



inELS RFTI-10B Wireless Temperature Sensor Instruction Manual

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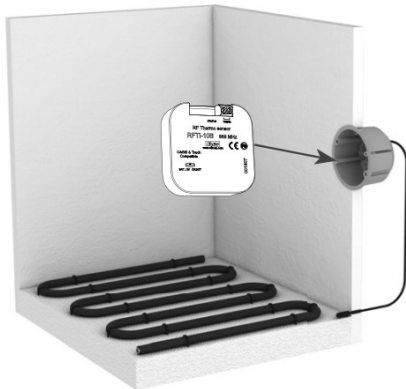
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Characteristics

- The temperature sensor measures the temperature by internal sensor, which it sends in regular intervals to the system unit. Option of connecting an external sensor to the terminals THERM.
- The temperature sensor can be used in one of two ways:
 - For displaying the measured temperature (from a garage, balcony, cellar, garden) on the display of the system unit or in the application.
 - For measuring temperature, which it sends to the system unit, which may control the heating based on the set temperature program (electric underfloor heating, air conditioning, boiler, etc.).
- These can be combined with system units: smart RF box eLAN-RF or touch unit RF Touch.
- It measures temperature in a range of -20 – 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Battery power (3 V / 1x CR2477 – included in supply) with battery life of around 1 year based on frequency of use.
- The temperature sensor can be placed anywhere thanks to battery power.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol iNELS RF Control.
- External sensor TC (0 ..+70 °C) or TZ (-40 ..+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

Assembly

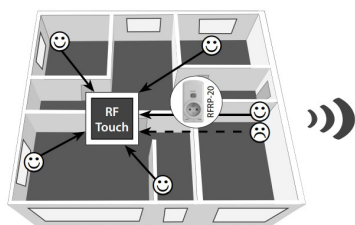
mounting in an installation box


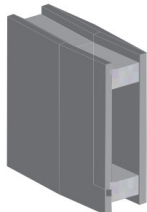

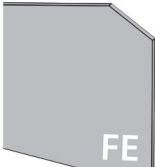



Avoid rapid temperature changes, direct sunlight and excessive moisture. The temperature actuator should not be located near windows or heating equipment, etc., which could affect the internal temperature sensor.



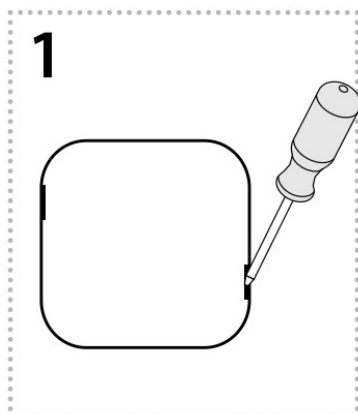
Radio frequency signal penetration through various construction materials



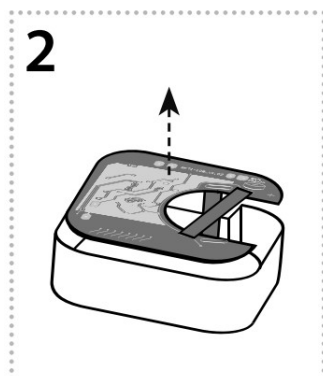
				
60 – 90 %	80 – 95 %	20 – 60 %	0 – 10 %	80- 90 %
brick walls	wooden structures with plaster boards	reinforced concrete	metal partitions	common glass

Insertion and replacement of a battery

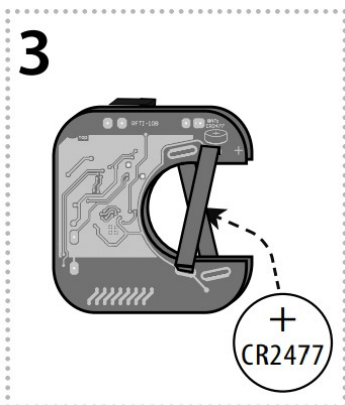
1. Using a screwdriver, carefully remove the rear cover



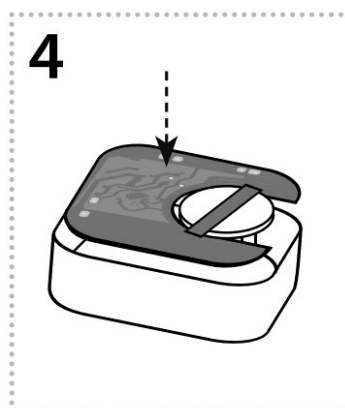
2. Carefully remove the device from the box.



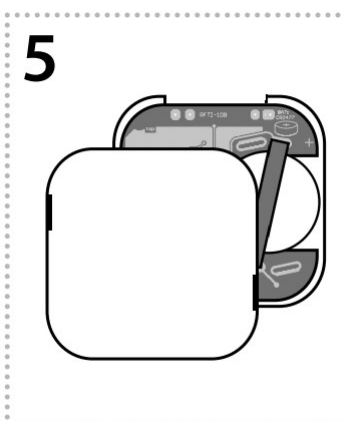
3. Slide the CR2477 battery into the battery holder. Observe the polarity.



4. Insert the device into the box.

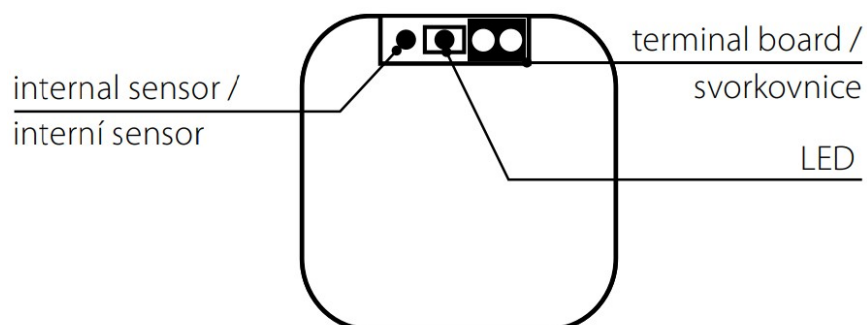


5. Snap on the rear cover.



Indication

- Terminal board – connection for an external temperature sensor.
- LED – indication of transmission of an RF signal.



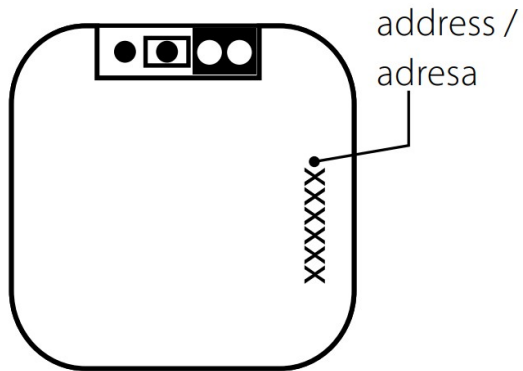
Programming with the RF control unit RF Touch (eLAN-RF)

Description of function

RFTI-10B measures the temperature with both an internal and external sensor, and sends data in regular intervals to the RF Touch (eLAN-RF).

Programming

An address listed on the front of the actuator is used for programming and controlling a temperature actuator by RF Touch (eLAN-RF).



Safe handling



When handling a device unboxed it is important to avoid contact with liquids. Never place the device on the conductive pads or objects, avoid unnecessary contact with the components of the device.

Technical parameters

Supply voltage:	1 x 3V battery / baterie CR 2477
Battery life:	1 year / rok
Transmission indication / function:	red / červená LED
Temperature measurement:	1x internal NTC thermistor, 1x external TZ/TC temperature sensor input / 1x interní termistor NTC, 1x vstup na externí teplotní senzor TZ/TC
Temp. measurement range and accuracy:	-20 ... +50°C ; 0.5 °C in the range / z rozsahu
Transmitter frequency:	866 MHz, 868 MHz, 916 MHz
Signal transmission method:	unidirectionally addressed message / jednosměrně adresovaná zpráva
Range in free space:	up to / až 160 m
<u>Other data</u>	
Operating temperature:	-10 ... +50 °C
Operating position:	any / libovolná
Mounting:	glued, free-standing / lepením, volně
Protection:	IP30
Contamination degree:	2
Dimensions:	49 x 49 x 13 mm
Weight:	45 g
Related standards:	EN 60669, EN 300220, EN 301489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC) / EN 60669, EN 300 220, EN 301 489 směrnice RTTE, NVč.426/2000Sb (směrnice 1999/ES)

Attention:

When you instal iNELS RF Control system, you have to keep minimal distance 1 cm between each units. Between the individual commands must be an interval of at least 1s.

Warning

Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualification upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated. Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized – life threat. Due to transmissivity of RF signal, observe correct location of RF components in a building where the installation is taking place. RF Control is designated only for mounting in interiors. Devices are not designated for installation into exteriors and humid spaces. The must not be installed into metal switchboards and into plastic switchboards with metal door – transmissivity of RF signal is then impossible. RF Control is not recommended for pulleys etc. – radiofrequency signal can be shielded by an obstruction, interfered, battery of the transceiver can get fl at etc. and thus disable remote control.



Documents / Resources



[inELS RFTI-10B Wireless Temperature Sensor](#) [pdf] Instruction Manual
RFTI-10B Wireless Temperature Sensor, RFTI-10B, Wireless Temperature Sensor, Temperature Sensor, Sensor

References

- [ELKO EP - Global relay manufacturer • ELKO EP](#)