

FLEXIBLE - FUNCTIONAL - INTELLIGENT



**'INTERRA**  
CERTIFIED R&D CENTER OF AUTOMATION  
*Developer of Uniqueness*



# INTERRA KNX RF

## The wireless solution

Wirelessly expand or supplement KNX systems  
the quick and easy way.

**KNX RF Technology**  
**KNX RF Integration: Seamless configuration in ETS.**  
**KNX RF Solutions**





With INTERRA KNX RF, the operating comfort of the building technology can be easily increased at any time in buildings with an existing KNX system.

**'KNX RF' stands for 'KNX Radio Frequency', i.e. KNX via wireless signal.**

New options for wirelessly controlling light, blinds, scenes and so on can thus be installed anywhere in the building without a great deal of expense and effort, and above all else without any dirt or noise. Whether it's a renovation or even a new-build project, operating points can be installed in locations where cables cannot or should not be laid or where switches cannot

or should not be mounted – be this on walls made of stone, concrete, wood, glass or on furniture surfaces.

INTERRA KNX RF uses 100% of the universal KNX standard 'KNX RF1. R S-Mode' and allows interoperable access to the full functionality of the KNX system.

This means that all KNX products available on the market can be seamlessly integrated in the system.







# Wireless Technology

Scrupulously designed, KNX RF specifications meet the same criteria of interoperability and communication efficiency than KNX TP. In addition to the KNX Secure mechanisms, KNX RF is also suitable for energy harvesting.





# Seamless Integration

Smooth integration, thanks to the brand-independent tool ETS, is the main adjective.

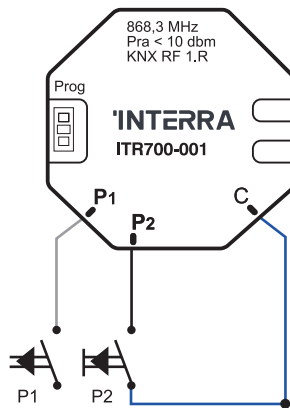
Either directly plugging an USB-RF stick in your computer, or by means of a TP/RF media coupler, the KNX Partner will enjoy a great User Experience integrating your KNX RF devices in any project.

**That KNX RF has been selected as a technology solution to achieve 95% digital metering by 2020 in World is not a coincidence: future-proof and global widespread ensures the long-term investment.**





**ITR700-001**



## PUSHBUTTON WIRELESS INTERFACE

Wireless KNX RF S-Mode transmitter with 2 pushbutton inputs. Built-in Temperature Sensor. Perfect solution for using in conventional installations without placing KNX bus cables. Communication with the KNX Bus must be carried out using a KNX / KNX RF S-Mode media coupler.

### CHARACTERISTICS

The Pushbutton Interface incorporates 2 inputs, each of which can be parameterized individually through the ETS:

- Acting on 1 or 2 independent output channels.
- Function of each input:
  - Switch.
  - Timed Start/Stop.
  - Dimmer.
  - Multiple Switch.
  - Shutter control.
  - Scene control.
  - Fixed value/Forced.

### The Temperature Sensor incorporates different options that must be parameterized:

- Transmission frequency.
- Over-heating or over-cooling alarms.
- Temperature sensor calibration.

It has a Programming key (A).

Programming and commissioning by ETS5.

Flush mounting within an universal box, behind a pushbutton.



**ITR700-002**

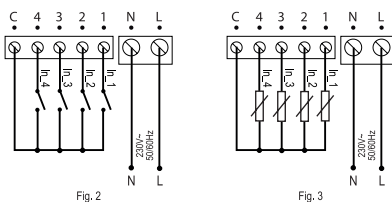
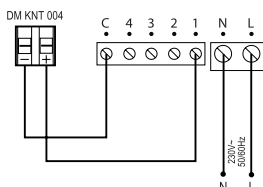


Fig. 2

Fig. 3



## 230V-OPERATED WIRELESS UNIVERSAL INTERFACE

Wireless KNX RF S-Mode transmitter with 4 Analog or Binary Inputs. Incorporates 4 Heating and / or Cooling Control Thermostats.

Perfect solution for using in conventional installations without placing KNX bus cables. Communication with the KNX Bus must be carried out using a KNX / KNX RF S-Mode media coupler.

### CHARACTERISTICS

The Universal Interface incorporates 4 inputs, each of which can be parameterized individually through the ETS:

- Switch.
- Dimmer.
- Multiple Switch.
- Sequential Switch.
- Shutter control.
- Scenes management.
- Sending og Fixed/Forced Value.
- Counter.

### OPERATION

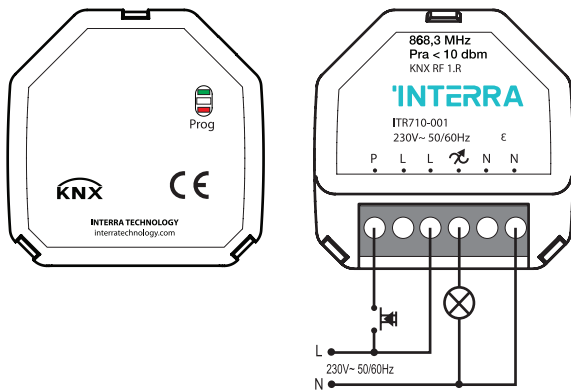
The Interface detects status changes at its inputs and send telegrams depending on the parameterization with the ETS.

Besides that, it also allows the measurement of the temperature and the management of temperature alarms.





**ITR710-001**

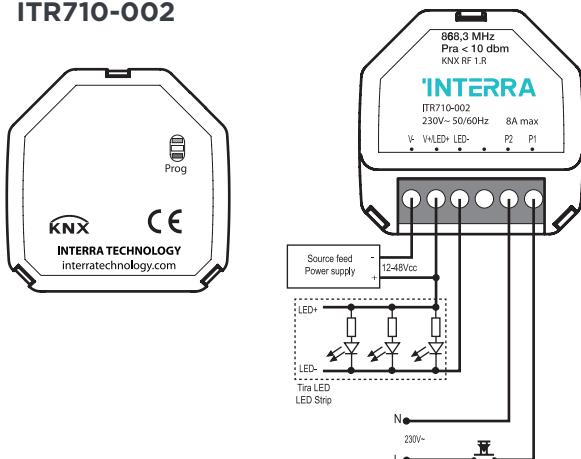


## 1-CHANNEL WIRELESS UNIVERSAL DIMMING ACTUATOR RLC+LED

- Compact 1-channel dimming actuator KNX-RF for flush-mounting (within junction box).
- Perfect solution when retrofitting conventional installations, without the need of installing KNX bus cables.
- For connection to the KNX Bus a KNX to KNX RF S-Mode media coupler is required.
- Different functions configurable via ETS, e.g.:
  - Type of dimming: leading or trailing edge
  - Time for soft-on and soft-off
  - Minimum and maximum dimming level
- Up to 5 Scenes can be stored / called up.
- Staircase lighting timer function with (optional) advanced warning function.
- Integrated cycle function.
- Bi-directional KNX-RF communication.
- Integrated KNX-RF signal repeater (optional) to extend the distance between devices.
- Configurable state in which the output returns after power fault.
- Integrated programming key (A).



**ITR710-002**



## WIRELESS DIMMING ACTUATOR FOR LED STRIPS

- 1-channel KNX RF S-Mode wireless Dimming actuator.
- Valid for the control of single-color low voltage LED Strips. PWM control.
- Communication with the KNX Bus must be carried out using a KNX / KNX RF S-Mode media coupler.

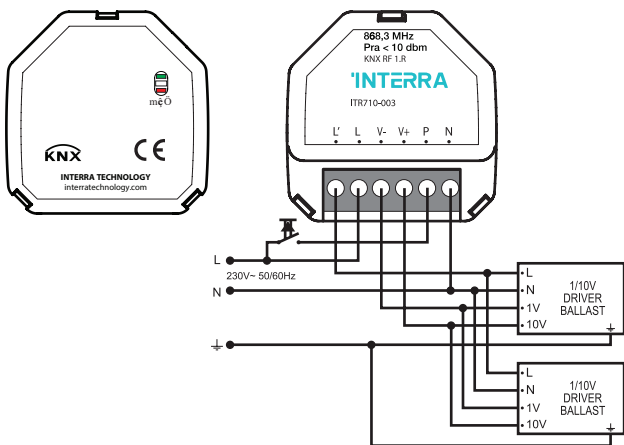
### CHARACTERISTICS

- The Dimming Actuator has different functions which can be configured with ETS:
  - Time of soft on and off.
  - Maximum and minimum dimming level.
  - Behavior after on telegram.
- Allows saving a calling of up to 5 Scenes.
- Staircase time switch and Sequential operation modes.
- Possibility to configure the state in which it returns after a power fault.
- The connection of an auxiliary pushbutton (optional) allows local control of the actuator or some other wireless actuator or connected to the bus, as parameterized in the ETS.
- Programming and commissioning by ETS5.
- Bi-directional KNX-RF communication.
- It incorporates the KNX-RF signal repeater function (optional), which allows to extend the distance between transmitters and receivers.
- Flush-mounting installation within junction box.





**ITR710-003**



## 1/10VDC WIRELESS DIMMING ACTUATOR

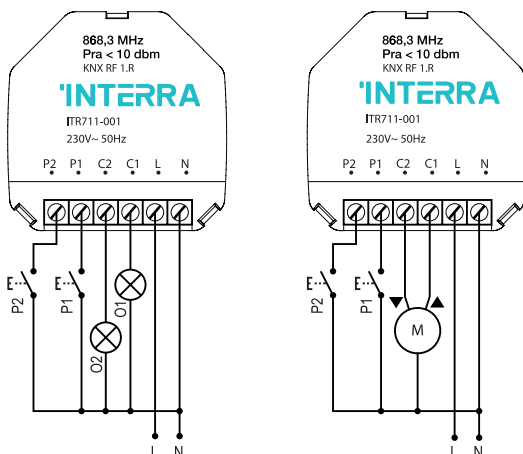
- 1-channel KNX RF S-Mode wireless Dimming actuator.
- Compatible with 1/10VDC Drivers or Ballasts, with LED or Fluorescence lighting.
- Perfect solution for using in conventional installations without placing KNX bus cables.
- Communication with the KNX Bus must be carried out using a KNX / KNX RF S-Mode media coupler.

### CHARACTERISTICS

- The Dimming Actuator has different functions which can be configured with ETS:
  - Time of soft on and off.
  - Maximum and minimum dimming level.
  - Behavior after on telegram.
- Allows saving a calling of up to 5 Scenes.
- Staircase time switch and Sequential operation modes.
- Possibility to configure the state in which it returns after a power fault.
- Output contact (L') which allows disconnecting physically the lamps. L' output is a relay contact that opens or closes the power supply to the ballasts/drivers. Installation can be made without using the relay L' as long as for the user is indifferent that the lamps remain at their minimum brightness and keep continuously supplied, or if the off is done by another external breaking device.
- The connection of an auxiliary pushbutton (optional) allows local control of the actuator or some other wireless actuator or connected to the bus, as parameterized in the ETS.
- Programming and commissioning by ETS5.
- Bi-directional KNX-RF communication with the Bus.
- It incorporates the KNX-RF signal repeater function (optional), which allows to extend the distance between transmitters and receivers.
- Flush-mounting installation within junction box.



**ITR711-001**



## WIRELESS 1-CHANNEL SHUTTER/BLIND ACTUATOR OR 2-CHANNEL SWITCHING ACTUATOR WITH 2 INPUTS FOR PUSHBUTTONS

KNX-RF S-Mode Switching Actuator which can work as:

- 2-channel Switching actuator.
- 1-channel Blind/Shutter actuator.

It has 2 inputs for conventional pushbutton, which can be configured independently, through the ETS: Switching, Dimming, Blind/Shutter Control, Scenes or Value sending.

### CHARACTERISTICS

The 2 outputs can be configured as:

- 1 blind/shutter channel: control of Roller Shutters/Awnings, Venetian Blinds or Venting Louvers.
- 2 switching channels: control of 2 individual loads.

In case it is configured as 1-channel blinds/shutters actuator, the following alarms and functions are available: Wind alarm, Rain alarm, Frost alarm, Sun Protection function, Scene control and Forced function. If it is configured as 2-channel switch actuator, the following functions are available in each channel: Timer, Preset value, Scene control, Logical functions, Forced and Threshold function.





**ITR720-001**

## WIRELESS TEMPERATURE, LUMINOSITY AND HUMIDITY MULTI-SENSOR

Wireless Temperature, Luminosity or Relative Humidity sensor KNX RF S-Mode. Perfect solution for using in conventional installations without placing KNX bus cables. Communication with the KNX Bus must be carried out using a KNX / KNX RF S-Mode media coupler.

### CHARACTERISTICS

The sensor incorporates different options that must be parameterized using the ETS:

- Temperature sensor:
  - Transmission frequency: according to the time or temperature change.
  - Over-heating or over-cooling alarms.
  - Temperature sensor calibration.
- Luminosity sensor:
  - Transmission frequency: according to the time or luminosity change.
  - Sun Protection or Generic Protection Alarms.
  - Luminosity sensor calibration.
- Relative Humidity sensor:
  - Transmission frequency: according to the time or humidity change.
  - Alarms by high or low humidity.
  - Humidity sensor calibration.

It has a Programming key (A).  
Programming and commissioning by ETS5.  
Bi-directional communication.



**ITR750-001**

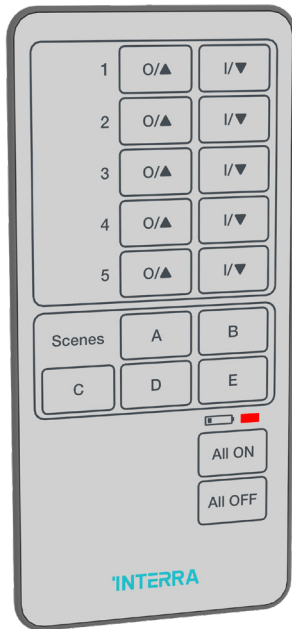
## KNX-RF / KNX-TP MEDIA COUPLER

KNX-RF / KNX-TP media coupler. Bidirectional gateway between Radio-frequency devices and the KNX Bus. It allows the transmission of telegrams from the radio devices to the KNX-TP communication bus and vice versa.

Can be used with devices to control lighting, HVAC, blinds/shutters and general purpose devices.

- The CO KNX 002 comes with 16 RF or TP independent channels.
- The configuration is done using the ETS4.
- The CO KNX 002 has:
  - A: KNX-TP standard connecting terminal.
  - B (TP prog): green/red LED-key for the commissioning by ETS.
  - C: RF working mode selector switch:
  - P: Link Programming.
  - R: Standard operation + Repeater function.
  - S: Standard operation.
  - E: Erase one link.
  - EA: Erase All links.
  - D: Channel selector (up to 16 channels: 0, 1, 2, 3, 4,... F).
  - E (RF prog): green/red LED-key for learning RF devices.





### ITR740-001



## REMOTE CONTROL FOR LIGHTING & BLINDS/SHUTTERS RF ACTUATORS

### LINK PROCEDURE

The remote control has a control knob with 5 positions in order to select the operation mode during the linking procedure:

1. Blinds/Shutters control mode : move up/down blinds or shutters.
2. Switch mode: switch on/off the load.
3. Standard mode: normal operation mode. After doing the link procedure with the actuator, is necessary to set the ITR740-001's knob in this position.
4. Dimming mode: switch on/off and dim the lighting.
5. Scenes mode: save and recall scenes with lighting and/or blinds (move up/down).

In order to link one channel from the ITR740-001 with an actuator, it is necessary to follow these steps:

1<sup>o</sup>) Set the actuator in link mode, according to the instructions given by the manufacturer.

2<sup>o</sup>) Set the ITR740-001's knob in the desired working mode: 1, 2 or 4.

3<sup>o</sup>) Press the ON key from the channel of the ITR740-001 which is going to be linked for more than 1 second.

4<sup>o</sup>) Check the acknowledgment of the actuator according to the instructions given by the manufacturer.

5<sup>o</sup>) Set the control knob of the ITR740-001 at 3 position.

In order to link one scene from the ITR740-001 with an actuator, it is necessary to follow these steps:

1<sup>o</sup>) Set the actuator in link mode, according to the instructions given by the manufacturer.

2<sup>o</sup>) Set the ITR740-001's knob in scenes programming mode: 5.

3<sup>o</sup>) Press the channel key (A, B, C, D or E) for more than 1 second.

4<sup>o</sup>) Check the acknowledgment of the actuator according to the instructions given by the manufacturer.

5<sup>o</sup>) Set the control knob of the ITR740-001 at 3 position.



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