




inELS RFTI-20 Temperature and Humidity Sensor Instruction Manual

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inELS RFTI-20 Temperature and Humidity Sensor Instruction Manual



RFTI-20

Temperature and humidity sensor



inELS
RF Control

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Characteristics

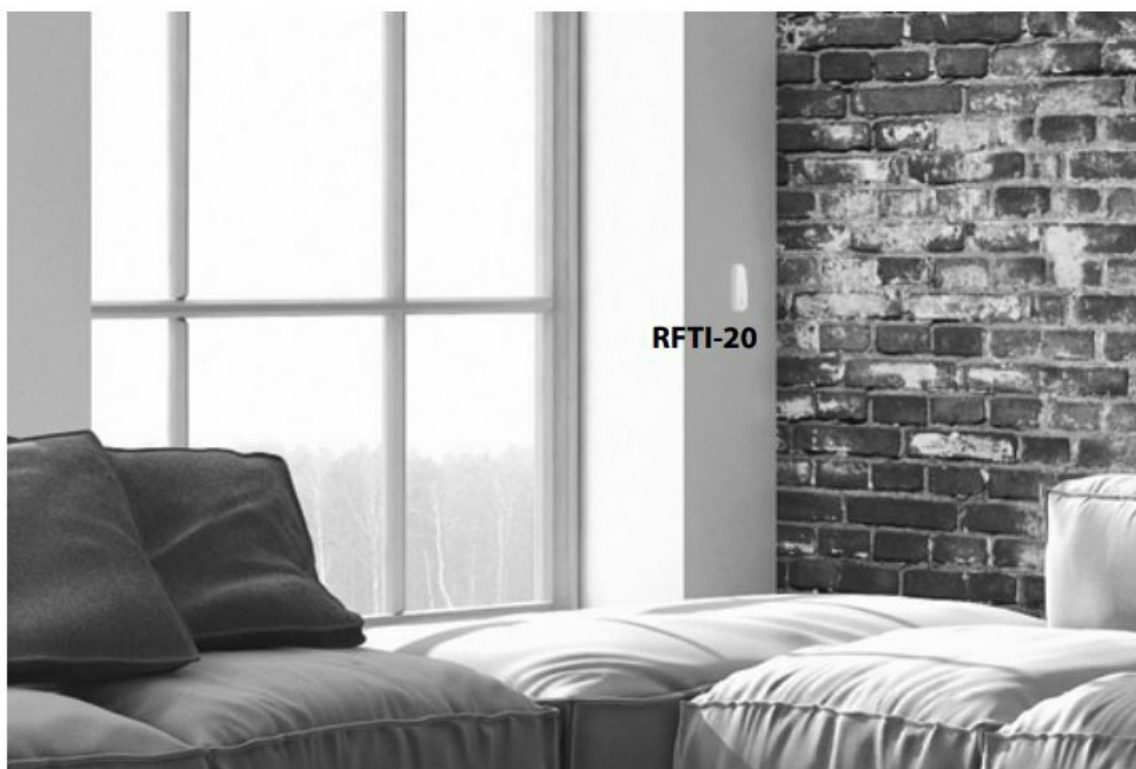
- The temperature and humidity sensor is intended for measuring temperature and humidity in residential and industrial premises.
- With an internal sensor, it measures temperature in the range of -10 to +50 °C and humidity in the range of 0-90% and sends the measured values at regular intervals to the system element (eLAN-RF, RF Touch) for further work with these values.
- When the temperature changes by 0.5 °C or the humidity changes by 5%, it sends the value to the system element immediately, if the value change is smaller, it communicates with the system element at intervals of 1x

every 20 minutes.

- Battery power supply (2x 3 V CR 2032 batteries – included in the package) with lifetime approx. 1 year (according to ambient temperature cycling).
- Range up to 160 m (in open space), in case of insufficient signal between controller and system element use RFRP-20 signal repeater or elements with protocol
- RFIO2 that support this feature.
- Communication frequency with two-way RFIO protocol.

Assembly

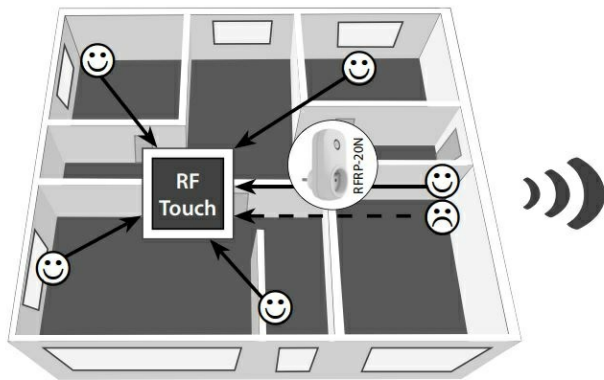
mounting



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.

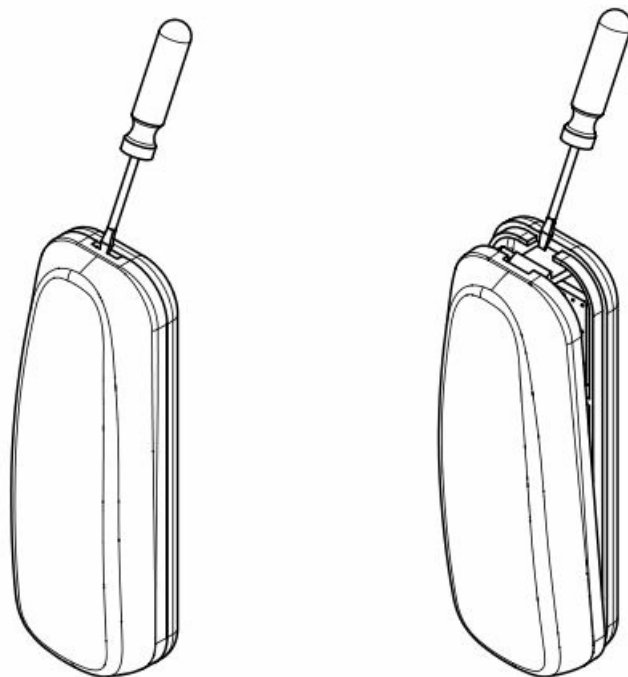
Radio frequency signal penetration through various construction materials



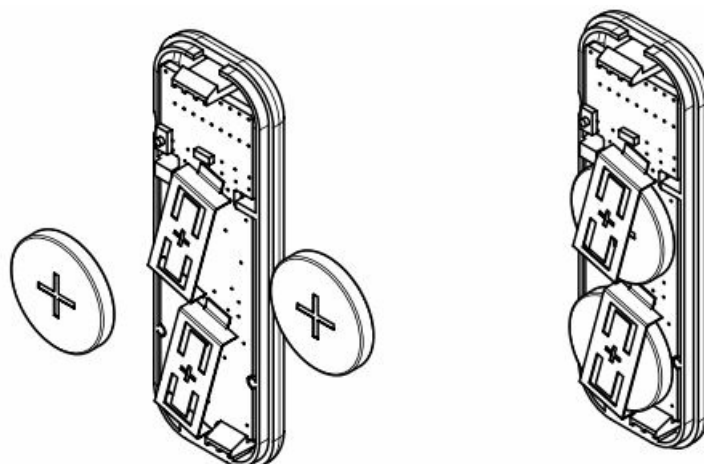
60 - 90 %	80 - 95 %	20 - 60 %	0 - 10 %	80- 90 %
brick walls	wooden structures with plaster boards	reinforced concrete	metal partitions	common glass

Insertion and replacement of a battery

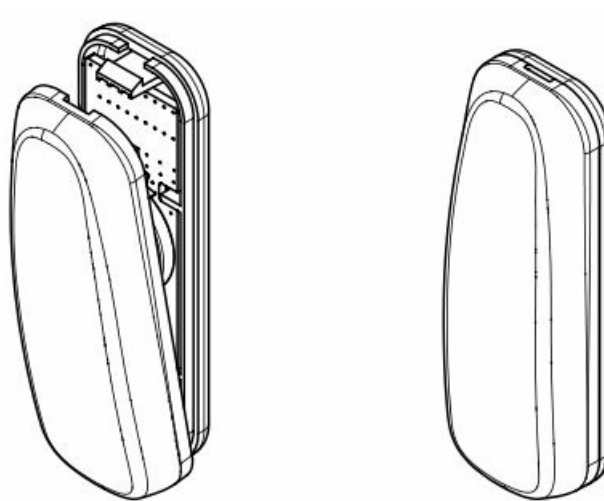
Use the screwdriver carefully snap off the front cover.



Insert 2 CR2032 batteries into the battery holder.
Pay attention to the polarity.



Carefully snap the front cover back on.



Indication

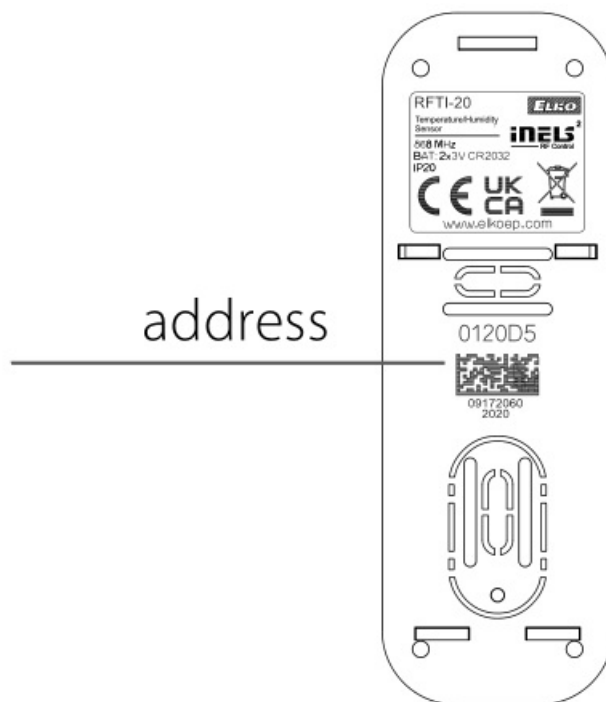
Programming with the RF control unit RF Touch (eLAN-RF)



Description of function

RFTI-20 measures the temperature and humidity with a sensor, and sends data in regular intervals to the RF Touch and other system elements.

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:	2x 3 V battery
Battery life:	cca 1 year
Transmission indication / function:	red
Temperature and humidity measurement:	Integrated digital sensor
Temp. measurement range and accuracy:	-10 .. +50 °C; 0.5 °C in the range
Humidity measurement range and accuracy:	0 .. 90 %; ±3 % in the range
Output	
Signal transmission method:	RFIO
Frequency:	866–922 MHz
Function repeater:	no
Method of signal transmission:	unidirectionally addressed message
Range:	up to
Other data	
Operating temperature:	-10 .. +50 °C
Operating position:	any
Mounting:	glued, free-standing
Protection:	IP30
Contamination degree:	2
Dimensions:	75 x 25 x 13 mm
Weight:	45 g
Related standards:	EN 60730, EN 63044, EN 300 220, EN 301 489

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 flat etc. and thus disable remote control.



Made in Czech Republic

ELKO EP, s.r.o. | Palackého 493 | 769 01 Holešov, Všetuly | Česká republika | e-mail: elko@elkoep.cz EN
Support: +420 778 427 366 | CZ Technická podpora: +420 775 444 609

www.elkoep.com



Documents / Resources

	inELS RFTI-20 Temperature and Humidity Sensor [pdf] Instruction Manual RFTI-20 Temperature and Humidity Sensor, RFTI-20, Temperature and Humidity Sensor, Humidity Sensor, Sensor
	inELS RFTI-20 Temperature and Humidity Sensor [pdf] User Manual RFTI-20 Temperature and Humidity Sensor, RFTI-20, Temperature and Humidity Sensor, Humidity Sensor, Sensor

References

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