

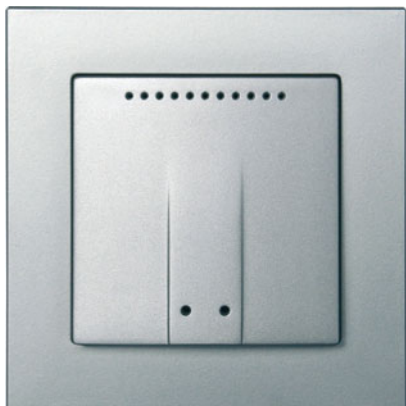


# Indoor Sensor WGTH-UP

For WS1 Color, WS1000 Color, KNX WS1000 Color

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## Technical Specifications and Installation Instructions



The WGTH-UP Indoor Sensor transfers temperature and humidity to the control system via radio. Several separate WGTH-UP can be taught to one control system. The teaching is described in the chapter "Learn wireless connections" (manual of the control system).

The WGTH-UP Indoor Sensor consists of the housing, the sensor PCB/base plate and a frame. As an alternative to the supplied frame, a frame of the switch series used in the building may be used. You will additionally require a junction box (Ø 60 mm, 42 mm deep, not included in scope of delivery).

For power supply (7...30 V DC), e. g. 12 V DC can be tapped from the connection board of the control unit (multifunctional input).

## 1. Installation of the indoor sensor

### 1.1. Installation location

The interior sensor is to be installed flush to the wall surface in a junction box (Ø 60 mm, 42 mm deep) and fitted with a frame as used in the switch range for the building. When selecting the location for installation, ensure that no direct sunlight, radiator or draft from windows or doors can affect the measurement values. For the same reason do not fit the sensor above the central unit. Draft from ducts which lead from other rooms to the junction box in which the sensor is mounted can also lead to incorrect measurement results.



**The indoor sensor must only be installed and used in dry, interior spaces. Avoid condensation.**

### 1.2. Layout

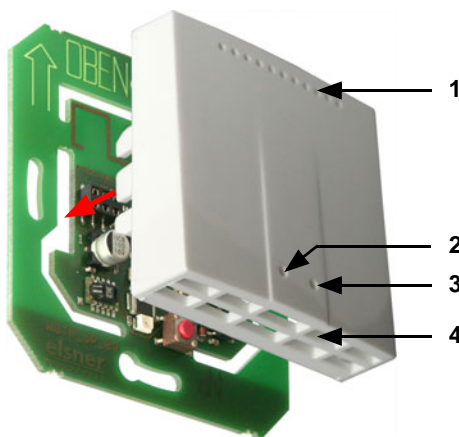


Abb. 1

- 1 Openings for air circulation
- 2 Opening programming LED
- 4 Opening programming button for configuring the device
- 5 Openings for air circulation (BOTTOM)

### 1.3. Rear view

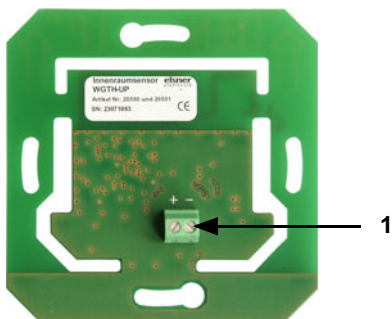


Abb. 2

- 1 Connection for power supply  
7...30 V DC (+/-)

### 1.4. Installation

First install the junction box. Seal the inlet tubes in order to prevent drafts. Connect the power supply +/- to the connector terminals provided for this purpose on the sensor board. Then screw the board/base plate onto the socket. Ensure that the front side with the writing „TOP“ is directing out of the wall and that the arrows point towards the top.

Position the frame of the switching programme. Insert the housing of the sensor firmly onto the base plate using the catches, so that the housing and frame are fixed together.

## 2. Installation notes for the indoor sensor

Never expose the sensor to water (e.g. rain) or dust. This can damage the electronics.

## 3. Notes on installation



**Installation, inspection, commissioning and troubleshooting of the device must only be carried out by a competent electrician.**

Disconnect all lines to be assembled, and take safety precautions against accidental switch-on.

The device is exclusively intended for appropriate use. With each inappropriate change or non-observance of the instructions for use, any warranty or guarantee claim will be void.

After unpacking the device, check immediately for any mechanical damages. In case of transport damage, this must immediately be notified to the supplier.



**If damaged, the device must not be put into operation.**

If an operation without risk may supposedly not be guaranteed, the device must be put out of operation and be secured against accidental operation.

The device must only be operated as stationary system, i.e. only in a fitted state and after completion of all installation and start-up works, and only in the environment intended for this purpose.

Elsner Elektronik does not assume any liability for changes in standards after publication of this instruction manual.

## 4. Technical specifications WGTH-UP

Housing	Plastic (partially painted)
Colours	<ul style="list-style-type: none"> <li>• White, glossy (similar to RAL 9016 Traffic White)</li> <li>• Matt aluminium</li> </ul>
Installation	Flush-mounted (installed in wall within junction box Ø 60 mm, 42 mm deep)
Protection rating	IP 20
Dimensions	Housing approx. 55 × 55 (W × H, mm) Installation depth approx. 15 mm Backplate approx. 71 × 71 (W × H, mm)
Total weight	approx. 50 g
Ambient temperature	Operating -20...+70°C, Storage -55...+90°C
Ambient air humidity	max. 80% rH, avoid condensation
Operating voltage	7...30 V DC
Current	max. 35 mA
Data output	Wireless
Wireless frequency	868.2 MHz
Protocol	Proprietary protocol (Elsner RF)
Temperature measurement range	-40...+100°C
Resolution (temperature)	0.1°C
Accuracy (temperature)	± 0.4°C at 25°C
Humidity measurement range	0...100% rH
Resolution (humidity)	0,3%
Accuracy (humidity)	0...20 % = ± 5% rH 20...80 % = ± 3% rH 80...100 % = ± 5% rH
Drift (humidity)	± 0.5% rH per year in normal atmosphere