1.1	VA	
Dissipated power:	0.8	W	
Supply voltage tolerance:	+10/-	15 %	
Connection:	4-wire, with	"NEUTRAL"	
Output			
Dimmed load:	R,L,C, L	ED, ESL	
Contactless:	2 x M0	DSFET	
Load capacity:*	max. 160 W	max. 80 W	
Control			
Wireless:	up to 25-chan	nels (buttons)	
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
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 to +35 °C		
Storage temperature:	-30 to	+70 °C	
Operating position:	ar	ıy	
Mounting:	free at lead-in wires		
Protection:	IP30 under normal conditions		
Overvoltage category:	Ш.		
Contamination degree:	2		
Terminals (CY wire, Cross-section):	4 x 0.75 mm <sup>2</sup>		
Terminal length:	90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:	40 g		
Related standards:	EN 607 30-1 ED.2		

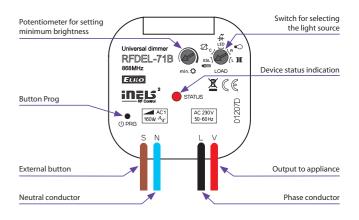
\* See page 75 for the load chart for each light source.

Technical parameters	RFOSC-61	
Supply voltage:	230–250 V AC	
Supply voltage frequency:	50–60 Hz	
Apparent power:	6 VA	
Dissipated power:	0.7 W	
Supply voltage tolerance:	+10 %; -15 %	
Output		
Number of contacts:	1x switching	
Rated current:	10 A	
Switching power:	2500 VA/300 W	
Switching voltage:	250 V AC1/30 V DC	
Contact material:	AgSnO <sub>2</sub>	
Mechanical service life:	1x 10 <sup>7</sup>	
Electrical service life (AC1):	1x 10 <sup>5</sup>	
Control		
Wireless:	up to 25-channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Manual control:	button PROG (ON/OFF)	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-15 to +50 °C	
Mounting:	screws	
Colour design:	white (RAL 9003)	
Cross-section of connecting	max. 1x 2.5, max. 2x 1.5/	
wires (mm²):	with a hollow max. 1x 2.5	
Recommended power cord:	CYKY 3x 1.5 mm <sup>2</sup>	
Protection:	IP65	
Overvoltage category:	III.	
Contamination degree:	2	
Dimensions:	64 x 74 x 53 mm	
Weight:	185 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive	

Order. No 426/2000 Coll. (Directive 1999/EC)

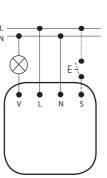
- The universal built-in dimmer is used to regulate light sources:
   R classic lamps (resistive load)
   L halogen lamps with wound transformer (inductive load)
- C halogen lamps with electronic transformer (capacity load) ESL – dimmable energy-efficient fluorescent lamps
- LED LED light sources equiped with LED.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- 6 light functions smooth increase or decrease with time setting 2 s 30 min. Function description can be found on page 75.
- 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 25-channels.
- 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.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.

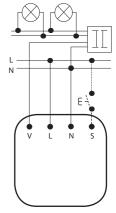
# **Device description**



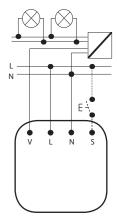
#### Connection

- LED, ESL, R resistive load
- L inductive load coil transformer





C - capacity load

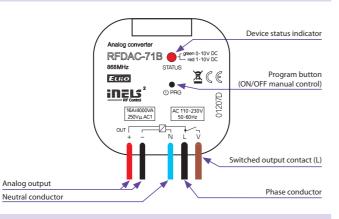


#### Anatog converter READC-710 © \_\_\_\_\_\_\_\_\_\_\_ COMMARY DELES DELES

Technical parameters	RFDAC-71B	
Supply voltage:	110–230 V AC	
Supply voltage frequency:	50–60 Hz	
Apparent input:	3 VA	
Dissipated power:	1.2 W	
Supply voltage tolerance:	+10/-15 %	
Control		
Potential-free analog		
output/max. current:	0(1)–10 V/10 mA	
Rated current:	1x AgSnO <sub>2</sub> , switches the phase conductor	
Rated current:	16 A/AC1	
Switching power:	4000 VA/AC1	
Switching voltage:	250 V AC1	
Mechanical service life:	3x10 <sup>7</sup>	
Electrical service life:	0.7x10 <sup>5</sup>	
Indication:	red LED/green LED	
Output selection:	0(1)–10V/PROG button	
Control		
Wireless:	up to 25-channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Manual control:	button PROG (ON/OFF)	
Range:	in open space up to 200 m	
Minimal control distance:	20 mm	
Other data		
Operating temperature:	-15 to + 50 °C	
Operating position:	any	
Mounting:	plug into a socket	
Protection:	IP30	
Overvoltage category:	III.	
Contamination degree:	2	
Terminals (CY wire, cross-section):	3 x 0.75 mm <sup>2</sup> , 2 x 2.5 mm <sup>2</sup>	
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 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

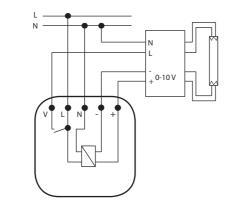
- The device with analog output 0(1)–10 V is used to control devices, luminaires, thermal actuators and thermal heads – which are equipped with such an input.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Potential free analog output 0(1)–10 V, contact relay 16 A.
- 6 light functions smooth increase or decrease with time setting 2 s–30 min. Function description can be found on page 75.
- The analog controller may be controlled by up to 25-channels.
- The programming button on the controller is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- ${\boldsymbol{\cdot}}$  Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.

# Device description

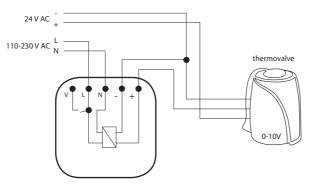


# Connection

Connection example: dimming of fluorescent tubes with dimmable ballast



Connection example: with thermo valve

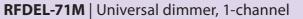




Technical parameters	RFDEL-71M/230V	RFDEL-71M/120V	
Supply voltage:	230 V AC	120 V AC	
Supply voltage frequency:	50 Hz	60 Hz	
Apparent power:	2.5 VA	1.1 VA	
Dissipated power:	0.8 W	0.6 W	
Supply voltage tolerance:	+10/-	-15 %	
Output			
Dimmed load:	R,L,C, L	ED, ESL	
Contactless:	2 x M0	OSFET	
Load capacity:*	max. 600 W	max. 300 W*	
Control			
Wireless:	up to 32 chan	nels (buttons)	
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Range:	in open space up to 160 m		
Manual control:	SW (ON/OFF) button		
External button:	max. 50 m cable		
Glow lamps connection:	no		
Analog control:	potentiometer or 0 (1)–10 V		
RF Antenna:	AN-I included (S	MA connector**)	
Other data			
Operating temperature:	-20 to	+35 °C	
Storage temperature:	-30 to	+70 °C	
Operating position:	vertical		
Mounting:	DIN rail EN 60715		
Protection:	IP20 under normal conditions		
Overvoltage category:	Ш.		
Contamination degree:	2		
Cross-section of connecting wires:	max. 1x 2.5, max. 2x 1.5/with a hollow max. 1x 2.5		
Dimensions:	90 x 52 x 65 mm		
Weight:	12	5 g	
Related standards:	EN 607 30-1 ed.2		

\* See page 75 for the load chart for each light source.

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



34

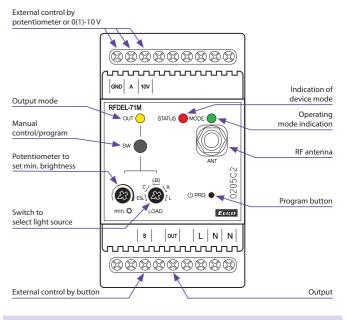
Switches

The universal modular dimmer is used to regulate light sources:
 R – classic lamps (resistive load)
 L – halogen lamps with wound transformer (inductive load)

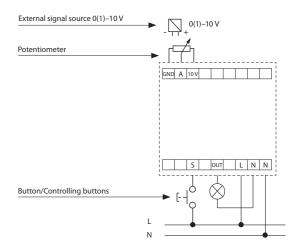
C – halogen lamps with electronic transformer (capacity load) ESL – dimmable energy-efficient fluorescent lamps LED – LED light sources equiped with LED.

- Control can be performed by:
- a) detectors, Controllers and System units iNELS RF Control b) by control signal 0(1)–10 V
- c) potentiometer d) existing button in the installation.
- 6 light functions smooth increase or decrease with time setting
- 2 s-30 min. Function description can be found on page 75. • Thanks to setting the min. brightness by potentiometer, you will elimi-
- nate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32-channels.
- 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, see accessories on page 69.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The unit's 3-MODULE design with switchboard mounting.

#### **Device description**



#### Connection and external control options



# **RFDEL-76M** Universal dimmer, 6-channels



Technical parameters	RFDEL-76M/230V	RFDEL-76M/120V	
Supply voltage:	230 V AC	120 V AC	
Supply voltage frequency:	50 Hz	60 Hz	
Power supply indication:	green	LED Un	
Supply voltage tolerance:	+10/-	-15 %	
Output			
Output:	12x MOSFE	T transistor	
Load type *:	R - resistive, L - indu	ctive, C - capacitive,	
	ESL - econo	omical, LED	
Minimum output power:	10	VA	
Max. output power/channel:	150 VA	75 VA	
Possible to connect outputs:	ye	es	
Maximum power when	max. 900 VA	max. 450 VA	
connecting all outputs:			
Output protection:	thermal/short-term	overload/longterm	
	overload/short circuit		
Output indication:	red LED	STATUS	
Control			
Wired buttons:	potential "L" or external voltage		
	AC 20-230 V (50-60 Hz)/DC 20-230 V		
Wireless	up to 32-channels (with iNELS RF buttons)		
Communication protocol:	RFIO2		
Function repeater:	yes		
Range:	in the open up to	160 m (524.11 ft)	
RF antenna:	AN-I included (	SMA connector)	
Other information			
Operating temperature:	-20 to + 50 °C	(-4 to 122 °F)	
Storage temperature:	-30 to +70 °C	(-22 to 158 °F)	
Ingress protection:	IP20 under nor	mal conditions	
Overvoltage category:	1	l.	
Contamination degree:		2	
Connecting conductor:	max. 2.5 mm <sup>2</sup> /1.5	mm <sup>2</sup> with sleeve	
Operating position:	ver	tical	
Installation:	in the switchboard	on DIN rail EN 60715	
Design:	6-MO	DULE	
Dimensions:	90 x 105 x 65 mm (3.5″ x 4.1″ x 2.6″)		
Weight	320 g (11 oz.)		

• RFDEL-76M is a universal 6-channels actuator, which is used to control the brightness intensity of dimmable sources R - L - C - LED - ESL.

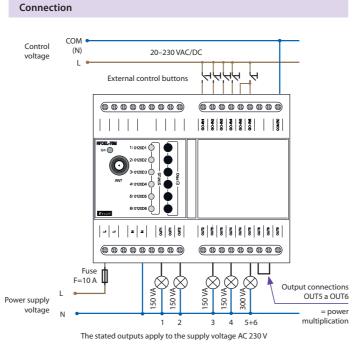
- The maximum possible load is 150 VA for 230 V and 75 VA for 120 V for each channel.

• The individual channels of the dimmer can be connected in parallel and thus increase the maximum output load at the expense of the number of outputs.

- Each of the output channels is individually controllable and addressable.
- By setting the min. brightness eliminates flickering of different types of light sources, setting min. brightness and type of load is done using the PROG buttons.
- Electronic overcurrent, thermal and short-circuit protection, which switches off the output.
- 6 galvanically isolated inputs for wired buttons, which can be used to control the outputs independently of the RF.
- Communication with bidirectional RFIO2 protocol. The package includes an internal AN-I antenna, in case of placement of a sheet metal distribution element, you can use an external AN-E antenna to improve the signal.

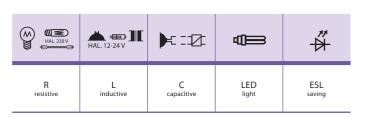
#### Description

		For external inputs control buttons
	© @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @	
Power indication RF antenna		Programming buttons/
Status indication channel	5:012005 0 6:012005 0	Manual control
Power supply		Outputs



\*Warning: it is not allowed to simultaneously connect loads of inductive and capacitive type in the same channel.

# Types of connectable loads



Note

Dimmers

36



# **RFDA-73M/RGB** | Dimming actuator for LED (RGB) strips, 3-channels



Technical parameters	RFDA-73M/RGB	
Supply terminals:	Un+, GND	
Supply voltage:	12–24 V DC stabilized	
Maximum power without load:	0.8 W	
Output		
Dimmed load:	LED strip 12 V, 24 V with common anode	
	RGB LED strips 12 V, 24 V with common anode	
Number of channels:	3	
Rated current:	3x5 A	
Peak current:	3x10 A	
Switching voltage:	Un	
Control		
Wireless:	up to 32-channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Load capacity of output +10 V:	10 mA	
Ext. signal:	0–10 V, 1–10 V	
Range:	in open space up to 160 m	
RF Antenna:	AN-I included (SMA connector*)	
Other data		
Operating temperature:	-20 to +50 °C	
Storage temperature:	-30 to +70 °C	
Working position:	any	
Mounting:	DIN rail EN 60715	
Protection:	IP20 from front panel	
Contamination degree:	2	
Cross-section of connecting	max. 1x 2.5, max. 2x 1.5/	
wires (mm <sup>2</sup> ):	with a hollow max. 1x 2.5	
Dimensions:	90 x 52 x 65 mm	
Weight:	130 g	
Related standards:	EN 60730-1; EN 60730-2-11	

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

- The dimmer for LED strips is used for independent control of 3 singlecolour LED strips or one RGB LED strip.
- The expanded selection of control modes enables it to be combined with: a) detectors, controllers and system units iNELS RF Control b) device with output signal 0 (1)–10 V c) potentiometer.
- The unit's 3-MODULE design with switchboard mounting enables connection of dimmed load 3x 5 A, which represents: a) single-colour LED strip 7.2 W - 3x 8 m b) RGB LED strip 14.2 W-10 m.
- 6 light functions smooth increase or decrease with time setting 2 s – 30 min. Function description can be found on page 74.
- The dimmer may be controlled by up to 32-channels.
- The power supply of the unit is in the range of 12–24 V 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, see accessories on page 69.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.

#### Device description

Inputs 0-10/1-10 V cont	rolling colours	Input 0–10/1–10 V controlling overall brightnes
	88888888	Auxiliary voltage output +10
Red LED STATUS		+ 10V out.
Green LED power supply	RFDA-73M/RGB Un STAT. RF WHIE RF COLOR RF RGB MODE	Switch MODI
RF antenna		Colour and brightness
Program button		Frequency o 000000000000000000000000000000000000
	GND RED GREEN BLUE	Un Voltage supply Un-
Voltage supply GND	8888888	Outputs for load connection

#### Output variations and external control options

RF RGB/RF COLOUR



external control

0 (1)-10 V

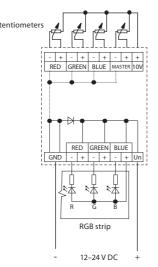
- + - + - + + +

RED GREEN BLUE MASTER 10V

3x monochrome

strip

12-24 V DC





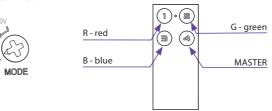
#### RF RGB Switch settings in MODE:

TERM 0-10\

RF RGB

**RF WHITE** 

RF COLOR



RF RGB mode for controlling RGB LED strips. In the RF RGB programming mode, colours 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 and eLAN-RF.

#### **RF WHITE** Switch settings in MODE:

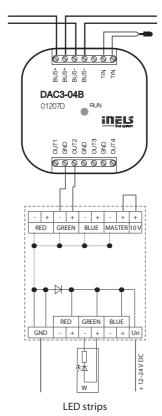


This works in a mode where it acts like three independent dimmers for 12-24 V. Each channel can be programmed independently of one another and has its own address.

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

#### **Control options**

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



38

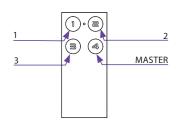
Dimmers

# RFDA-73M/RGB | Dimmer for LED (RGB) strips, 3-channels

**RF** Color

# Switch settings in MODE:





RF COLOUR mode for controling RBG LED strips, where you can choose the colour for individual transmitter buttons. A long press of the button starts the colour search mode. After releasing the button, the current colour is set for the given button

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

#### TERM 0-10 V and TERM 1-10 V Switch settings in MODE:



MODE

TERM 1-10\

Modes TERM 0–10 V and TERM 1–10 V. Inputs 0-10 V and 1-10 V used to control one RGB LED strip or three independent single-colour LED strips (see modes above) from the iNELS BUS System. For controlling, you can use the application iMM on the TV screen or the application iHC for smartphones and tablets.

> TERM 0(1)-10 V DC - RGB LED strips BUS+ BUS-BUS-BUS-Ξź DAC3-04B RUN 01207D inels RED GREEN BLUE MASTER 10\ RED GREEN BLUE GND - + - + - + ≷Ă ≷本 え

> > **RGB LED strips**

Dimmers

# RFDSC-71 | Dimming socket-plug

40



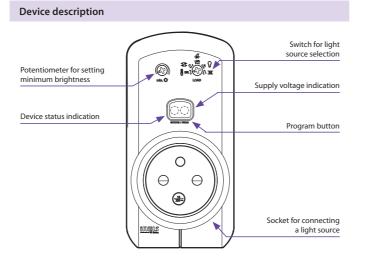
Technical parameters	RFDSC-71/230V	RFDSC-71/120V
Supply voltage:	230-250 V	120 V AC
Supply voltage frequency:	50–60 Hz	60 Hz
Apparent power:	1.1	VA
Dissipated power:	0.8	3 W
Supply voltage tolerance:	+10/-	-15 %
Output		
Contactless:	2 x M0	OSFET
Load capacity:*	max. 300 W*	max. 150 W*
Dimming load:	R, L, C, I	ED, ESL
Control		
Wireless:	up to 32-chan	nels (buttons)
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Range:	in open space up to 160 m	
Manual control:	button PROG (ON/OFF)	
Other data		
Operating temperature:	-20 to +35 °C	
Storage temperature:	-30 to +70 °C	
Working position:	aı	лу
Mounting:	plug into	a socket
Protection:	IP	30
Overvoltage category:	I	Ι.
Contamination degree:		2
Dimensions:	60 x 120 x 80 mm	
Weight:	13	1 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Co	oll. (Directive 1999/EC)

\* See page 75 for the load chart for each light source.

- The dimmed socket is used to control light sources that are connected by power cord especially lamps:
- R classic lamps (resistive load)
- L halogen lamps with wound transformer (inductive load)
- C halogen lamps with electronic transformer (capacity load)
- ESL dimmable energy-efficient fluorescent lamps
- LED LED light sources equipped with LED.
- Multi-function 6 light functions smooth increase or decrease with time setting 2 s – 30 min. Function description can be found on page 75.
- 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.
- The programming button on the socket is also used for manual control of the output.
- · Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

# Produced in 3 designs of sockets/plugs:





# RFTC-10/G | System temperature controller

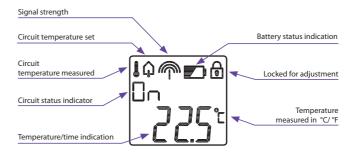


Technical pa	rameters	RFTC-10/G		
Supply voltage:		2 x 1.5 V AAA batteries		
Battery life:		1 year based on frequency of use		of use
Temperature co	rrection:		2 buttons V/A	
Temperature off	set:		± 5 °C	
Display:		LCD, charact	ers/see Display d	escription
Backlighting:		activ	e 10 s after pressi	ng
Transmission indica	ation/function:		symbols	
Temperature me	asurement:	1:	k internal sensor	
Temp. measurer	nent range		0 to +55 °C;	
and accuracy:		0.3	3 °C of the range	
Control				
Communication	protocol:		RFIO	
Frequency:		866–922 MHz (f	or more informat	ion see p. 76)
Repeater function	on:		no	
Signal transmiss	ion method:	bidirection	nally addressed n	nessage
Range:		in open space up to 100 m		0 m
Minimum contro	ol distance:		20 mm	
Other data				
Max. number of	control.			
RFSA-6x:		1		
Program:			х	
Operating temp	erature:		0 to +55 °C	
Operating posit	ion:		wall-mounted	
Mounting:			glue/screws	
Protection:			IP30	
Contamination of	degree:		2	
Dimensions fran	ne			
- plastic:		8	35 x 85 x 20 mm	
- metal, glass, wo	ood, granite:	94 x 94 x 20 mm		
Weight:		66 g (without batteries)		es)
Related standar	ds:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,		&TTE Directive,
		Order. No 426/	2000 Coll. (Direct	ive 1999/EC)
		Compatibility		
RF Touch	eLAN-RF	RFSA-6 x	RFSTI-11B	RFATV-1

#### **Display description**

 $\checkmark$ 

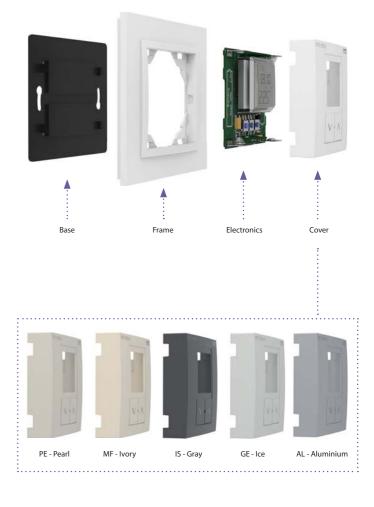
 $\checkmark$ 

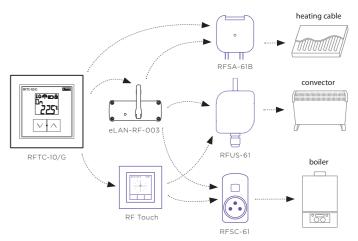


-

- RFTC-10/G is used for temperature measurement (in the range of 0 to 55 °C) and correction of the pre-set temperature in RF Touch or eLAN-RF system devices in the range of  $\pm$  5 °C. The temperature correction is valid until the next program change in the given system device.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, etc.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- Colour combination of heating unit in design of frames LOGUS<sup>90</sup> (plastic, glass, wood, metal, stone).

#### **Device description**

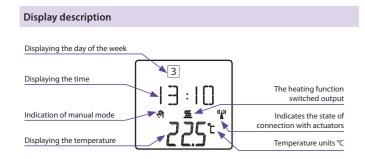






Technical parameters	RFTC-50/G	
Supply voltage:	2x 1.5 V AAA batteries	
Battery life:	1 year based on frequency of use	
	according to the number of controlling actuators	
Temperature correction:	2 buttons V/A	
Temperature offset:	± 5 °C	
Display:	LCD, characters/see Display description	
Backlighting:	active 10 s after pressing	
Transmission indication/function:	symbols	
Temperature measurement:	1x internal sensor	
Temp. measurement range		
and accuracy:	0 to +55 °C; 0.3 °C of the range	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Signal transmission method:	bidirectionally addressed message	
Range:	in open space up to 100 m	
Minimum control distance:	20 mm	
Other data		
Max. number of control.		
RFSA-6x:	4	
Program:	Weekly	
Operating temperature:	0 to + 55 °C	
Operating position:	on the wall	
Mounting:	by gluing/screwing	
Protection:	IP30	
Contamination degree:	2	
Dimensions frame		
- plastic:	85 x 85 x 20 mm	
- 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 R&TTE	
	Directive, Order. No 426/2000 Coll. (Directive 1999/EC	

		Compatibility		
<b>RF</b> Touch	eLAN-RF	RFSA-6 x	RFSTI-11B	RFATV-1
-	-	$\checkmark$	$\checkmark$	-

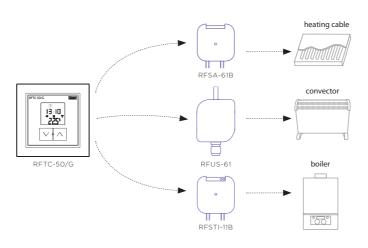


- RFTC-50/G is a separate thermostat that allows wireless control of up to 4 multifunctional switching components, e.g. RFSA-6x, RFUS-61, RFSTI-11B.
- · Temperature measurement with built-in sensor in the range of 0.55 °C, temperature setting in the range of 0 to +55 °C in the weekly program.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- · Battery power (2x 1.5 V AAA batteries 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 or protocol
- component RFIO2 that support this feature. · Communication frequency with bidirectional protocol RFIO.
- Colour combination of temperature unit in design of frames LOGUS<sup>90</sup> (plastic, glass, wood, metal, stone).

# **Device description**









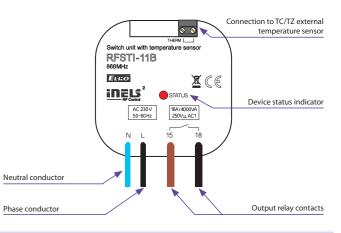
Technical parameters	RFSTI-11B/230V	RFSTI-11B/120V	RFSTI-11B/24V
Supply voltage:	230 V AC	120 V AC	12-24 V AC/DC
Supply voltage frequency:	50-60 Hz	60 Hz	50-60 Hz
Apparent input:	7 VA/co	os φ= 0.1	-
Dissipated power:		0.7 W	
Supply voltage tolerance:		+10 %; -15 %	
Temperature measurement input:	1x external TZ	/TC temperature se	ensor input 🖄
Temp. measurement range		-20 to +50 °C;	
and accuracy:		0.5 °C of the range	
Output			
Number of contacts:	1)	switching (AgSnC	) <sub>2</sub> )
Rated current:		16 A/AC1	
Switching power:	40	00 VA/AC1, 384 W/	DC
Peak current:		30 A/<3 s	
Switching voltage:		250 V AC1/24 V DC	
Max. DC switching power:		500 mW	
Mechanical service life:		3x10 <sup>7</sup>	
Electrical service life (AC1):		0.7x10 <sup>5</sup>	
Control			
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Range:	in open space up to 160 m		
Other data			
Operating temperature:	-15 to +50 °C		
Status indication:		red LED	
Operating position:		any	
Mounting:	f	ree at lead-in wire	S
Protection:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Outlets (CY wire, cross-	2 x 0.75 mm <sup>2</sup> , 2 x 2.5 mm <sup>2</sup> ,		
section, length):	90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:		46 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,		
	Order. No 426	5/2000 Coll. (Direct	tive 1999/EC)

A Temperature sensor input is at the supply voltage potential.

42

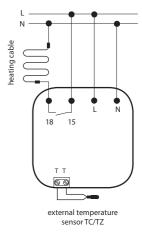
- The temperature unit measures the temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RF Touch.
- It measures temperature in a range of -20 to 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.
- It enables connection of the switched load up to 16 A (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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- External sensor TC (-20 to +80 °C) or TZ (-40 to +125 °C) for length of 3 m, 6 m, 12 m. For more information see "Accessories" on page 45.

#### **Device description**

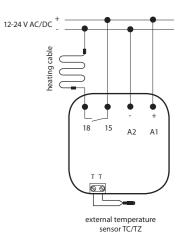


#### Connection

RFSTI-11B/230V RESTI-11B/120V



RFSTI-11B/24V

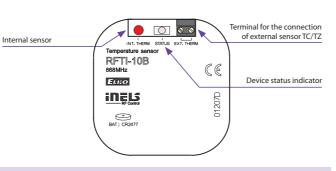




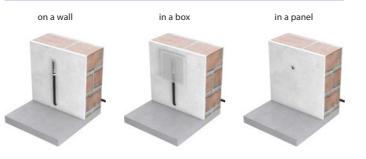
Technical parameters	RFTI-10B	
Supply voltage:	1x 3 V CR 2477 battery	
Battery life:	1 year based on frequency of use	
Transmission indication/function:	red LED	
Temperature measurement:	1x internal NTC thermistor	
	1x external TZ/TC temperature sensor input	
Temp. measurement range	-20 to +50 °C;	
and accuracy:	0.5 °C in the range	
Output		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Signal transmission method:	unidirectionally addressed message	
Range:	in open 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	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

- It measures temperature in a range of -20 to 50 °C with internal or external sensor and sends it to the system unit (eLAN-RF, RF-Touch) in regular 5 min. intervals.
- It sends a signal upon sudden temperature change within 1 min.
- Option of connecting an external sensor to the terminals THERM.
- Battery power (1x 3 V CR 2477 battery included in supply) with battery life of around 1 year based on frequency of use.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency 868 MHz with bidirectional protocol RFIO.
- External sensor TC (-20 to +80 °C) or TZ (-40 to +125 °C) for length of 3 m, 6 m, 12 m. For more information see "Accessories" on page 45.

# Device description



# Sensor location



in a tank



in a pipe

# Accessories

# TC, TZ | Temperature sensors



Technical parameters	тс	TZ	
Range:	-20 to +80 °C (-4 to 176 °F)	-40 to +125 °C (-40 to 257 °F)	
Scanning element:	NTC 12K	NTC 12K	
Tolerance:	±(0.15 °C + 0.002 t )	±(0.15 °C + 0.002 t )	
In air/in water:	(τ0.5) ≤ 18 s	(τ65) 62 s/8 s	
In air/in water:	(τ0.9) ≤ 48 s	(τ95) 216 s/23 s	
Cable material:	PVC unshielded,	silicon	
	2x 0.25 mm <sup>2</sup>	VO3SS-F 2D x 0.5 mm <sup>2</sup>	
Terminal material:	polyamide	stainless steel	
Protection degree:	IP67	IP67	
Electrical strength:	2500 VAC	2500 VAC	
Insulation resistance:	$> 200 \mbox{ M}\Omega$ at 500 VDC	$> 200~\text{M}\Omega$ at 500 VDC	
Types of temperature set	re sensors:		
	TC-0	TZ-0	
- length:	100 mm	110 mm	
- weight:	5 g	4.5 g	
	TC-3	TZ-3	
- length:	3 m	3 m	
- weight:	70 g	106 g	
	TC-6	TZ-6	
- length:	6 m	6 m	
- weight:	130 g	216 g	
	TC-12	TZ-12	
- length:	12 m	12 m	
- weight:	250 g	418 g	

 $\tau 65$  (95): time, which sensor needs to heat up on 65 (95) % of ambient temperature of environment, in which is located.

44

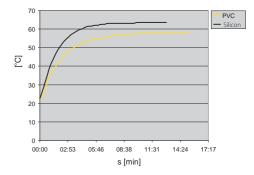
- Thermister temperature sensors are made of Negative Temperature Coefficient (NTC) embedded in a PVC or metal sleeve with a thermally-conductive sealer.
- Sensor TC
- lead-in cable to sensor TC is made of wire CYSY 2D x 0.5 mm/0.02".
  Sensor TZ
- cable VO3SS-F 2D x 0.5 mm/0.02" with silicone insulation for use in high temperature applications.
- silicone insulation for use in high temperature applications.
- Temperature sensors can be connected directly to the terminal block
- Cable lengths can not be changed, connected or modified.

Resistive values of sensors in dependance on temperature

Temperature ( °C)	Sensor NTC ( $k\Omega$ )
20	14.7
30	9.8
40	6.6
50	4.6
60	3.2
70	2.3

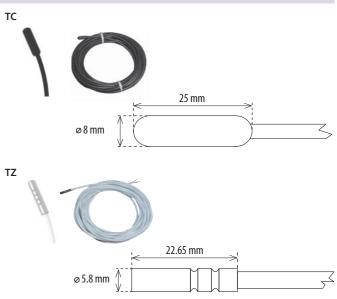
Tolerance of sensor NTC 12 k $\Omega$  is  $\pm$  5% by 25 °C/77 °F.

# Diagramm of sensor warm up via air



PVC -reaction to water temperature from 22.5 °C to 58 °C. Silicone - reaction to water temperature from 22.5 °C to 63.5 °C.

#### Design and dimensions





Technical parameters	TELVA 230V	TELVA 24V
Operating voltage:	230 V, 50/60 Hz	24 V, 50/60 Hz
Switching current max:	300 mA	500 mA
Operating current:	13 mA	100 mA
Closing/opening time:	3–5 min	3–5 min
Power imput:	2.9 W	2.4 W
Protection:	IP54	IP54
Settings:	4 mm (0.16")	4 mm (0.16")
Stopping force:	90–110 N	90–110 N
Cable lenght:	800–1000 mm (31–39")	800–1000 mm (31–39")
Connecting wire:	2 x 0.75 mm <sup>2</sup>	2 x 0.75 mm <sup>2</sup>
Media temperature:	-5 °C to 60 °C (23 to 140 °F)	-5 °C to 60 °C (23 to 140 °F)
Colour:	white RAL 9003	white RAL 9003
Dimensions h/w/d:	63 x 42 x 45 mm ( 2.5 x 1.7 x 1.8 ")	63 x 42 x 45 mm ( 2.5 x 1.7 x 1.8 ")
Connection size:	M30 x 1.5 mm (1.2" x 0.06")	M30 x 1.5 mm (1.2" x 0.06")

- Thermodrive is intended for opening or closing valves in heating, cooling or air conditioning systems. It is also suitable for use in a floor heating or ceiling cooling manifolds.
- Available in NO (open without voltage), NC (closed without voltage) and for 230 V and 24 V.
- The internal principle of operation of thermodrive mechanism = its movement so that the valve opens/closes is provided by an electric heating element with expansion material, which expands due to temperature changes in the supply voltage.
- Thermodrive is maintenance-free and works completely silently.
- Thermodrive is fitted with a metal nut M30 x 1.5, thanks to which it becomes a 100% fixed part of the valve with this corresponding thread size after installation.
- The stated nut size predetermines the use of a thermocouple with valves from manufacturers such as Herz, HoneyWell, Danfoss, Oventrop and others.

# Telva thermo drive:

- is characterized by absolutely quiet and maintenance-free operation
- is designed for installation - control of heating and cooling systems
- method of mounting the actuator on the controlled valve using an M30 x 1.5 nut

- any working position

## Type of use:

• Floor heating – the RFTC-50/G wireless controller measures the room temperature and, based on the set program, sends a command to the RFSA-66M switching element to open/close the TELVA thermo drive on the distributor.

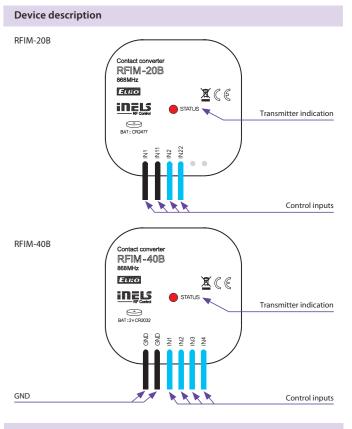


Technical parameters	RFIM-20B	RFIM-40B
Supply voltage:	1x 3 V CR 2477 battery	2x 3 V CR 2032 batteries
Battery life:	5 years based of frequency use	
Transmission indication / function:	orange LED	red LED
Number of inputs:	2	4
Input switching time:	Permanent input	Short-tem input
	connection (contact)	connection (button)
Control		
Communication protocol:	RF	10
Frequency:	866–922 MHz (for more	e information see p. 76)
Repeater function:	n	0
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Terminals (CY wire, cross-section):	4 x 0.75 mm <sup>2</sup>	6 x 0.75 mm <sup>2</sup>
Length of terminals:	90 mm	
Resist.of connection between terminals		
- for switched on button:	< 300 Ω	
- for disconnected contact:	> 10 kΩ	
Mounting:	free at lead-in wires	
Protection:	IP30	
Contamination degree:	2	
Dimensions:	49 x 49 x 13 mm	
Weight:	45 g	50 g
Open contact voltage:	pulse 12 V	3 V
Length of cable to contact:	max. 100 m	
	of parallel lines	max. 5 m
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

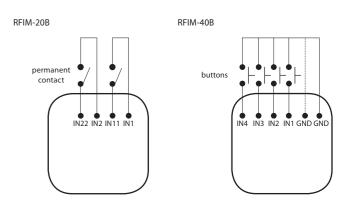
Temperature control

46

- **RFIM-20B:** the wireless contact converter changes your existing wired button/switch to a wireless one.
- two inputs enable control of two units independent,
- battery power supply (1x 3 V CR 2477 battery included in the supply) with battery life of around 5 years based on frequency of use,
   contact can be permanently closed (does not drain on the battery).
- **RFIM-40B:** the wireless contact converter changes your existing wired button to a wireless one.
- four inputs enable control of four units independently,
- battery power supply (2x 3 V CR 2032 batteries) with battery life of around 5 years based on frequency of use (included in the supply),
   button control (input must not be permanently closed).
- It can be used to transmit information on switching on the contact (detector, button, technology, logic output).
- 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 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- The BOX design lets you mount it right in an installation box under the button or switch.



#### Connection



# **RFSG-1M** | Input contact converter

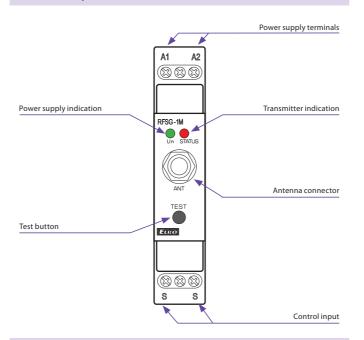


Technical parameters	RFSG-1M		
Supply voltage:	110-230 V AC		
Supply voltage frequency:	50–60 Hz		
Apparent input:	2 VA		
Dissipated power:	0.2 W		
Supply voltage tolerance:	+10 %/-25 %		
Power supply indication:	green LED		
Input			
Control voltage:	AC 12-230 V/DC 12-230 V		
Control input power:	AC 0.025 VA/DC 0.1 W		
Control terminals:	S–S		
The length of control impulse:	min. 25 ms (max. unlimited)		
Transmission indication/function:	red LED		
Control			
Communication protocol:	RFIO		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	no		
Signal transmission method:	unidirectionally addressed message		
Range:	in open space up to 160 m		
Minimum control distance:			
	20 mm		
RF antenna:	AN-I included (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	max. 1x 2.5, max. 2x 1.5/		
cross-section: (mm <sup>2</sup> ):	with a hollow max. 1x 2.5		
Dimensions:	90 x 17.6 x 64 mm		
Weight:	62 g		
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,		
	Order. No 426/2000 Coll. (Directive 1999/EC)		

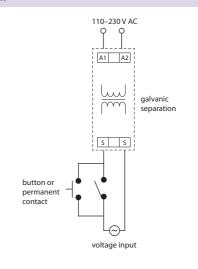
\* Max Tightening Torque for antenna connector is 0.56 Nm.

- This wireless contact converter is especially appropriate for wireless transmission of information on switching HDO.
- Thanks to the permanent power supply, it can also be used for partial transmission of information for control of an appliance or device.
- 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.
- 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, see accessories on page 69.
- 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 RFIO.
- 1-MODULE design of the unit with mounting into switchboard.

#### Device description



#### Connection



# Note

48

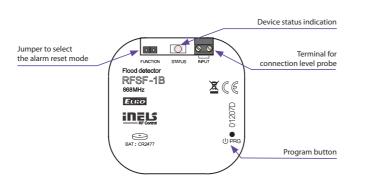




Technical parameters	RFSF-1B	
Supply voltage:	1x 3 V CR 2477 battery	
Battery life:	1 year based on frequency use	
Indications/transfer function:	red LED	
Reset after flooding:	JUMPER - Manual/Automatic	
Programming:	with Prog button/based batteries	
Measuring input:	terminal 0.5–1mm <sup>2</sup>	
Voltage measuring input:	3 V	
Resistance measuring input		
for detecting flooding:	≤20 kΩ	
Resistance measuring input		
for flushing detection:	≥40kΩ	
Probe cable length:	max. 30 m	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Signal transmission method:	two-way addressed message	
Range:	in open space up to 160 m	
Other data		
Working temperature:	-10 to +50 °C	
Operating position:	any	
Mounting:	glue/freely	
Protection:	IP30	
Degree of pollution:	2	
Dimensions:	49 x 49 x 13 mm	
Weight:	45 g	
Standards:	EN 60730-1, EN 300 220, EN 301 489 directive R&TTE	
	Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

- 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 or closes a pipe valve.
- 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 (1x 3 V CR 2477 battery 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 or protocol component RFIO2, that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- Option of connecting an external probe FP-1, max. wire length 30 m.

# Device description



# Location of the detector and probe

In an installation box

On the wall





Freely





Technical parameters	RFSF-100	
Power supply		
Battery power:	2x 1.5 V AAA batteries	
Battery life by frequency		
1x 12 hours:	3 years	
Setting		
Alarm Detection:	optical and audible alarm	
Battery status view:	low battery is indicated by 5 flashes every 15 minutes	
	or by display in the system element	
Acoustic signal:	greater than 45 dB/1m	
Detection		
Sensor:	contacts for flooding	
Detection principle:	contact between the sensor sensed liquid	
Response Time:	2 s after connecting the scanning contacts	
Measurement accuracy:	99.8 %	
Sensitivity:	in the range 0–170 k $\Omega$	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 160 m	
Other parameters		
Working temperature:	0 to +50 °C (Pay attention	
	to the operating temperature of batteries)	
Storage temperature:	-20 to +60 °C	
Operation position:	capture contacts for flooding downwards	
Mounting:	loose	
Protection degree:	IP62	
Dimension:	Ø 89 x 23 mm	
Weight:	92 g	

# **FP-1** | Liquid probe



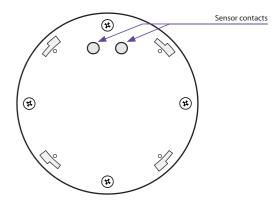
FP-1	
-10 to +40 °C	
glue/screws	
1 m	
18 x 8 x 26 mm	

Detectors

# RFSF-100 | Flood detector

- The flood detector is used to detect water leakage the activation occurs the moment the flooding of the contacts located on the underside of the detector occurs.
- Upon detecting water, the flood detector immediately sends a signal to the switched unit, which further switches on a pump or closes a pipe valve.
- Flood detection is signalled by optical and acoustic signalling.
- Range up to 160 m (in open space); if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.

#### Descritption



#### Function

When the scanning contact is connected, the detector sends the message and starts alarm.

#### Conductivity of liquids

Liquids suitable for detection		
Type of liquid Resistivity [Ωcm]		
Drinking water	5–10 kΩ	
Well water	2–5 kΩ	
River water	2–15 kΩ	
Rain water	15–25 kΩ	
Waste water	0.5–2 kΩ	
Seawater	~0.03 kΩ	
Salt water	~2.2 kΩ	
Natural/hard water	~5 kΩ	
Chlorinated water	~5 kΩ	
Condensed water	~18 kΩ	
Milk	~1 kΩ	
Milk serum	~1 kΩ	
Fruit juices	~1 kΩ	
Vegetable Juices	~1 kΩ	
Broths	~1 kΩ	
Wine	~2.2 kΩ	
Beer	~2.2 kΩ	
Coffee	~2.2 kΩ	
Soap toam	~18 kΩ	

Inadmissible liquids	
Demineralised water	
Deionised water	
Bourbon	
Gasoline	
Oil	
Liquid gases	
Paraffin	
Ethylene glycol	
Paints	
High alcohol-content	
liquids	

\* Resistivity characterizes the resistive properties of materials which conduct electric current.

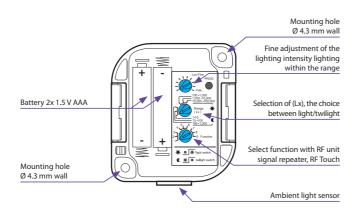
Detectors



Technical parameters	RFSOU-1	
Power supply:	2 x 1.5 AAA batteries	
Battery Life:	Appr. 2 years,	
	according to the number of controlled units	
Setting the range of light	levels	
Function ( (twilight switch)		
- Range 1:	1 to 10 lx	
- Range 2:	10 to 100 lx	
- Range 3:	100 to 1.000 lx	
Function ·次· (light switch)		
- Range 1:	100 to 1 000 lx	
- Range 2:	1 000 to 10 000 lx	
- Range 3:	10 000 to 100 000 lx	
Function setting:	rotary switch	
The level of lighting gently:	0.1 to 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	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Range:	in open 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	
Standards:	EN 60730-1, EN 300 220, EN 301 489 R&TTE Directive,	
	Order. No 426/2000 Coll. (Directive 1999/EC)	

- The twilight switch 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.
- 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 (2x 1.5 V AAA batteries 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- The increased IP65 protection is suited to mounting on the wall or into the rural environment.

# Device description



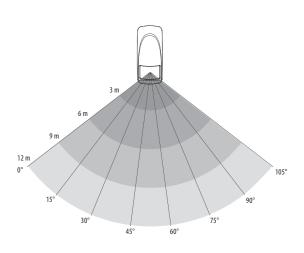


Technical parameters	RFMD-100	
Power supply:	2x 1.5 V AA batteries	
Battery life:	up to 1 year, according to the number of activations	
Drained battery indicator:	yes	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Detection angle:	105°	
Detection distance:	max. 12 m	
Recommended working height:	: max. 2.4 m	
Other data		
Working temperature:	-10 to +50 °C	
Protection:	IP20	
Colour:	white	
Dimension:	46 x 105 x 43 mm	
Weight:	57 g	

Detectors

- 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.
- Power supply: 2x 1.5 V AA batteries, the battery life is around 1 year.
- "Low Battery" Alerts by double LED flashing or on iHC App.
- The detectors are compatible with switching components marked with the RFIO2 communication protocol and the eLAN-RF system components.
- Communication frequency with bidirectional protocol RFIO.

#### **Detection field**



# RFWD-100 | Window/Door detector



Technical parameters	RFWD-100	
Power supply:	1x 3 V CR 2032 battery	
Drained battery indicator:	yes	
Control		
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Other data		
Working temperature:	-10 to +50 °C	
Protection:	IP20	
Colour:	white	
Dimension:	25 x 75 x 16 mm	
Magnet dimension:	15 x 75 x 14 mm	

- 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.).
- by means of the Smart RF box, detection can be displayed on your smart phone in the form of a notifi cation; 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.
- Power supply: 1x 3 V CR 2032 battery, 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.
- "Low Battery" Alerts on Your iHC App.
- The detectors are compatible with switching components marked with the RFIO2 communication protocol and the eLAN-RF system components.
- Communication frequency with bidirectional protocol RFIO.





54



Window/Door detector | RFWD-100

# **RF Touch** | Wireless touch unit

56



**RF Touch-W** 

**RF Touch-B** 

Technical parameters	<b>RF Touch-B</b>	RF Touch-W	
Display			
Туре:	colour	TFT LCD	
Resolution:	320 x 240 pixels	/262,144 colours	
Side proportion:	3	3:4	
Visible surface:	52.5 x	70 mm	
Backlighting:	active (w	/hite LED)	
Touch area:	resistive 4	-conductor	
Diagonal:	3	.5″	
Control:	to	uch	
Power supply			
Supply voltage:		from the back 100–230 V AC,	
	100–230 V AC	from the side 12 V DC	
Input power:	max	r. 5 W	
Power supply terminals:	A1–A2		
Control			
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Range:	in open space up to 100 m		
Min. distance RF Touch			
Actuator:	1	m	
Connection			
Connection:		no-screw push-in terminal	
		box or jack Ø 2.1 mm jack	
	terminal box	connector	
Cross-section of connecting wires:	max. 2.5 mm <sup>2</sup> /1.5 mm <sup>2</sup> with a hollow		
Other data			
Operating temperature:	0 to +50 °C		
Storage temperature:	- 20 to +70 °C		
Protection:	IP20		
Overvoltage category:	III.		
Contamination degree:	2		
Operating position:	any		
Installation:	an installation box	anywhere indoor	
Dimensions:	94 x 94 x 36 mm	94 x 94 x 24 mm	
Weight (plastic):	127 g	175 g	
Related standards:	EN 60730-1		

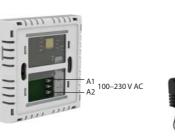
- · The Wireless touch unit RF Touch is a central controller for heating, switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- · It transmits and receives commands from units and processes set programs for automatic control.
- · Thanks to bidirectional communication, it visualizes the current status of individual units.
- · Automatic control based on weekly program.
- 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 100–230 V AC, (RF Touch/W also supplied via adapter 12 V DC included in the supply).
- 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

# Power supply

**RF Touch-B** 



# **RF Touch-W**





Adapter, 12 V DC (adapter is part of the RF Touch-W . unit package)

**Colour combinations** 





black/white

chrome/grey



RF Pilot	Transmitter communication with actuators	крански страна ПП RFSA-62B	*		20.01.2021
DETECTORS		Ť			

 $\square$ 

RFSA-61B

**RF Touch** | Wireless touch unit

up to 200 m

Command to execute function

#### Function execution feedback

# HEATING

D

The detector senses

ement and switches on alarm

control of heating devices (boilers, thermo valve 0–10 V...)

- 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



- the regulation of light intensity
- 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 s and 30 min













 $(\bigcirc)$ DETECTORS

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

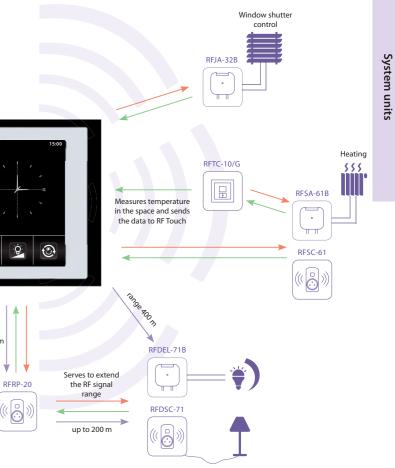
white/pearly

glass/grey

red/aluminum

aluminum/dark grey

titanium/ice





# **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 s to 60 min)



- 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
- $\cdot$  the window shutter receivers are powered by either 230 V or 24 V 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

# **RFRP-20** | Repeater to extend the range

58



Technical parameters	RFRP-20/230V	RFRP-20/120V	
Supply voltage:	230–250 V	120 V AC	
Supply voltage frequency:	50-60 Hz	60 Hz	
Apparent input:	6 VA		
Dissipated power:	0.7	7 W	
Control			
Communication protocol:	RF	-i0	
Frequency:	866–922 MHz (for more information see p. 76)		
Range:	in open space up to 200 m		
Minimum control			
distance:	20 mm		
Programming:	button - green LED/red LED		
Other data			
Operating temperature:	-20 to	+55 °C	
Storage temperature:	-30 to +70 °C		
Mounting:	plug into a socket		
Protection:	IP20 Device		
Dimensions:	60 x 120 x 80 mm		
Weight:	225 g		
Related standards:	EN 607 3	0-1 ED.2	

#### 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.
- 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 RFIO.
- · Thanks to the socket design, installation is simple by direct insertion into the existing socket, the throughsocket function remains unchanged.

Produced in 3 designs of sockets/plugs:

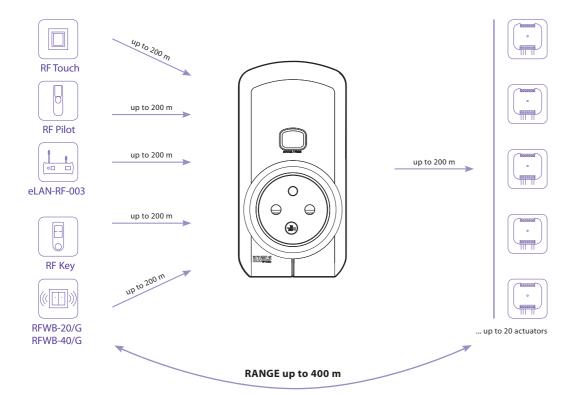




Technical parameters	eLAN-RF-103	eLAN-RF-Wi-103	
Interface RF Control			
Communication protocol:	RFIO2		
Broadcasting frequency:	866–922 MHz (for more information see p. 76)		
Signal transfer method:	two-way addr	ressed message	
Output for antenna:	SMA co	nnector*	
Antenna RF:	AN-	I 1 dB	
Indications RF communications:	1x gree	n RF LED	
Range:	in open space	ce up to 100 m	
Interface Ethernet			
ETH operating status			
indicator:	gree	en LED	
ETH communication indicator:	yello	w LED	
Communications interface:	100 Mb	ops (RJ45)	
Preset IP address:	DI	НСР	
Interface Wi-Fi			
Standard:	х	IEEE 802.11 b/g/n/2.4 GHz	
Wi-Fi Security:	х	WEP, WPA-PSK, WPA2-PSH	
Frequency range Wi-Fi:	х	R-SMA connector*	
Antenna Wi-Fi:	х	WiFi 2.4 GHz 1 dB	
Indications Wi-Fi communication:	х	1x green LED Wi-Fi	
Range:	х	up to 20 m	
Wi-Fi network mode:	х	SOFT-AP/Client	
Power supply			
Supply voltage/current:	5 V DC/0.5 A	5 V DC/1 A	
Power source:	110-230 V AC/5 V DC-	–2 A (connector USB-C)	
Button RESET			
- short press:	restart t	he device	
- press> 5 s	reset netw	ork settings	
- press> 10 s:	reset to fac	tory settings	
Indication LED STATUS			
- green:	norma	al mode	
- red:	error condition		
- orange:	initialization/start		
Other data			
Operating temperature:	-20 to +50 °C		
Storage temperature:	-25 to +70 °C		
Protection:	IP20		
Contamination degree:	2		
Working position:	any		
Dimensions:	90 x 52 x 65 mm		
Weight:	136 g	146 g	

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

# Signal transmission and extension for up to 20 components.



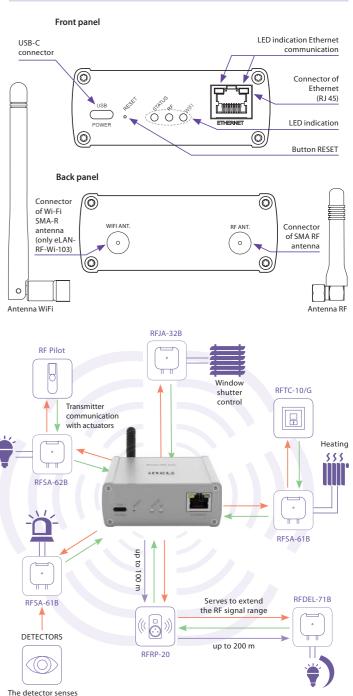
# eLAN-RF-103, eLAN-RF-Wi-103 | Smart RF gateway

- applications for smartphones, tablets, watches, televisions, voice assistants (Google Home & Alexa) and other third-party devices.
- It is produced in two versions:
- a) eLAN-RF-103: LAN communication

b) eLAN-RF-Wi-103: LAN communication with WiFi in AP (Access Point) mode with direct connection of the smartphone to eLAN-RF-Wi-103 or in Client mode (connection to the home WiFi network by connecting the smartphone via home wireless router).

- It communicates from up to 70 iNELS RF elements, processes set programs for automatic control.
- · Thanks to two-way communication, it displays the current status of individual elements.
- Powered by 5 V DC/2 A adapter, USB-C connector (included).
- Configuration is done via the iHC application.
- 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, see accessories on page 75. For the eLAN-RF-Wi-103 version, a WiFi antenna is included in the package.

# **Device description**



movement and switches on alarm System

units

# **Hotel Retrofit (HRESK)**

Cost savings, increased comfort





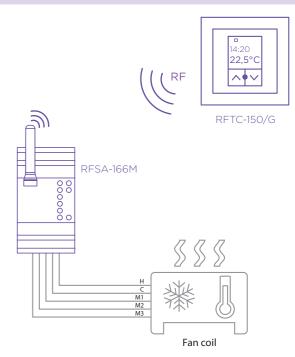
Technical parameters	RFTC-150/G
Supply voltage:	2x 1.5 V AAA batteries
Battery life:	up to 1 year
Temperature correction:	2 buttons V/A
Temperature offset:	± 5 °C
Display:	LCD, characters
Backlighting:	active 10 s after pressing
Transmission indication/function:	symbols
Temperature measurement input:	1x internal sensor
Temp. measurement range	
and accuracy:	0 to + 55 °C ; 0.3 °C of the range
Control	·
Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Signal transmission method:	bidirectionally addressed message
Range:	in open space up to 100 m
Minimum control	
distance:	20 mm
Other data	
Max. number of controlling	
actuators RFSA-166M:	1
Program:	weekly
Operating temperature:	0 to +55 °C
Operating position:	on the wall
Mounting:	by gluing/screwing
Protection:	IP30
Contamination degree:	2
Dimensions	
- plastic:	85 x 85 x 20 mm
- 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 RTTE Directive
	Order. No 426/2000 Coll. (Directive 1999/EC)



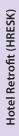
www.inels.com

- The wireless controller RFTC-150/G measures the room temperature by internal sensor. On the basis of a set program it sends commands to the switching component RFSA-166M Switching fan coil.
- It is possible to set automatic or manual mode.
- Range of measured temperature 0 to 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 (2x 1.5 V AAA batteries 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.
- Components support communication with RF detectors.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- Colour combination of temperature unit in design of frames LOGUS<sup>90</sup> (plastic, glass, wood, metal, stone).

#### Connection



# **RFSAI-161B** | Ligting control unit with pair detectors and external button input





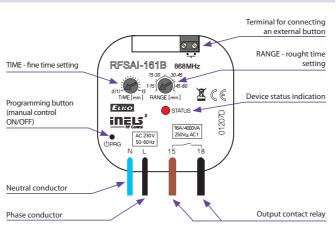
# Technical parameters RFSAI-161B/230V RFSAI-161B/120V

Supply voltage:	230 V AC	120 V AC	
Supply voltage frequency:	50-60 Hz	60 Hz	
Apparent power:	9 VA	9 VA	
Dissipated power:	0.7 W		
Supply voltage tolerance:	+10 %	; -15 %	
Output			
Number of contacts:	1x switching (AgSnO <sub>2</sub> )		
Rated current:	12 A/AC1		
Switching power:	3000 VA/AC	1, 288 W/DC	
Peak current:	30 A, max.	4 s at 10%	
Switching voltage:	250 V AC	1/24 V DC	
Min. switching power DC:	100 m	A/10 V	
Insulation voltage between			
outputs and internal circuits:	basic In	sulation	
	(Cat. III surges	by EN 60664-1)	
Isolation voltage open			
contact:	1	kV	
Mechanical service life:	Зх	107	
Electrical service life (AC1):	5x	10 <sup>4</sup>	
Indication of relay switch:	red	LED	
Control			
Communication protocol:	RFI	02	
Frequency:	866–922 MHz (for more	e information see p. 76)	
Repeater button:	yes		
Manual control:	button PROG (ON/OFF)		
External button:	cable length r	nax. 12 m 👍 *	
Range:	in open space	e up to 160 m	
Other data			
Open contact voltage			
external switch:	3	V	
Resistor for the management			
of external switch:	<1	kΩ	
Resist. of connection for open			
contact:	>10	kΩ	
Galvanic isolation of input:		0	
Operating temperature:		+50 °C	
Storage temperature:	-30 to	+70 °C	
Working position:		ıy	
Mounting:		d-in wires	
Protection:		30	
Overvoltage category: III.			
Contamination degree:	ree: 2		
Terminals:	Terminals: 0.5–1 mm <sup>2</sup>		
Terminals (CY wire, Cross-section):	2x 0.75 mm <sup>2</sup> , 2x 2.5 mm <sup>2</sup>		
Terminal length:		nm	
Dimensions:		« 21 mm	
Weight:	50	) g	

 Switch component with one output channel which is used in combination with detectors for automatic lighting control.

- RFSAI-161B has a pre-set control algorithm (scene) adapted to the requirements of hotel room control, see wiring.
- Each RFSAI-161B can be programmed with 1x RFMD-100, 1x RFWD-100 and 1x wireless controller (RFWB-40/G or RF KEY).
- The terminals on the component give you the opportunity to connect a wired detector or an existing key installation.
- It enables connection of the switched load up to 1x 12 A (3000 VA).
- The programming button on the unit 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.

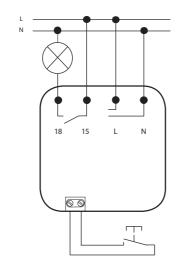
# Device description

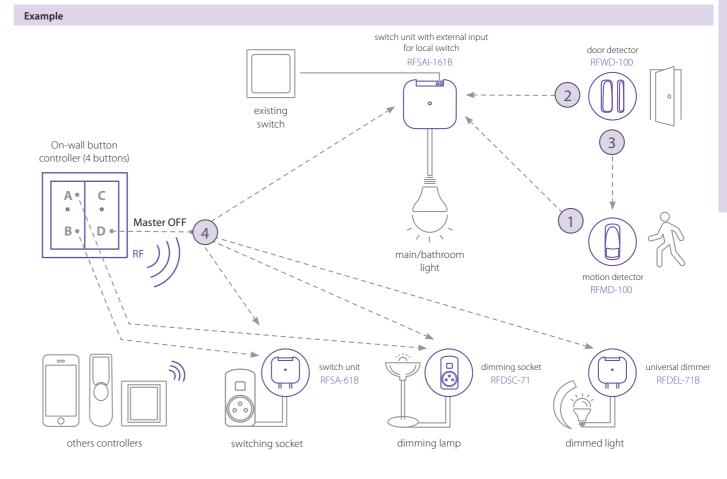


Compatible wireless detectors: Movement: RFMD-100 Door/Window: RFWD-100

# Connection

RFSAI-161B/230V RFSAI-161B/120V





# Function

- When RFMD-100 motion detector captures the movement of the guest, the light ON command is sent.
- 2 The functionality of RFWD-100 door detector is delayed OFF= after the guest (or cleaner) close the door than the timer starts running (which you can set) and the light will turn OFF.
- 3 If there is movement the command from RFWD-100 door detector (delay off) will be cancelled by the motion detector RFMD-100 command.
- 4 Pressing the button at position D of RFWB-40 On-wall button controller sends an OFF command to all components that are controlled from that button while blocking the response to RFMD-100 motion detector.

\* We recommend using a twisted pair cable for this distance.

 $\Delta t$  Control button input is at the supply voltage potential.

You are able to control other units with other channels (A, B, C) on RFWB-40 On-wall button controller.



5

When guest wakes up and presses any RFWB-40 button, then pressing on button makes all units working again after previous pressing button on position D and it also re-enable RFMD-100 motion detector primary function.

# RFSA-166M | Switch unit for fancoil, 6-channels

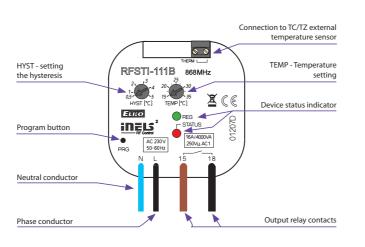




Technical parameters	RFSTI-111B/230V	RFSTI-111B/120V
Supply voltage:	230 V AC	120 V AC
Supply voltage frequency:	50–60 Hz	60 Hz
Apparent input:	9 VA/cos φ= 0.1	9 VA/cos φ= 0.1.
Dissipated power:	0.7	W
Supply voltage tolerance:	+10 %	; -15 %
Temperature measurement input:	1x external TZ/TC tem	perature sensor input
Temp. measurement range	+15 to	+35 °C;
and accuracy:	0.5 °C of 1	he range
Output		
Number of contacts:	1x switchin	g (AgSnO²)
Rated current:	12 A	/AC1
Switching power:	3000 VA/AC	1, 288 W/DC
Peak current:	30 A/max.	4 s at 10%
Switching voltage:	250 V AC	1/24 V DC
Min. switching power:	100 m	A/10 V
Insulation voltage between		
relay outputs and internal	basic Insulation	
circuits:	(Cat. III surges	by EN 60664-1)
lsolates. voltage open relay		
contact:	1 kV	
Mechanical service life:	3x10 <sup>7</sup>	
Electrical service life (AC1):	5x10 <sup>4</sup>	
Control		
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more	e information see p. 76)
Repeater function:	yes	
Range:	in open space	e up to 160 m
Other data	·	
Operating temperature:	-15 to	+50 °C
Storage temperature:	-30 to	+70 °C
Indication of relay switch:	red	LED
Indication regulation:	green LED	
Operating position:	ar	ıy
Mounting:	free at lead-in wires	
Protection:	IP30	
Overvoltage category:	III.	
Contamination degree:	2	
Outlets (CY wire,	2 x 0.75 mm <sup>2</sup> , 2 x 2.5 mm <sup>2</sup> ,	
cross-section, length):	90 mm	
Dimensions:	49 x 49 x 21 mm	
Weight:	50 g	

- The component measures temperature in the range of 15 to 35  $^\circ\mathrm{C}$  with external sensor and on the basis of the set temperature switches air conditioning.
- It is particularly suitable for hotel rooms.
- With the Window/Door sensor programmed, when the window/door is opened, the device relay contact is automatically disconnected, there by saving unnecessary energy consumed for cooling when the window/door is open.
- It enables connection of the switched load up to 12 A (3000 VA).
- Up to 4 RFDW-100 detectors can be connected to one RFSTI-111B device.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- External sensor TC (-20 to +80 °C) or TZ (-40 to +125 °C) for length of 3 m, 6 m, 12 m. For more information see "Accessories" on page 45.

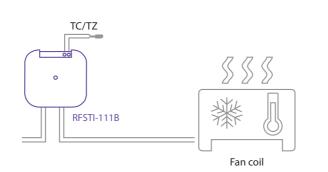
# Device description



# Function

The external sensor senses the temperature of the room, turns the air conditioner on and off according to the set temperature. Responds to commands from the detector - when you open the window, turn off air conditioning.

# Connection



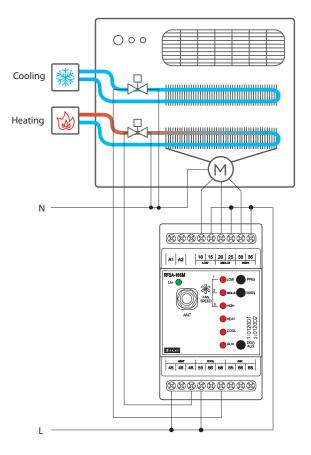


Technical parameters	RFSA-166M/230V
Supply voltage:	110–230 V AC
Supply voltage frequency:	50–60 Hz
Apparent input:	min. 2 VA/max. 5 VA
Dissipated power:	min. 0.5W/max. 2.5W
Supply voltage tolerance:	+10%/-25 %
Output	
Number of contacts:	3x changeover (AgSnO <sub>2</sub> );
	3x switching (AgSnO <sub>2</sub> )
Rated current:	8 A/AC1
Switching power:	2000 VA/AC1
Peak current:	10 A/<3 s
Switching voltage:	250 V AC1
Max. DC switching power:	500 mW
Mechanical service life:	1x10 <sup>7</sup>
Electrical service life (AC1):	1x10 <sup>5</sup>
Control	
Wireless:	on output RE6 up to 25-channels/buttons
Communication protocol:	RFIO2
Frequency:	866–922 MHz (for more information see p. 76)
Repeater button:	yes
Manual control:	MAN button
Range:	in open space up to 100 m
RF antenna:	AN-I included (SMA connector)*
Other data	
Operating temperature:	-15 °C to +50 °C
Operating position:	any
Mounting:	DIN rail EN 60715
Protection:	IP20 from the front panel
Overvoltage category:	III.
Contamination degree:	2
Connecting conductor	max. 1x 2.5, max. 2x 1.5/
cross-section (mm <sup>2</sup> ):	with a hollow max. 1x 2.5
Dimensions:	90 x 52 x 65 mm
Weight:	264 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive,
	Order. No 426/2000 Coll. (Directive 1999/EC)

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

- Thanks to the 6-channels design of the switching component it can control the heating/cooling mode and with 3 speeds, the AUX output channel can be used to control appliances, sockets or lights.
- The RFSA-166M wireless switching component can be combined with the RFTC-150/G.
- Up to 25 detectors RFWD-100 can be assigned to the switching component.
- The RFWD-100 can be assigned to the RFSA-166M using the PRG button.
- Output Channel AUX:
- up to 25-channels can be controlled,
- can be combined with detectors, controllers or system components of iNELS RF Control,
- function: button, pulse relay and delayed start or return time functions with 2 s 60 min time setting. Function description can be found on page 78,
- memory status is retained in the event of a power failure,
- the AUX programming button on the component also serves as manual control of the AUX 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, see accessories on page 75.
- Range up to 100 m (in open space), if the signal is insufficient, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.

#### Connection for fancoil control



# Smartphones



- · Control application for smartphones and tablets with Android and iPhone operating systems - iHC-AiO. It allows you to easily control vour house.
- The user-friendly and intuitive application environment offers central control from one place.
- The application enables control of the complete iNELS RF and BUS solution via the RF Smart box, Connection server, Central unit and other supported third-party devices that are connected to the home Internet network.
- The application allows free remote control.
- IHC-AiO features:
- unification of all iNELS devices under one application. Specifically, eLAN RF 003, eLAN RF 103, eLAN IR, CU3, CS and LARA
- within BUS it is now possible to configure rooms without the need for a public server or CS
- user management in the application it will be possible to set rights for all users who will use one system
- automation creation of conditions within RF, BUS systems or in both systems
- low battery notification, alarms, actuator status
- history of states of individual actors
- display of all added devices in a clear menu and the possibility of configuring your own dashboard.

Smart TV



- · Device control via Smart TV is possible not only in the wireless installation of iNELS RF Control using the smart box eLAN-RF, but also in the case of wired option iNELS BUS using the Connection server. The iHC--SMTV app is free to download from the app store on your Smart TV.
- The control of app works with a classic TV remote control.
- Every Smart TV that has been manufactured since 2015 and supports OS Tizen is compatible.
- Functionality:
- ON/OFF switching, with the possibility of time schedules
- dimming ON/OFF, smooth brightening/dimming, color change - scenes
- heating (temperature correction, heating mode change, cooling/heating mode)

- cameras (image, or live stream if supported by web browser on Smart TV).

- iHC-SMTV (Smart TV App) is free and is not licensed in any way.
- Here you will find a link to the application:



Smart watch Samsung GEAR S2 / S3



TIZEN iHC-WTRF

- Applications to control appliances via smart watches Samsung Gear S2/S3.
- Smart watches are associated with the controlled appliances through RF smart box eLAN-RF.
- Functionality:
- switching appliances, sockets
- automatic timing
- dimming the lights, adjust the colour
- control garage doors, gates, gates and shutters - features scenes for group commands.
- Intuitive and easy to control in many combinations, touching the display and moving wheels on Samsung Gear S2/S3.
- The setting is done by applying iNELS Home Control iHC-MAIRF directly or via a web interface RF smart box eLAN-RF.
- It is not necessary to carry a smart phone to control, the watch functions independently.

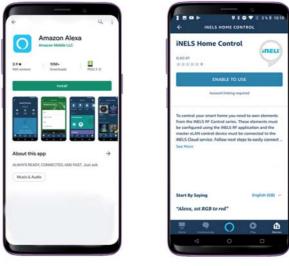
# Voice assistants

#### Amazon Alexa



Google Home





Register to the Cloud via email and set a password.

Preview the Amazon Alexa app on Google Play

#### Application iHC-MAIRF-Cloud/iHC-MIIRF-Cloud:

- Designed for iOS 10+ and Android 5.0+. .
- . Optimized for devices with 800x480 screen resolution.
- The language of the application changes automatically according to the language set in Android/iOS. .
- . the Cloud should be in the order of megabytes per second (3G - 1Mbit/s and higher).

# 🔿 amazon alexa

- With Alexa Artificial Intelligence, you can simplify your daily life by setting an alarm, notifications, creating new items, or reminders in your calendar.
- · The voice assistant can answer questions and control individual devices and smart homes.
- It is available on mobile phones, TVs, smart speakers and other devices.
- The voice assistant is designed to comfortably control the RF Control wiring by voice using your mobile phone or smart speaker.
- As a complement to RF Control, iNELS Smart Home Solution blends in with every modern home.
- Here you will find a link to the manual:







- Google Home can become a member of your smart home family.
- It communicates with the smart eLAN-RF box via the Cloud connection.
- This allows you to control, for example, the temperature setting or the light intensity by voice.
- The voice assistant is designed to conveniently control the RF Controlled electro-installations by voice using your mobile phone or smart speaker.
- As a complement to RF Control, iNELS Smart Home Solution blends in with every modern home.
- Here you will find a link to the manual:







Setting up products in iNELS Home Control.

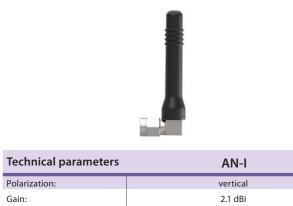
You can create a cloud account using the Setup Wizard or the login button in the main menu. The recommended minimum speed for connecting the eLAN-RF to

Accessories

# AN-I | Internal antenna



68



· · · · · · · · · ·	////
Polarization:	vertical
Gain:	2.1 dBi
Dimensions:	17 x 44 x 8.5 mm
Impedance:	50 Ω
Colour:	black

The rod antenna with SMA connector is supplied as standard with the product.

# Extension cable for external antenna



Technical parameters		
Connector Type:	SMA (male/female)	
Colour:	white	
Cable Length:	10 m	

• The internal antenna is included in the standard package.

AN-I antenna measurement graph

S11 VSWR

25 23.4

21.8 20.2

18.6

17.0

15.4

13.8

12.2

10.6 9.0

7.4

5.8

4.2

2.6

1.0 W0'005

733.3M

350.0N 966.7N

# Measured range between controllers and RFSA-66M

	RFGB	RFWB	<b>RF KEY</b>
AN-I	305 m	290 m	190 m
AN-E	300 m	290 m	200 m
AN-E3	275 m	260 m	180 m

The range is measured with direct visibility between the RFGB-x, RFWB-x, RF KEY and RFSA-66M actuators.

Connecting the antenna extension cable does not affect the range.

# Accessories

# AN-E1 | External antenna



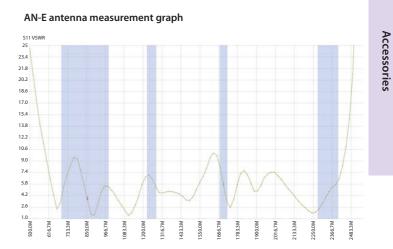
Technical parameters	AN-E1
Mounting:	Magnetic Mount
Cable Length:	3 m
Polarization:	vertical
Gain:	5 dBi
Impedance:	50 Ω
Colour:	black
Dimensions:	Ø 30 x 280 mm

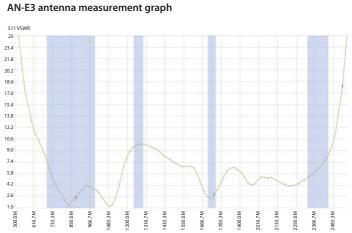
# AN-E3 | External antenna



3 m

Technical parameters	AN-E3
Cable Length:	3 m
Polarization:	vertical
Gain:	3 dBi
Impedance:	50 Ω
Colour:	black
Dimensions:	Ø 50 x 88 mm





• The external antenna is intended for outdoor use.

I E2 ontonna more state i

69

# RFAF/USB | Service Key



Technical parameters	RFAF/USB
Power:	max. 1 W
Interface:	USB 1.1 and higher, plug. "A"
Range:	100 m
Min. distance of RF Touch-	
Actuator:	1 m
Communication protocol:	RFIO2
Frequency:	866–922 MHz (for more information see p. 76)
Power supply indication:	green LED
RF communication indication:	red LED
Other data	
Operating temperature:	0 to +55 °C
Storage temperature:	- 20 to +70 °C
Protection:	IP30
Contamination degree:	2
Work space:	any
Installation:	any
Dimensions:	22 x 85 x 15 mm
Weight:	20 g
Related standards:	EN 60950-1

- The RFAF/USB Service Key (in conjunction with the RF\_analyzer) is designed for iNELS RF Control system partners and serves for: - Setting the repeater (signal amplifier) through the iNELS RF Control
- elements labeled as RFIO2. This option allows you to communicate over longer distances (in the order of 50 m) via existing iNELS RF Control elements in the installation (eliminating the use of the RFRP-20 repeater).
- upgrade of firmware in the iNELS RF Control elements (labeled RFIO2), in the case of new firmware versions that improve the functionality of the elements on which we are constantly working.
- The RF Network Analyzer will reliably analyze the communication between the controller (where you plan to place it) and the component in the installation. Indicates signal strength/quatty as well as possible frequencies that can interfere with communication.

- SW RF analyzer can be found at inels.com/partners in section SW/ FW RF Control

# Accessories

# Supported video cameras



# Supported intercoms



- Cameras integrated in iHC-MIIRF and iHC-MAIRF applications: Axis cameras with PTZ control support. HIK VISION cameras with PTZ control support. D-Link cameras. Other cameras supporting RTSP and MJPEG streams.
- IHC-SMTV supports streaming cameras in JPEG format.

- The iHC-MAIRF/iHC-MIIRF applications are integrated as client accounts for the SIP server on the Connection Server (Asterisk) and the SIP server on the Dahua speaker.
- Using CS, it is possible to freely connect applications with LARA Intercom, 2N and HIK VISION voices.

# **RF sets** | Combination of controllers and units

N.	В	EZDRÁTOVÁ ele WIRELESS electr	ektroinst oinstallat
9		OBSAN	LADY / NOT CO
- 17			+
8		111	
	Concession of the second	1x Spinaci bezdrátový (	Presk

# **Basic sets**



# **Multifunction sets**













¢ >>

val has elapsed.

t = 2 s to 60 min.

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.

# Loadability products

#### RFJA-32B: RFSA-62B: RFSAI-62B: RFSA-66M

Load type	 cos φ ≥ 0.95 AC1	-(M) AC2	- <u>M</u> - AC3	f AC5a without compensation	AC5a with	AC5b	AC6a	 AC7b	 AC12
Contact material AgSnO <sub>2</sub> , Contact 8 A	250 V/8 A	250 V/5 A	250 V/4 A	x	x	250 W	250 V/4 A	250 V/1 A	250 V/1 A
Load type	 AC13	 AC14	 للج۲۰۰۲	 DC1	-(M)- DC3	- <u>M</u> - DC5	 DC12	 DC13	 DC14
Contact material AgSnO <sub>2</sub> , Contact 8 A	x	250 V/4 A	250 V/3 A	30 V/8 A	24 V/3 A	30 V/2 A	30 V/8 A	30 V/2 A	x

The output contact will be closed by pressing

the button and opened after the set time inter-

> >

has elapsed.

t = 2 s to 60 min

The output contact will be opened by pressing

the button and closed after the set time interval

RFUS-61									
Load type	 cos φ ≥ 0.95	-(M)-	-(M)-		j j	HAL230V	<u> </u>		
	AC1	AC2	AC3	AC5a without compensation	AC5a with compensation	AC5b	AC6a	AC7b	AC12
Contact material AgSnO <sub>2</sub> , Contact 14 A	250 V/12 A	250 V/5 A	250 V/3 A	230 V/3 A (690 VA)	230 V/3 A (690 VA) up to max input C=14uF	1000 W	х	250 V/3 A	х
Load type	36+		- <u></u>		-(M)-	-(M)-			
	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Contact material AgSnO <sub>2</sub> , Contact 14 A	х	250 V/6 A	250 V/6 A	24 V/10 A	24 V/3 A	24 V/2 A	24 V/6 A	24 V/2 A	х

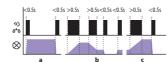
# RFSA-11B; RFSA-61B; RFSA-61M; RFSC-61; RFSTI-11B; RFDAC-71B

		0	0				210		
Load type	 cos φ ≥ 0.95	-(M)-	-(M)-			HAL230V			
	AC1	AC2	AC3	AC5a without compensation	AC5a with compensation	AC5b	AC6a	AC7b	AC12
Contact material AgSnO <sub>-</sub> , Contact 16 A	250 V/16 A	250 V/5 A	250 V/3 A	230 V/3 A (690 VA)	230 V/3 A (690 VA) up to max input C=14uF	1000 W	х	250 V/3 A	250 V/10 A
Load type					-(M)-	- <u>M</u> -		<u></u>	
	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Contact material AgSnO <sub>2</sub> , Contact 16 A	х	250 V/6 A	250 V/6 A	24 V/10 A	24 V/3 A	24 V/2 A	24 V/6 A	24 V/2 A	x

# Dimmers

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

Light scene function 1



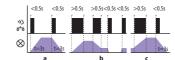
a) By pressing the programmed button for less than 0.5 s, the light illuminates; it goes out by pressing again

b) By pressing the programmed button for more than 0.5 s, 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 3



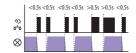
- a) By pressing the programmed button for less than 0.5 s, the light fluidly illuminates a) By pressing the programmed button for less than 0.5 s, the light illuminates. By pressing the button shortly again, the light will continuously switch off for 3 seconds for a period of 3 s (at 100% brightness). By pressing the button shortly again, the light will continuously switch off for 3 seconds. (at 100% brightness).
- b) By pressing the programmed button for more than 0.5 s, 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.

#### **Function sunrise**



After pressing the programmed button, the light begins to illuminate in the pro-After pressing the programmed button, the light begins to dim in the programmed grammed time interval in a range of 2 seconds to 30 minutes 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 The dimmer output switches off by pressing the button. is switched on, pressing the programmed button will switch it off.

#### Rating of the light source ELKO lighting on dimmers ELKO EP

	LED bulb LED spot lights						s LED panels							LED / RGB strip												
	DLB- 806-			-E27- 5-5K		GU10- 0-3K		GU10- )-3K	LSL-G 350	iU10- -5K	LP-60	60-3K	LP-60	60-6K		strip 2W		strip .4W		strip .2W		strip 8W	RGB 7.2		RGB 14.	
	Y	<b>Y</b> number	Y	Y number		number	-	number	-			number		number		number	1215	number		number	19 19 19	number		number	R. STR	number
RFDSC-71	$\checkmark$	21	$\checkmark$	21	$\checkmark$	45	$\checkmark$	25	$\checkmark$	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
RFDEL-71B	$\checkmark$	11	$\checkmark$	11	$\checkmark$	25	$\checkmark$	13	$\checkmark$	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RFDA-73M/RGB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$\checkmark$	3x8m	$\checkmark$	3x4m	$\checkmark$	3x5m	$\checkmark$	3x4m	$\checkmark$	20m	$\checkmark$	10m
RFDAC-71B	-	-	-	-	-	-	-	-	-	-	$\checkmark$	50	$\checkmark$	50	-	-	-	-	-	-	-	-	-	-	-	-

#### WARNING!

May lead to different results based on the state of network cable length and other factors.

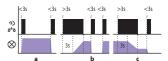
This table contains the results of tests that were conducted internally and therefore is ONLY for customers only informative. The products were tested in test laboratories ELKO EP, and therefore the company assumes no responsibility for any imitation test

Inductive and capacitive loads must not be connected simultaneously!

**Overview of functions** 

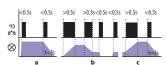
74

#### Light scene function 2



- a) By pressing the programmed button for less than 3 s, the light illuminates; it goes out by pressing again
- b) In order to limit undesirable control of brightness, fluid brightness control occurs only by pressing a programmed button for over 3 s. 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 3 s.
- The actuator remembers the adjusted value even after disconnecting from the power supply.

#### Light scene function 4



- b) By pressing the programmed button for more than 0.5 s, 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.

#### **Function sunset**



#### Function switch off



- Load capacity:
- \* 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  $\cos \varphi$ , capacity for power factor  $\cos \varphi = 1$ . 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.

# Protocol and compatibility

Installation possibilities

The communication between the components is wireless at 866–922 MHz (according to country standards/regulations), using the unique RFIO and RFIO2 protocols. Both are proprietary wireless protocols from ELKO EP, which have a completely unique structure. RFIO2 is an extension of the RFIO protocol and allows users to use newly introduced features, such as unit signals (repeater), for selected features. This protocol is fully compatible with the previous version of the protocol (RFIO).

# Available frequency for individual territories:

865.15 MHz India868.1 MHz Russia868.5 MHz EU, Ukraine, Middle East

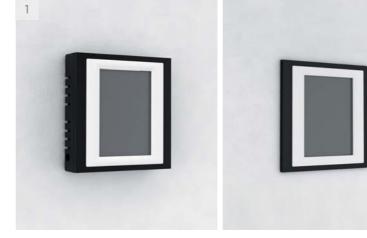
916 MHz Australia, New Zealand, America, Israel

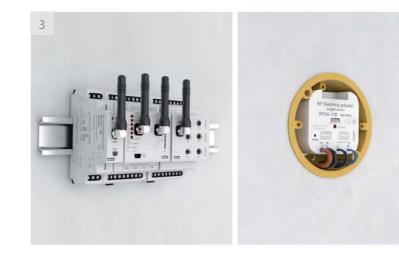
**Benefits of RFIO:** 

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

# **Benefits of RFIO2:**

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







76



# 1) Surface mounted

Wall mounted or in an installation box with spacing of 65 mm.

RF Touch-W	RFTC-10/G
RFWB-20/G	RFTC-50/G
RFWB-40/G	RFTC-150/G
RFGB-20	RFGB-220
RFGB-40	RFGB-240

#### 2) Flush mounted

RF Touch-B	RFGCR-31
RFDW-71	RFDW-271

# 3) DIN Rail mounted

On DIN rail according to EN 60715.

RFSG-1M	RFSA-61M
RFDA-73M/RGB	RFSA-66M
RFDEL-71M	RFSA-66MI
RFSA-166M	

#### 4) Flush mounted (BOX)

RFIM-20B	RFSAI-62B
RFIM-40B	RFJA-32B
RFDAC-71B	RFSF-1B
RFDEL-71B	RFSTI-11B
RFSA-11B	RFTI-10B
RFSA-61B	RFSAI-161B
RFSA-62B	RFSTI-111B

#### 5) Mounted into the cover of appliance

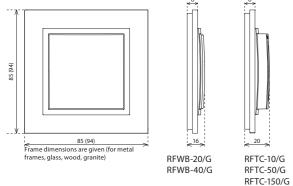
RFDAC-71B	RFJA-32B
RFDEL-71B	RFSAI-161E
RFSA-11B	RFSTI-111B
RFSA-61B	
RFSA-62B	

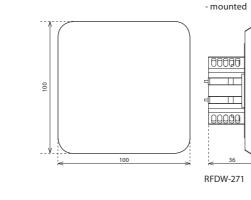
# 6) Surface mounted

RFSOU-1	RFWD-100
RFUS-61	RFOWB-20
RFTM-100	RFOSC-61
RFSF-1B	RFWS-100
RFMD-100	

78 **Product dimension** 

# Flush - mounted Surface -mounted EBEEC 8 JUUUU < 24 > 36 94 RF Touch-B **RF** Touch-W Surface-mounted \_8



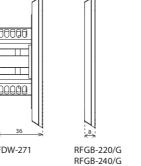


22

Π

15 19

94



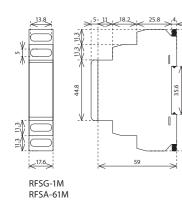
1-MODULE

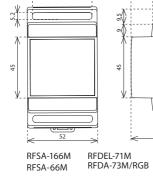
ŝ

de

41.2

RF Pilot

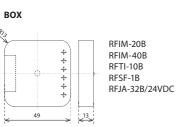


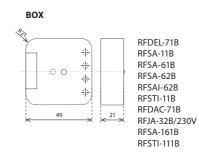


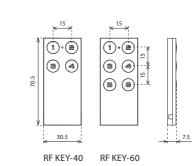
3-MODULE

-

45







Flush - mounted

88888

36

RFDW-71 RFGCR-31

Flush

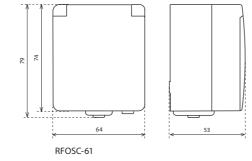
Surface -mounted

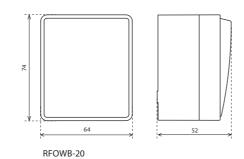
8

Surface

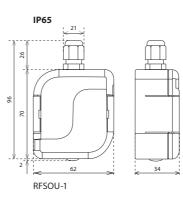
-mounted

RFGB-20/G RFGB-40/G



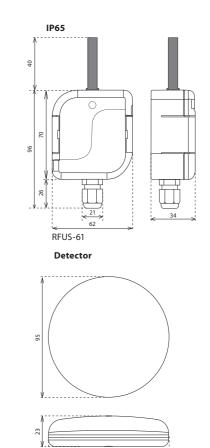


# **Product dimension**

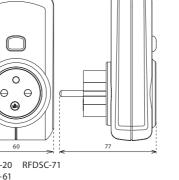


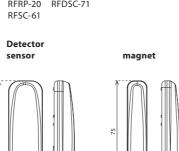
Socket

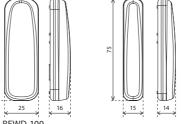
RFWD-100



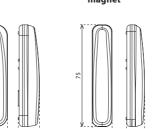
 $\bigcirc$ RFRP-20 RFDSC-71 RFSC-61





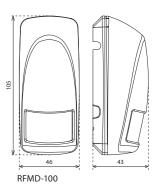


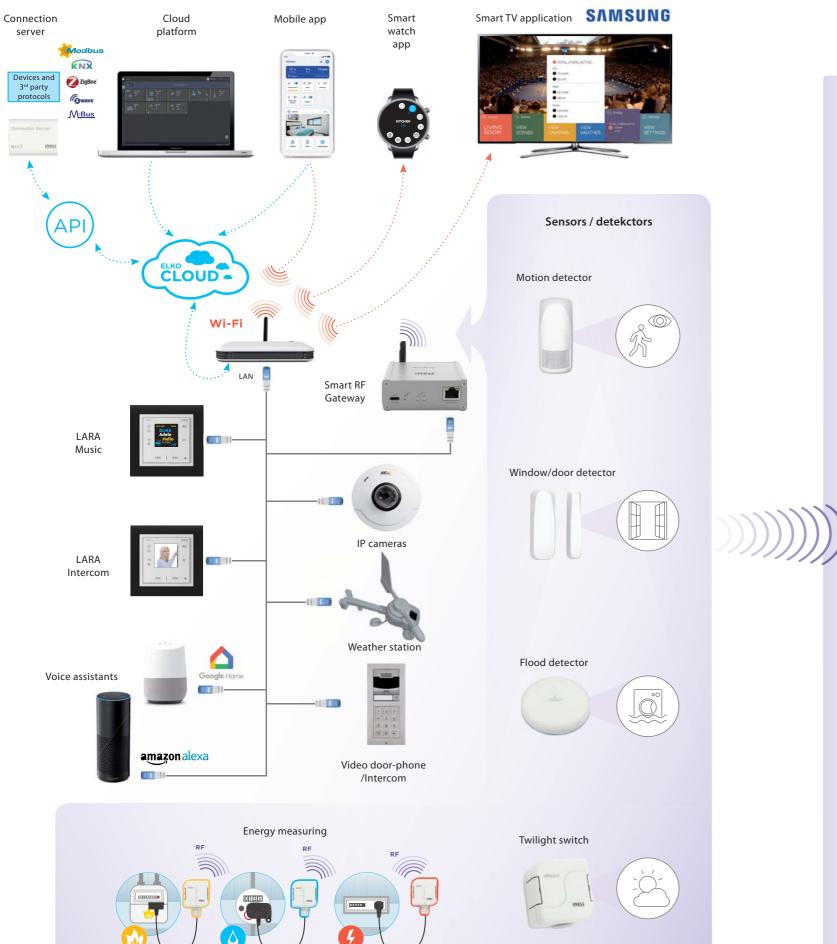


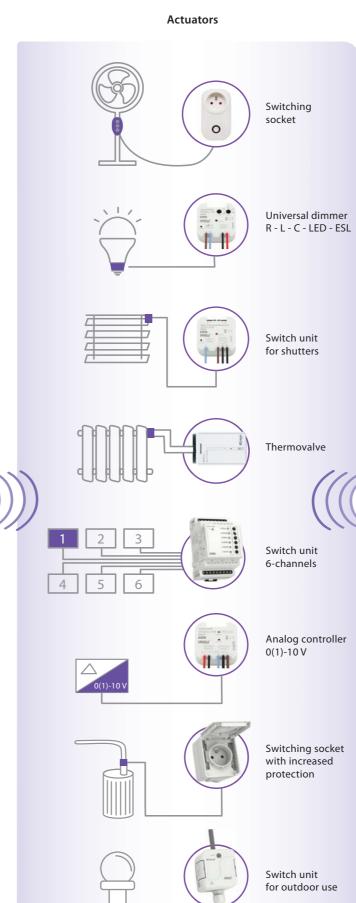


79

Detector







# Controllers



EAN codes

# Product groups of the Wireless electro-installation



Controllers

Switching units

Dimmers

Temperature control

D-

**RS485** 

Convertors

0

Detectors

Supply voltage

230 V AC

120 V AC

12 - 24 V AC

230 V AC

120 V AC

230 V AC

120 V AC

5 - 24 V DC

110 - 230 V AC

110 - 230 V AC

110 - 230 V AC

12-24 V AC / DC

110 - 230 V AC 12-24 V AC / DC

230 V AC

120 V AC

230 - 250 V AC

230 V AC

120 V AC

230 V AC

120 V AC

110 - 230 V AC

230 V AC

120 V AC

System units

111

CPU

E

٢

Energy

management

Hotel Retrofit

\*\*\*\*

868.5 MHz         8595188140379         RFWB-20/C*         1x CR2032         868.5 MHz         85951881142816         RFSA-428/230/           868.5 MHz         859518811471         RF0WB-20/C*         1x CR2032         916 MHz         859518811582         RFSA-628/230/           868.5 MHz         8595188117778         RFGB-20/W         2x CR2032         916 MHz         8595188114990         RFSA-628/230/           868.5 MHz         8595188176781         RFGB-20/W         2x CR2032         916 MHz         8595188174947         RFSA-628/230/           868.5 MHz         8595188176811         RFGB-20/W         2x CR2032         916 MHz         8595188174947         RFSA-628/230/           868.5 MHz         859518817681         RFGB-20/W         2x CR2032         916 MHz         8595188174644         RFSA-628/230/           868.5 MHz         8595188176859         RFGB-20/W         2x CR2032         866.5 MHz         859518817493         RFJA-328/240 /C           868.5 MHz         8595188176859         RFGB-20/W         2x CR2032         866.5 MHz         859518817493         RFSA-64//230/           868.5 MHz         8595188176938         RFDW-71/1230/W         220 V AC         866.5 MHz         859518817529         RFSA-64//230/           868.5 MHz         859518816029	Frequency	EAN	Туре	Supply voltage	Frequency	EAN	Туре
868.5 MHz         8595188114711         RFOWB-20         1x CR2032         868.5 MHz         8595188176781         RFSA-628/24V           868.5 MHz         8595188176778         RFGB-20/W         2x CR2032         96         868.5 MHz         8595188176798         RFSA-628/24V           868.5 MHz         8595188176778         RFGB-20/W         2x CR2032         96         NHz         8595188176447         RFSA-628/24V           868.5 MHz         8595188176811         RFGB-20/W         2x CR2032         96         NHz         8595188176464         RFJA-328/240V           868.5 MHz         8595188176842         RFGB-20/W         2x CR2032         96         NHz         8595188176841         RFJA-328/240V           868.5 MHz         8595188176842         RFGB-20/W         2x CR2032         868.5 MHz         8595188176843         RFJA-328/240V           868.5 MHz         8595188176846         RFGP-240/B         2x CR2032         868.5 MHz         8595188115030         RFSA-61M/230V           868.5 MHz         8595188176858         RFDW-71/120V/W         230 V AC         868.5 MHz         8595188116503         RFSA-66M/220V           868.5 MHz         859518816928         RFDW-71/120V/W         120 V AC         868.5 MHz         859518816268         RFSA-66M/220V	868.5 MHz	8595188140379	RFWB-20/G*	1x CR2032	868.5 MHz	8595188142816	RFSA-62B/230V
Image: Market in the second	868.5 MHz	8595188140607	RFWB-40/G*	1x CR2032	916 MHz	8595188151832	RFSA-62B/120V
868.5 MHz         8595188176799         RFGB-20/B         2x CR2032         916 MHz         8595188176404         RFSA-62B/120V           868.5 MHz         8595188176811         RFGB-40/W         2x CR2032         868.5 MHz         8595188176404         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-220/W         2x CR2032         868.5 MHz         8595188176442         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-220/W         2x CR2032         868.5 MHz         8595188176402         RFJA-32B/120V           868.5 MHz         8595188176842         RFGB-240/B         2x CR2032         868.5 MHz         8595188176493         RFSA-61M/230V           868.5 MHz         8595188176845         RFGB-240/B         2x CR2032         868.5 MHz         859518811549         RFSA-66M/230V           868.5 MHz         8595188178983         RFDW-71/20V/W         230 V AC         868.5 MHz         859518814223         RFSA-66M/24V           868.5 MHz         859518817693         RFDW-71/20V/W         120 V AC         868.5 MHz         859518816076         RFSA-66M/24V           868.5 MHz         859518817693         RFDW-71/20V/W         120 V AC         868.5 MHz         859518816076         RFSA-66M/24V           868.5 MHz         8595188180771<	868.5 MHz	8595188181471	RFOWB-20	1x CR2032	868.5 MHz	8595188151894	RFSA-62B/24V
868.5 MHz         8595188176799         RFGB-20/B         2x CR2032         916 MHz         8595188176404         RFSA-62B/120V           868.5 MHz         8595188176811         RFGB-40/W         2x CR2032         868.5 MHz         8595188176404         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-220/W         2x CR2032         868.5 MHz         8595188176442         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-220/W         2x CR2032         868.5 MHz         8595188176402         RFJA-32B/120V           868.5 MHz         8595188176842         RFGB-240/B         2x CR2032         868.5 MHz         8595188176493         RFSA-61M/230V           868.5 MHz         8595188176845         RFGB-240/B         2x CR2032         868.5 MHz         859518811549         RFSA-66M/230V           868.5 MHz         8595188178983         RFDW-71/20V/W         230 V AC         868.5 MHz         859518814223         RFSA-66M/24V           868.5 MHz         859518817693         RFDW-71/20V/W         120 V AC         868.5 MHz         859518816076         RFSA-66M/24V           868.5 MHz         859518817693         RFDW-71/20V/W         120 V AC         868.5 MHz         859518816076         RFSA-66M/24V           868.5 MHz         8595188180771<							
868.5 MHz         8595188176804         RFGB-40/W         2x CR2032         Image: CR2032         Sec: SMHz         S595188176811         RFGB-40/B         2x CR2032           868.5 MHz         8595188176813         RFGB-20/W         2x CR2032         868.5 MHz         8595188174923         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-20/W         2x CR2032         868.5 MHz         8595188174923         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-20/W         2x CR2032         868.5 MHz         8595188174923         RFJA-32B/120V           868.5 MHz         8595188176835         RFGB-240/W         2x CR2032         868.5 MHz         859518813509         RFSA-61M/230V           868.5 MHz         8595188176938         RFDW-71/230V/W         230 V AC         868.5 MHz         859518813509         RFSA-66M/24V           868.5 MHz         8595188142823         RFSA-66M/24V         868.5 MHz         859518813508         RFSA-66M/24V           868.5 MHz         859518814728         RFDW-71/20V/W         120 V AC         868.5 MHz         859518813508         RFSA-66M/24V           868.5 MHz         8595188144223         RFSA-66M/24V         868.5 MHz         859518813508         RFU<-61/20V	868.5 MHz	8595188176781	RFGB-20/W	2x CR2032	868.5 MHz	8595188149990	RFSAI-62B/230V
868.5 MHz         8595188176811         RFGB-40/8         2x CR2032         868.5 MHz         8595188174233         RFIA-32B/24V DC           868.5 MHz         8595188176835         RFGB-220/W         2x CR2032         868.5 MHz         8595188176835         RFGB-220/W         2x CR2032           868.5 MHz         8595188176835         RFGB-240/W         2x CR2032         868.5 MHz         8595188176839         RFGB-240/W         2x CR2032           868.5 MHz         8595188176839         RFGB-240/W         2x CR2032         868.5 MHz         8595188181709         RFSA-61M/230V           868.5 MHz         8595188176838         RFGW-71/230V/W         230 V AC         868.5 MHz         8595188181529         RFSA-66M/24V           868.5 MHz         8595188147293         RFDW-71/20V/W         120 V AC         868.5 MHz         859518815291         RFSA-66M/24V           868.5 MHz         859518814423         RFDW-71/120V/W         120 V AC         868.5 MHz         85951881526         RFSA-66M/24V           868.5 MHz         8595188180749         RFDW-71/8         230 V AC         868.5 MHz         859518814526         RFSC-61/23V           868.5 MHz         8595188180749         RFDW-71/8         1x CR2032         868.5 MHz         859518814526         RFSC-61 French	868.5 MHz	8595188176798	RFGB-20/B	2x CR2032	916 MHz	8595188174947	RFSAI-62B/120V
Image: Marking State         Image: Ma	868.5 MHz	8595188176804	RFGB-40/W	2x CR2032			
868.5 MHz         8595188176833         RFGB-220/W         2x CR2032         868.5 MHz         8595188176842         RFJA-328/24V DC           868.5 MHz         8595188176859         RFGB-240/W         2x CR2032         868.5 MHz         8595188176859         RFGB-240/W         2x CR2032           868.5 MHz         8595188176866         RFGB-240/W         2x CR2032         868.5 MHz         859518815703         RFSA-61M/230V           868.5 MHz         8595188176866         RFGW-71/230V/W         230 V AC         868.5 MHz         859518811549         RFSA-61M/230V           868.5 MHz         8595188115983         RFDW-71/20V/W         230 V AC         868.5 MHz         85951881152914         RFSA-66M/24V           868.5 MHz         859518811592         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188115163         RFSA-66M/24V           868.5 MHz         859518816429         RFDW-71/120V/W         120 V AC         868.5 MHz         859518816526         RFSC-617/20V           868.5 MHz         859518816429         RFDW-271/B         230 V AC         868.5 MHz         859518816526         RFSC-617/20V           868.5 MHz         859518816077         RF KEY-40/W         1x CR2032         868.5 MHz         859518816526         RFSC-61 French           868.5 MH	868.5 MHz	8595188176811	RFGB-40/B	2x CR2032	868.5 MHz	8595188174664	RFJA-32B/230V
868.5 MHz         8595188176842         RFGB-240/W         2x CR2032         868.5 MHz         859518817003         RFGA-1M/230V           868.5 MHz         8595188176866         RFGB-240/W         2x CR2032         868.5 MHz         8595188117003         RFSA-61M/230V           868.5 MHz         8595188176866         RFGB-240/W         2x CR2032         868.5 MHz         859518811549         RFSA-61M/230V           868.5 MHz         859518811789         RFDW-71/230V/W         230 V AC         868.5 MHz         85951881152914         RFSA-66M/230V           868.5 MHz         8595188114789         RFDW-71/120V/W         120 V AC         868.5 MHz         85951881152914         RFSA-66M/240V           868.5 MHz         8595188116958         RFDW-71/120V/W         120 V AC         868.5 MHz         85951881181563         RFSA-66M/240V           868.5 MHz         8595188116958         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188116026         RFU5-61/120V           868.5 MHz         8595188180770         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz					916 MHz	8595188174923	RFJA-32B/120V
868.5 MHz         8595188176859         RFGB-240/W         2x CR2032         868.5 MHz         8595188137003         RFSA-61M/230V           868.5 MHz         8595188176866         RFGB-240/B         2x CR2032         868.5 MHz         859518811599         RFSA-61M/230V           868.5 MHz         8595188176863         RFGW-71/230V/W         230 V AC         868.5 MHz         8595188142823         RFSA-66M/24V           868.5 MHz         859518814789         RFDW-71/230V/W         230 V AC         868.5 MHz         8595188152914         RFSA-66M/24V           868.5 MHz         8595188144233         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188152914         RFSA-66M/24V           868.5 MHz         859518814203         RFDW-71/120V/W         120 V AC         868.5 MHz         859518815291         RFSA-66M/24V           868.5 MHz         859518816059         RFDW-71/120V/W         120 V AC         868.5 MHz         859518815268         RFSA-61/120V           868.5 MHz         859518818049         RFDW-271/W         230 V AC         868.5 MHz         8595188145268         RFSC-61 French           868.5 MHz         8595188180770         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145202         RFSC-61 French           868.5 MHz         85	868.5 MHz	8595188176835	RFGB-220/W	2x CR2032	868.5 MHz	8595188157681	RFJA-32B/24V DC
868.5 MHz         8595188176866         RFGB-240/B         2x CR2032         968.5 MHz         85951881549         RFSA-61MI/230V           868.5 MHz         85951881159838         RFDW-71/230V/W         230 V AC         868.5 MHz         859518814223         RFSA-66M/230V           868.5 MHz         859518811789         RFDW-71/230V/W         230 V AC         868.5 MHz         8595188152914         RFSA-66M/240V           868.5 MHz         859518811789         RFDW-71/120V/W         120 V AC         868.5 MHz         859518815504         RFSA-66M/240V           868.5 MHz         859518814223         RFDW-71/120V/W         120 V AC         868.5 MHz         859518815504         RFSA-66M/240V           868.5 MHz         8595188176958         RFDW-271/W         230 V AC         868.5 MHz         859518815507         RFUS-61/230V           868.5 MHz         8595188180764         RF DW-271/W         230 V AC         868.5 MHz         8595188145268         RFUS-61/120V           868.5 MHz         8595188180764         RF KEY-40/B         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         859518818077         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 British           868.5 MHz         8	868.5 MHz	8595188176842	RFGB-220/B	2x CR2032			
Image: stype in the s	868.5 MHz	8595188176859	RFGB-240/W	2x CR2032	868.5 MHz	8595188137003	RFSA-61M/230V
868.5 MHz         8595188141789         RFDW-71/230V/B         230 V AC         868.5 MHz         8595188152914         RFSA-66M/24           868.5 MHz         8595188159852         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188115261         RFSA-66M/230V           868.5 MHz         8595188144223         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188181563         RFSA-66M/240V           868.5 MHz         8595188176958         RFDW-71/W         230 V AC         868.5 MHz         8595188181563         RFDS-66M/240V           868.5 MHz         859518816059         RFDW-71/B         230 V AC         868.5 MHz         859518815270         RFUS-61/120V           868.5 MHz         8595188180740         RF KEY-40/W         1x CR2032         868.5 MHz         859518814562         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-40/W         1x CR2032         868.5 MHz         859518814562         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         859518814562         RFSC-61 British           868.5 MHz         8595188145769         RF FLO/M         2x 1.5 V AAA         868.5 MHz         859518816077         RFOE-71B/230V           868.5 MHz         85	868.5 MHz	8595188176866	RFGB-240/B	2x CR2032	868.5 MHz	8595188181549	RFSA-61MI/230V
868.5 MHz         8595188141789         RFDW-71/230V/B         230 V AC         868.5 MHz         8595188152914         RFSA-66M/24           866.5 MHz         8595188159852         RFDW-71/120V/W         120 V AC         868.5 MHz         85951881655         RFSA-66M/230V           868.5 MHz         8595188144223         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188181556         RFSA-66M/240V           868.5 MHz         8595188176958         RFDW-71/180V/W         120 V AC         868.5 MHz         8595188181563         RFSA-66M/240V           868.5 MHz         8595188176958         RFDW-71/180V/W         230 V AC         868.5 MHz         8595188182670         RFUS-61/120V           868.5 MHz         8595188180767         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145602         RFSC-61 French           868.5 MHz         859518818077         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         859518818077         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         859518818077         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 British           868.5 MHz							
868.5 MHz         8595188159852         RFDW-71/120V/W         120 V AC         868.5 MHz         8595188181556         RFSA-66M//230V           868.5 MHz         8595188144223         RFDW-71/120V/B         120 V AC         868.5 MHz         8595188181563         RFSA-66M//23V           868.5 MHz         8595188176958         RFDW-271/W         230 V AC         868.5 MHz         8595188180429         RFDW-271/B         230 V AC         868.5 MHz         8595188180720         RFUS-61//230V           868.5 MHz         8595188180429         RFDW-271/W         230 V AC         916 MHz         8595188145268         RFUS-61//230V           868.5 MHz         8595188180740         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145602         RFSC-61 French           868.5 MHz         8595188180751         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         8595188180751         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         8595188143769         RF FPilot/W         2x 1.5 V AAA         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         8595188143769         RF FPilot/W         2x 1.5 V AAA         868.5 MHz <td>868.5 MHz</td> <td>8595188159838</td> <td>RFDW-71/230V/W</td> <td>230 V AC</td> <td>868.5 MHz</td> <td>8595188142823</td> <td>RFSA-66M/230V</td>	868.5 MHz	8595188159838	RFDW-71/230V/W	230 V AC	868.5 MHz	8595188142823	RFSA-66M/230V
868.5 MHz         8595188144223         RFDW-71/120V/B         120 V AC         868.5 MHz         859518811563         RFSA-66M/24V           868.5 MHz         8595188176958         RFDW-271/W         230 V AC         868.5 MHz         8595188180209         RFDW-271/B         230 V AC           868.5 MHz         8595188180409         RFDW-271/B         230 V AC         868.5 MHz         8595188185268         RFUS-61/20V           868.5 MHz         8595188180740         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145602         RFSC-61 French           868.5 MHz         8595188180757         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 French           868.5 MHz         8595188180757         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145424         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188180627         RFSC-61 French           868.5 MHz         8595188180759         RF FLY-60/W         1x CR2032         868.5 MHz         8595188180627         RFDC-61           868.5 MHz         8595188180759         RF FLY-60/W         2x 1.5 V AAA         8595188145121         RFDL-71B/230V           868.5 MHz         8595188	868.5 MHz	8595188141789	RFDW-71/230V/B	230 V AC	868.5 MHz	8595188152914	RFSA-66M/24V
Image: Marking	868.5 MHz	8595188159852	RFDW-71/120V/W	120 V AC	868.5 MHz	8595188181556	RFSA-66MI/230V
868.5 MHz         8595188180429         RFDW-271/B         230 V AC         916 MHz         8595188152570         RFUS-61/120V           868.5 MHz         8595188180740         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145020         RFSC-61 French           868.5 MHz         8595188180757         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188145169         RF FIDet/M         2x 1.5 V AAA         868.5 MHz         8595188180627         RFDEL-71B/230V           868.5 MHz         859518815483         RFSA-11B/230V         230 V AC         868.5 MHz         859518815228         RFDEL-76M/230V           868.5 MHz	868.5 MHz	8595188144223	RFDW-71/120V/B	120 V AC	868.5 MHz	8595188181563	RFSA-66MI/24V
868.5 MHz         8595188180429         RFDW-271/B         230 V AC         916 MHz         8595188152570         RFUS-61/120V           868.5 MHz         8595188180740         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145020         RFSC-61 French           868.5 MHz         8595188180757         RF KEY-40/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145620         RFSC-61 French           868.5 MHz         8595188145169         RF FIDet/M         2x 1.5 V AAA         868.5 MHz         8595188180627         RFDEL-71B/230V           868.5 MHz         859518815483         RFSA-11B/230V         230 V AC         868.5 MHz         859518815228         RFDEL-76M/230V           868.5 MHz							
Image: style	868.5 MHz	8595188176958	RFDW-271/W	230 V AC	868.5 MHz	8595188145268	RFUS-61/230V
868.5 MHz         8595188180757         RF KEY-40/B         1x CR2032         868.5 MHz         8595188145626         RFSC-61 Schuko           868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145442         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/B         1x CR2032         868.5 MHz         8595188145442         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/B         1x CR2032         868.5 MHz         8595188145442         RFSC-61 British           868.5 MHz         8595188143769         RF FEIot/W         2x 1.5 V AAA         868.5 MHz         8595188145121         RFDEL-71B/230V           868.5 MHz         8595188145169         RF Pilot/M         2x 1.5 V AAA         868.5 MHz         859518815121         RFDEL-71B/230V           868.5 MHz         8595188145169         RFSA-11B/20V         230 V AC         868.5 MHz         859518815228         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/20V         120 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151642         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           868.5 MHz	868.5 MHz	8595188180429	RFDW-271/B	230 V AC	916 MHz	8595188152570	RFUS-61/120V
868.5 MHz         8595188180757         RF KEY-40/B         1x CR2032         868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145626         RFSC-61 Schuko           868.5 MHz         8595188180771         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145442         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/B         1x CR2032         868.5 MHz         8595188145442         RFSC-61 British           868.5 MHz         8595188143769         RF KEY-60/B         1x CR2032         868.5 MHz         8595188180627         RFOSC-61           868.5 MHz         8595188143769         RF Pilot/W         2x 1.5 V AAA         868.5 MHz         8595188145121         RFDEL-71B/230V           868.5 MHz         8595188145169         RF Pilot/A         2x 1.5 V AAA         868.5 MHz         8595188151228         RFDEL-71B/230V           868.5 MHz         8595188136839         RFSA-11B/20V         230 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188142809         RFDL-76M/230V           868.5 MHz         8595188151504         RFSA-61B/230V         230 V AC         868.							
868.5 MHz         8595188180764         RF KEY-60/W         1x CR2032         868.5 MHz         8595188145742         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/B         1x CR2032         868.5 MHz         8595188145742         RFSC-61 British           868.5 MHz         8595188180771         RF KEY-60/B         1x CR2032         868.5 MHz         8595188180627         RFOC-61           868.5 MHz         8595188143769         RF Pilot/W         2x 1.5 V AAA         868.5 MHz         8595188145121         RFDEL-71B/230V           868.5 MHz         8595188145169         RF Pilot/A         2x 1.5 V AAA         868.5 MHz         8595188145121         RFDEL-71B/230V           868.5 MHz         8595188136839         RFSA-11B/230V         230 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDA-771B           916 MHz	868.5 MHz	8595188180740	RF KEY-40/W	1x CR2032	868.5 MHz	8595188145602	RFSC-61 French
Accord of the second	868.5 MHz	8595188180757	RF KEY-40/B	1x CR2032	868.5 MHz	8595188145626	RFSC-61 Schuko
Image: Market	868.5 MHz	8595188180764	RF KEY-60/W	1x CR2032	868.5 MHz	8595188145442	RFSC-61 British
Accord of the second	868.5 MHz	8595188180771	RF KEY-60/B	1x CR2032			
868.5 MHz         8595188145169         RF Pilot/A         2x 1.5 V AAA         868.5 MHz         8595188145121         RFDEL-71B/230V           868.5 MHz         8595188136839         RFSA-11B/230V         230 V AC         868.5 MHz         8595188152228         RFDEL-71B/120V           916 MHz         8595188151436         RFSA-11B/230V         120 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188182096         RFDEL-76M/120V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188182096         RFDEL-76M/120V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/230V         120 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/24V         120 V AC         868.5 MHz         8595188148979         RFDAC-71B           868.5 MHz         8595188151467         RFSA-61B/24V         120 V AC         868.5 MHz         8595188148979         RFDEL-71M/230V					868.5 MHz	8595188180627	RFOSC-61
Image: Constraint of the system of	868.5 MHz	8595188143769	RF Pilot/W	2x 1.5 V AAA			
868.5 MHz         8595188136839         RFSA-11B/230V         230 V AC         6         6         6           916 MHz         8595188151436         RFSA-11B/20V         120 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188182096         RFDEL-76M/120V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           868.5 MHz         8595188151504         RFSA-61B/230V         120 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/24V         120 V AC         868.5 MHz         85951881482090         RFDAC-71B           868.5 MHz         8595188151467         RFSA-61B/24V         120 V AC         868.5 MHz         8595188148979         RFDEL-71M/230V	868.5 MHz	8595188145169	RF Pilot/A	2x 1.5 V AAA	868.5 MHz	8595188145121	RFDEL-71B/230V
916 MHz         8595188151436         RFSA-11B/120V         120 V AC         868.5 MHz         8595188182058         RFDEL-76M/230V           868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188182096         RFDEL-76M/230V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/24V         120 V AC         120 V AC         868.5 MHz         8595188142809         RFDAC-71B           868.5 MHz         8595188151467         RFSA-61B/24V         12-24 V AC / DC         868.5 MHz         8595188148979         RFDEL-71M/230V					868.5 MHz	8595188152228	RFDEL-71B/120V
868.5 MHz         8595188151399         RFSA-11B/24V         12-24 V AC / DC         868.5 MHz         8595188182096         RFDEL-76M/120V           868.5 MHz         8595188136242         RFSA-61B/230V         230 V AC         868.5 MHz         8595188142809         RFDAC-71B           916 MHz         8595188151504         RFSA-61B/120V         120 V AC         868.5 MHz         8595188142809         RFDAC-71B           868.5 MHz         8595188151647         RFSA-61B/24V         120 V AC         120 V AC         120 V AC         120 V AC         868.5 MHz         8595188148979         RFDEL-71M/230V	868.5 MHz	8595188136839	RFSA-11B/230V	230 V AC			
Image: Normal System         Image: No	916 MHz	8595188151436	RFSA-11B/120V	120 V AC	868.5 MHz	8595188182058	RFDEL-76M/230V
916 MHz         8595188151504         RFSA-61B/120V         120 V AC           868.5 MHz         8595188151467         RFSA-61B/24V         12–24 V AC / DC         868.5 MHz         8595188148979         RFDEL-71M/230V	868.5 MHz	8595188151399	RFSA-11B/24V	12-24 V AC / DC	868.5 MHz	8595188182096	RFDEL-76M/120V
916 MHz         8595188151504         RFSA-61B/120V         120 V AC           868.5 MHz         8595188151467         RFSA-61B/24V         12–24 V AC / DC         868.5 MHz         8595188148979         RFDEL-71M/230V							
868.5 MHz         8595188151467         RFSA-61B/24V         12-24 V AC / DC         868.5 MHz         8595188148979         RFDEL-71M/230V	868.5 MHz	8595188136242	RFSA-61B/230V	230 V AC	868.5 MHz	8595188142809	RFDAC-71B
	916 MHz	8595188151504	RFSA-61B/120V	120 V AC			
868.5 MHz 8595188153041 RFDEL-71M/120V	868.5 MHz	8595188151467	RFSA-61B/24V	12-24 V AC / DC	868.5 MHz	8595188148979	RFDEL-71M/230V
					868.5 MHz	8595188153041	RFDEL-71M/120V

Frequency	EAN	Туре	Supply voltage					
868.5 MHz	8595188146814	RFDA-73M/RGB	12 - 24 V DC					
868.5 MHz	8595188145947	RFDSC-71 French	230 - 250 V AC					
868.5 MHz	8595188145954	RFDSC-71 Schuko	230 - 250 V AC					
868.5 MHz	8595188145466	RFDSC-71 British	230 - 250 V AC					
868.5 MHz	8595188142861	RFTC-10/G***	2x 1.5 V AAA					
868.5 MHz	8595188148641	RFTC-50/G**	2x 1.5 V AAA					
868.5 MHz	8595188135849	RFSTI-11B/230V	230 V AC					
868.5 MHz	8595188152396	RFSTI-11B/120V	120 V AC					
868.5 MHz	8595188152419	RFSTI-11B/24V	12 - 24 V AC/DC					
868.5 MHz	8595188131759	RFTI-10B	1x CR2477					
	8595188110075	TC-0						
	8595188110617	TC-3						
	8595188110082	TC-6						
	8595188110099	TC-12						
	8595188140591	TZ-0						
	8595188110600	TZ-3						
	8595188110594	TZ-6	+ adapter VA80					
	8595188110587	TZ-12	+ adapter VA80					
			+ adapter VA80					
	8595188181976	TELVA-2 230V, NC	+ adapter VA80					
	8595188181969	TELVA-2 /230V, NO						
	8595188181990	TELVA-2 24V, NC						
	8595188181983	TELVA-2 24V NO						
868.5 MHz	8595188139274	RFIM-20B	1x CR2477					
868.5 MHz	8595188137188	RFIM-40B	2x CR2032					
			1x 3.6V LS 14500 Li-SOCI2 AA					
868.5 MHz	8595188142847	RFSG-1M	110 - 230 V AC					
868.5 MHz	8595188181464	RFWS-100						







**RF** sets

Lighting

Accesories

•	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Frequency	EAN	Туре	Supply voltage				
868.5 MHz	8595188148603	RFSF-1B	1x CR2477				
868.5 MHz	8595188150095	RFSF-1B+FP-1	1x CR2477				
	8595188147064	FP-1					
868.5 MHz	8595188176828	RFSF-100	2x 1.5 V AAA				
868.5 MHz	8595188147071	RFSOU-1	2x 1.5 V AAA				
868.5 MHz	8595188150293	RFMD-100	2x 1.5 V AA				
868.5 MHz	8595188150279	RFWD-100	1x CR 2032				
868.5 MHz	8595188143738	RF Touch-B**	100 - 230 V AC				
868.5 MHz	8595188131711	RF Touch-W <sup>1</sup>	100-230V AC / 12V DC				
868.5 MHz	8595188145107	RFRP-20 French	230 - 250 V AC				
868.5 MHz	8595188145473	RFRP-20 Schuko	230 - 250 V AC				
868.5 MHz	8595188145480	RFRP-20 British	230 - 250 V AC				
868.5 MHz	8595188180443	eLAN-RF-103	5V DC / 0.5A				
868.5 MHz	8595188180849	eLAN-RF-Wi-103	5V DC / 1A				
868.5 MHz	8595188134576	RFTC-150/G**	2x 1.5 V AAA				
868.5 MHz	8595188149341	RFSAI-161B/230V	230 V AC				
868.5 MHz	8595188134040	RFSAI-161B/120V	120 V AC				
868.5 MHz	8595188149150	RFSTI-111B/230V	230 V AC				
868.5 MHz	8595188134095	RFSTI-111B/120V	120 V AC				
868.5 MHz	8595188134323	RFSA-166M/230V	110 - 230 V AC				
868.5 MHz	8595188145039	RFAF/USB					
	8595188161862	AN-I					
	8595188190121	AN-E					

\* white cover / white frame, BASE design

\*\* white / white \*\*\* white / white / white





**ELKO EP, s.r.o.** | Palackeho 493 | 769 01 Holesov, Vsetuly | Czech Republic phone: +420 573 514 221 | fax: +420 573 514 227 | elko@elkoep.com | www.elkoep.com

Published: 02/2021 | Modifications or amendments reserved | © Copyright ELKO EP, s.r.o. | 1st edition