



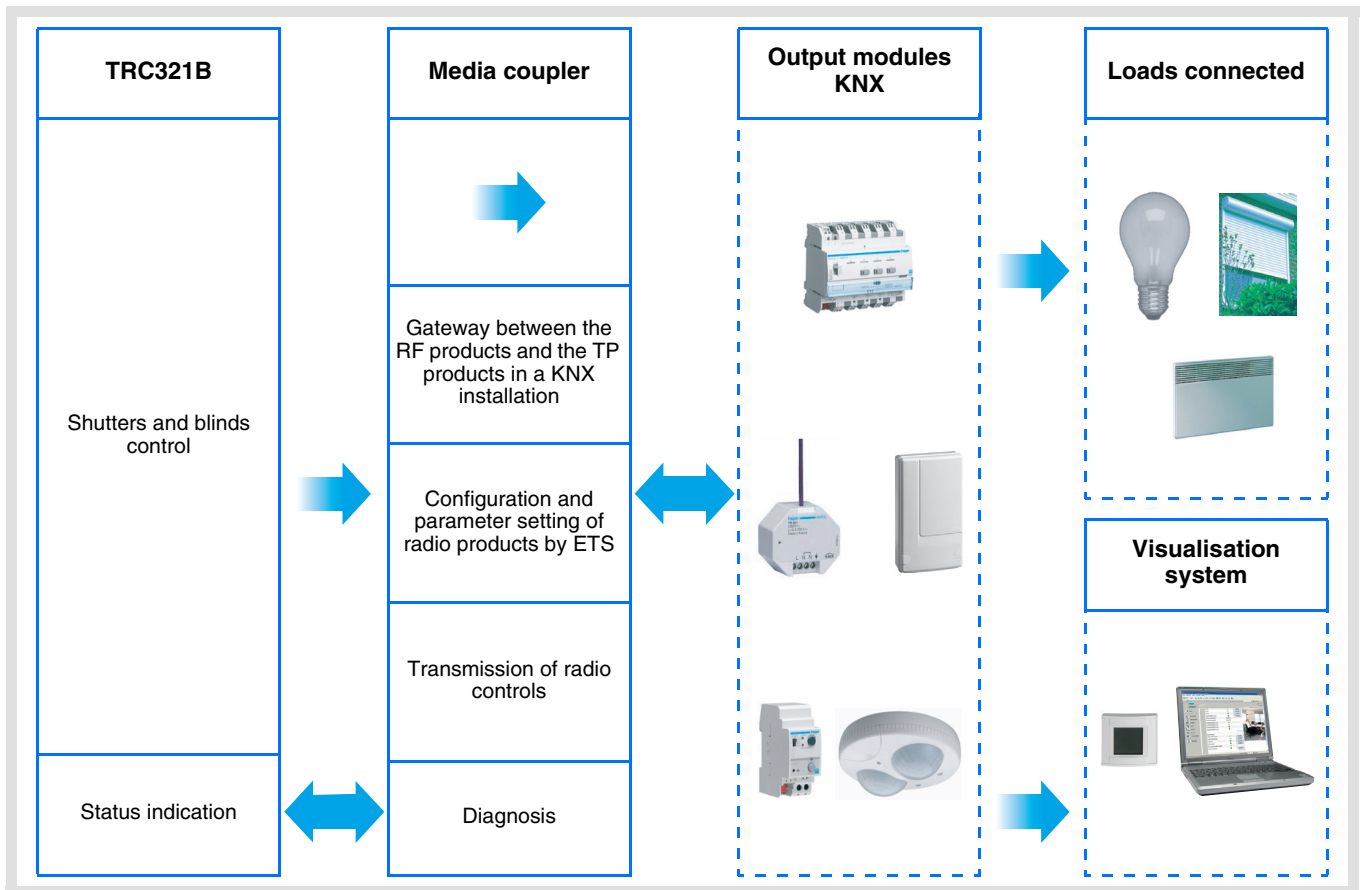
Tebis application software

Luminosity detector RF quicklink

Electrical / Mechanical characteristics: see product user's instructions

- Manufacturers
- Hager Electro
- RF devices
- Blinds and shutters

	Product reference	Product designation	Application software ref.
	TRC321B	Luminosity detector RF	STRC321B



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1. Presentation of the functions

1.1 General points

The luminosity detector RF this document refers to is a Quicklink[®] RF product. It can be recognised by its **cfg** configuration push button. Quicklink[®] indicates the configuration without tools mode.

These products can also be configured to E mode by the TX100 or in S mode by ETS via the media coupler .

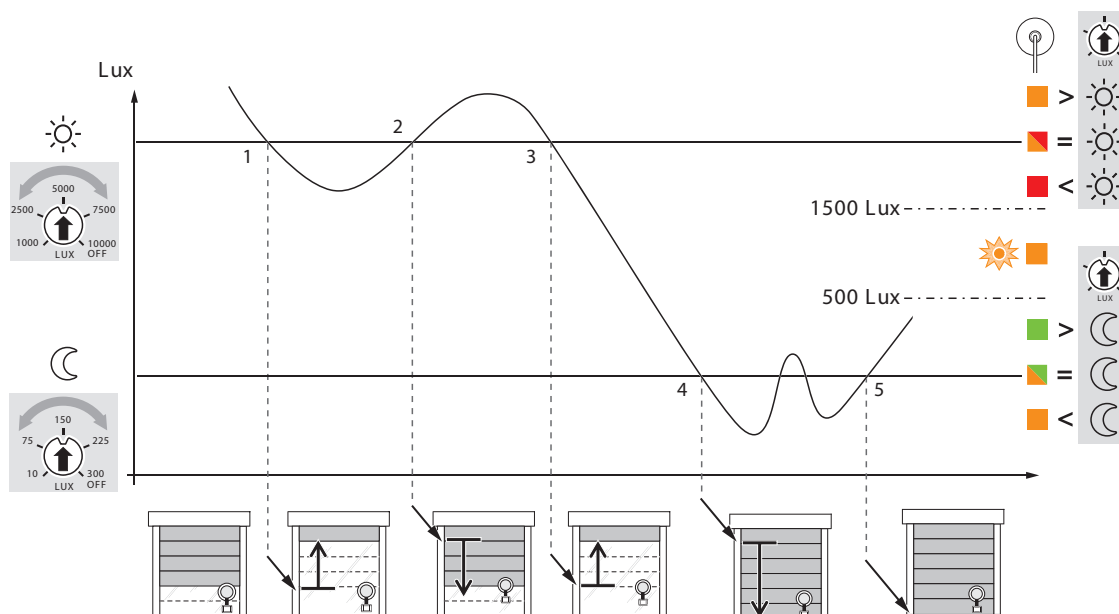
This document describes the configuration principle with the ETS software via the media coupler and the functions available in this mode.

Within the same installation, a single configuration mode may be used.

To reuse a product that has already been programmed in another installation by TX100 or quicklink[®], with ETS, it is necessary to perform a factory reset for the product.

1.2 Description of the product

The luminosity detector is a battery-powered KNX radio transmitter. It is designed for the automatic control of shutters or blinds (see Figure 1). According to the measured luminosity and the thresholds set on the product, it controls the raising or lowering of the shutters and blinds to provide sun protection and/or a dusk function. Luminosity is measured sensor attached to the window with a suction cup. The product does not transmit luminosity values.



- 1: Lux < threshold ☀ = Shutter up
- 2: Lux > threshold ☀ = Shutter descends to the level of the sensor then rises for 1 s to ensure detection again
- 2: Lux > threshold ☀ = Shutter up
- 4: Lux < threshold ☾ = Shutter fully lowered
- 5: Lux < threshold ☾ = No automatic raising

The KNX Up or Down controls are completely dependent:

- On the choice of the function selected on the potentiometers: sun protection (Threshold > 1500 lux) and/or dusk function (threshold < 500 lux),
- On the configuration of the luminosity threshold(s).

These choices and settings are only accessible on the product (no parameters in ETS).

A button on the front of the product allows the user to interrupt automatic operation (no more radio transmissions except for the **Status indication - Battery status** object). The effect of this button can be inhibited by configuration, leading to permanent automatic function.

Compatibility

The luminosity detector can control all the KNX shutter actuators, RF or wired, according to the automatic control function described in figure 1.

Test function

This mode is used to run an accelerated test of your programming (see the product user manual).

Time delay

When the shutter is completely shut, the frequency at which the luminosity is measured switches to 20 mn. During the day, this time delay changes to approximately 15 mn before a control is sent when the threshold is passed.

1.3 Function Description

The luminosity detector is designed for automatic shutter control. It only offers the following 3 objects:

- Input - Up / Down,
- Input - Slat angle / Stop,
- Status indication - Battery Status.

2. Configuration and settings

2.1 Objects List

■ Input - Up / Down

The **Input - Up/Down** object is automatically sent according to manual settings made on the detectors 2 potentiometers (no parameters).

■ Input - Slat angle / Stop

The **Input – Slat angle / Stop** object is automatically sent according to manual settings made on the detector's 2 potentiometers (no parameters). The detector is a shutter controller, it does not cover the slant angle function. Only the stop control is used on this object.

■ Status indication - Battery Status

The **status indication - battery status** object is information sent on the bus when the battery charge reaches a critical level. Information is not sent periodically. It is sent when the critical threshold is reached.

0 = Low level

1 = High level, (Batteries OK). Sent when new batteries are put in.

No parameters.

2.2 Setting parameters

The TRC321B luminosity detector only offers one parameter.

Parameter	Description	Value
Push button automatic operation	<p>This parameter defines utilization of the button on the front of the product.</p> <ul style="list-style-type: none"> • Used: allows the user by pushing the push button to interrupt automatic operation (telegrams are no longer sent each time the opening changes status) and by pushing the button again to re-establish automatic operation, • Not used: in this case, pushing the push button will no longer have any effect (permanent automatic operation). 	<p>Not used, Used</p> <p>Default value: Used</p>

2.3 Configuration with media coupler (ETS version \geq 3.0f)

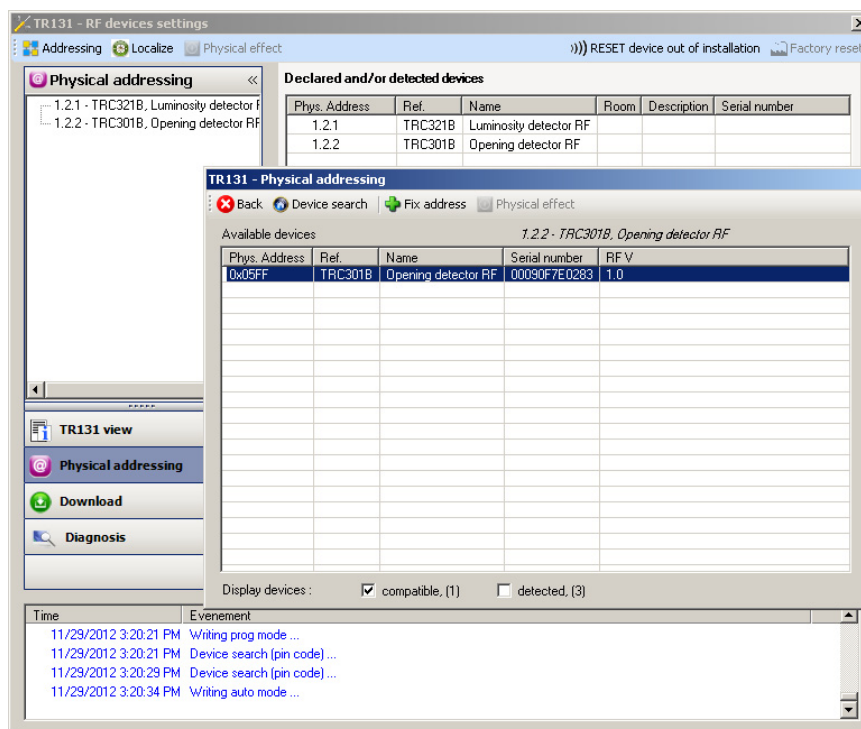
■ Configuration principle

The media coupler enables configuration by ETS of RF devices for a KNX radio installation or a mixed KNX installation including RF devices and wired buses. For normal operation, the radio transmitters operate in a one-direction mode. Configuration takes place in bi-directional mode.

Procedure:

- Create a line reserved for RF devices in your ETS plan. First insert the media coupler into this line, then insert the other RF devices into this line,
 - Perform the programming, parameter settings and group addressing for all the RF products except for the media coupler,
 - Download the physical address of the media coupler. This must be of the type 1.1.0 (always end with a zero),
 - Install the media coupler plug-in: Right-click on the product in the ETS tree structure, then select **edit the parameters**. Windows Administrator rights are necessary to install the plug in.
- ### ■ Physical addressing:
- Click on the button **Physical addressing** to display the physical addressing screen for the plug in,
 - Select the device to be addressed, then click on the field **Addressing** in the menu line at the upper left of the window,
 - Press the **cfg** button for each transmitter to be addressed, then click **Device search** (if the device is not found by the search, perform a **RESET device out of installation**, or manually on the device by pressing the **cfg > 10 s** button)
 - Select the device to be addressed and click on **Attribute address**. The physical addressing of the product is performed. The product is now part of the installation,
 - After downloading the physical address, the symbol appears in front of the product,
 - Repeat this operation for the other radio transmitters.

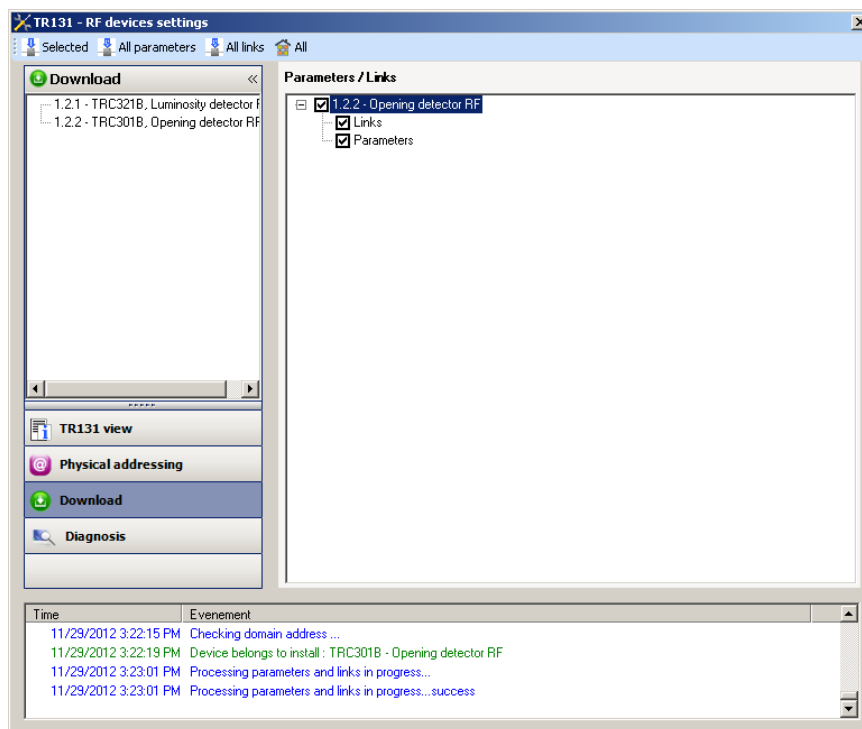
Caution: After an interruption in the above operations greater than 10 mn, it is necessary to press the **cfg** button again on the transmitter devices to be programmed.



■ Downloading the program and the parameters

This operation is performed on the **Download** screen of the plug in.

- Click on **Download** and follow the instructions on the screen.



To test the functions and the KNX radio communication, return to normal use mode and wait 15 s before pressing a control button on a transmitter.

Caution: The media coupler plug-in must be deactivated during the functional tests.

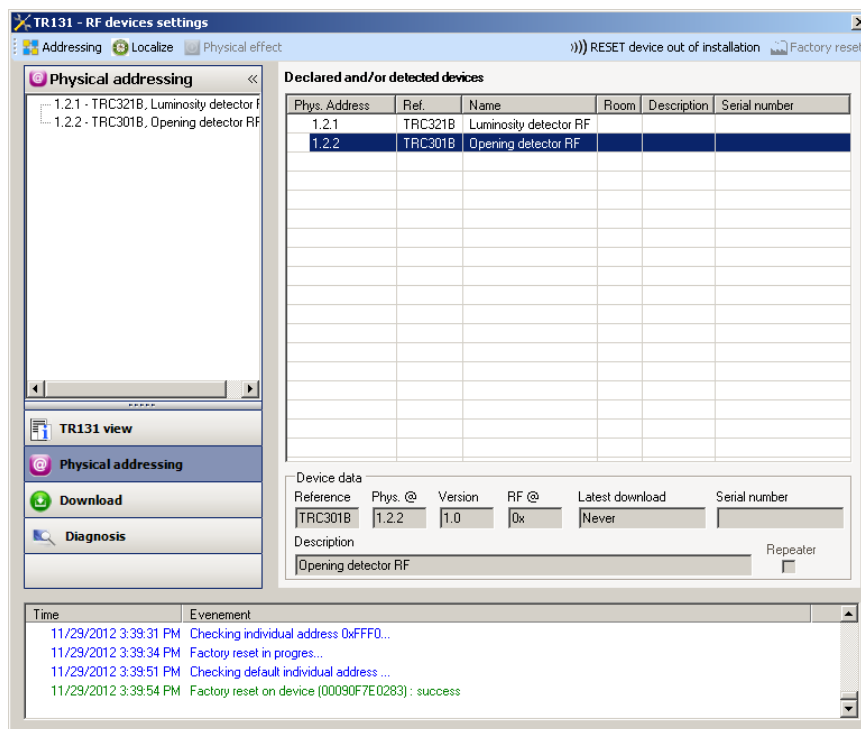
NB: For further information, please refer to the description of the media coupler application software.

3. Factory reset

This function enables the product to be returned to its initial configuration (factory reset). After a device reset, the device can be re-used in a new installation. A factory reset can be performed either directly on the product or by the media coupler plug-in. The latter solution is recommended if the product is part of the installation configured by ETS, which erases the product from the project.

3.1 Factory reset by ETS via the media coupler

- For a product which is part of the installation (known by the media coupler): In the **Physical addressing** menu, select **Factory reset** and then follow the instructions which appear on the screen,
- For a product which is not part of the installation (unknown by the media coupler): In the menu **Physical addressing**, select **RESET device out of installation**, then **Unidirectional device with Addr. button**.




3.2 Factory reset on the product

It is always possible to perform the factory reset directly on the device.

Factory reset on the product:

Do a long key press (> 10 seconds) on the **cfg** push button, release the button when the **cfg** LED blinks, Wait for the **cfg** LED to switch off, indicating that the factory reset has been completed.

Remark:

To reuse a product that has already been programmed in another installation by TX100 or quicklink , with ETS, it is necessary to perform a factory reset for the product.

4. Characteristics

Product	TRC321B
Max. number of group addresses	60
Max. number of links	85

