



# homematic HmIPW-STH Wired Temperature and Humidity Sensor Indoor User Manual

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Humidity Sensor Indoor User Manual

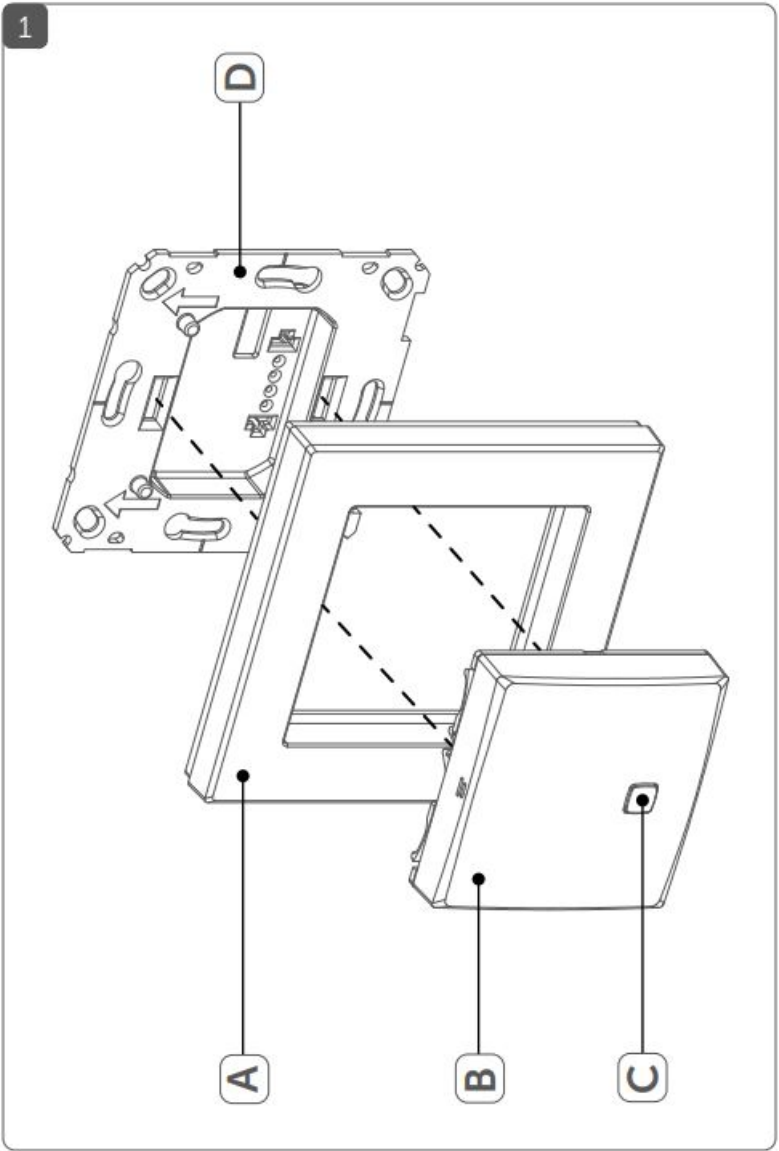
homematic<sup>IP</sup>  
wired

Installation instruction and  
operating manual

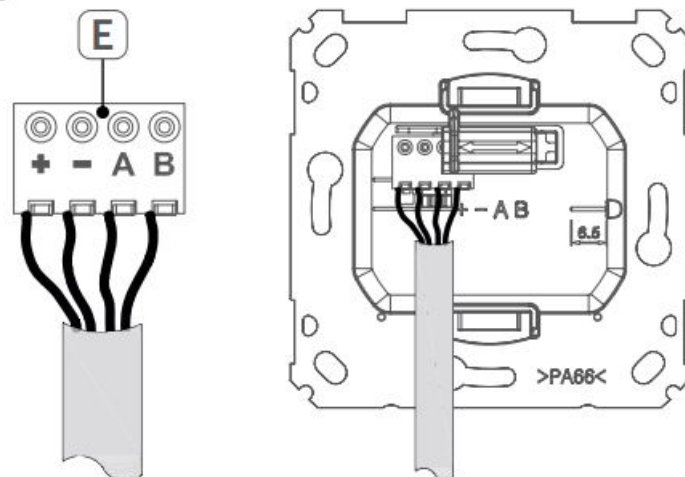
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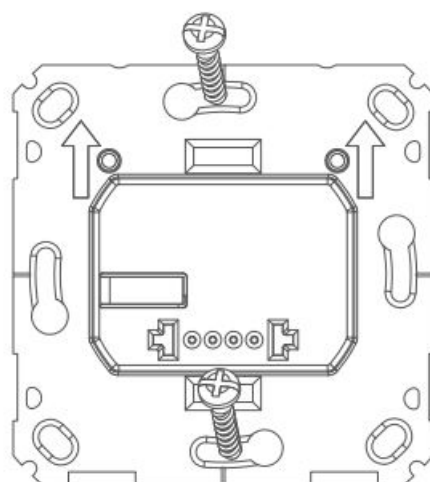
HmIPW-STH



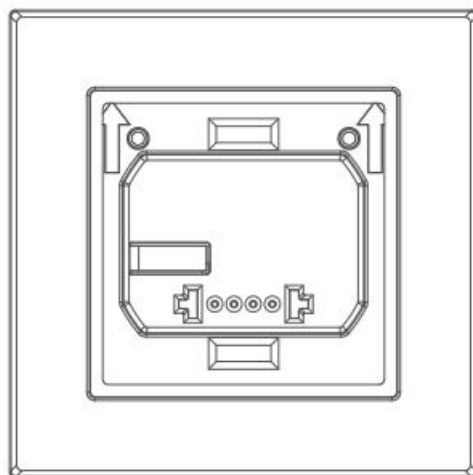
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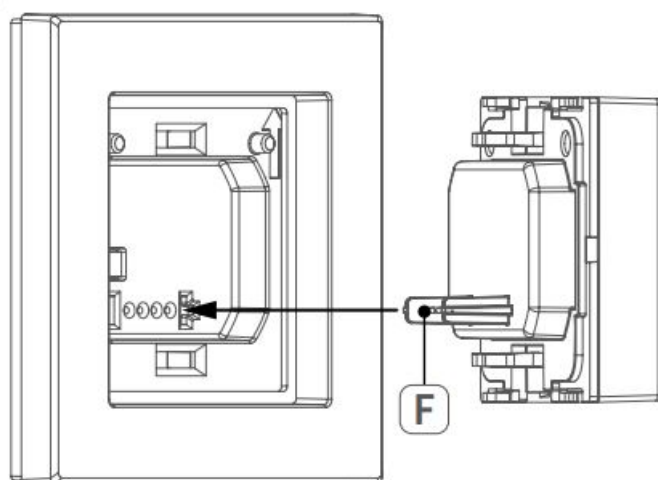
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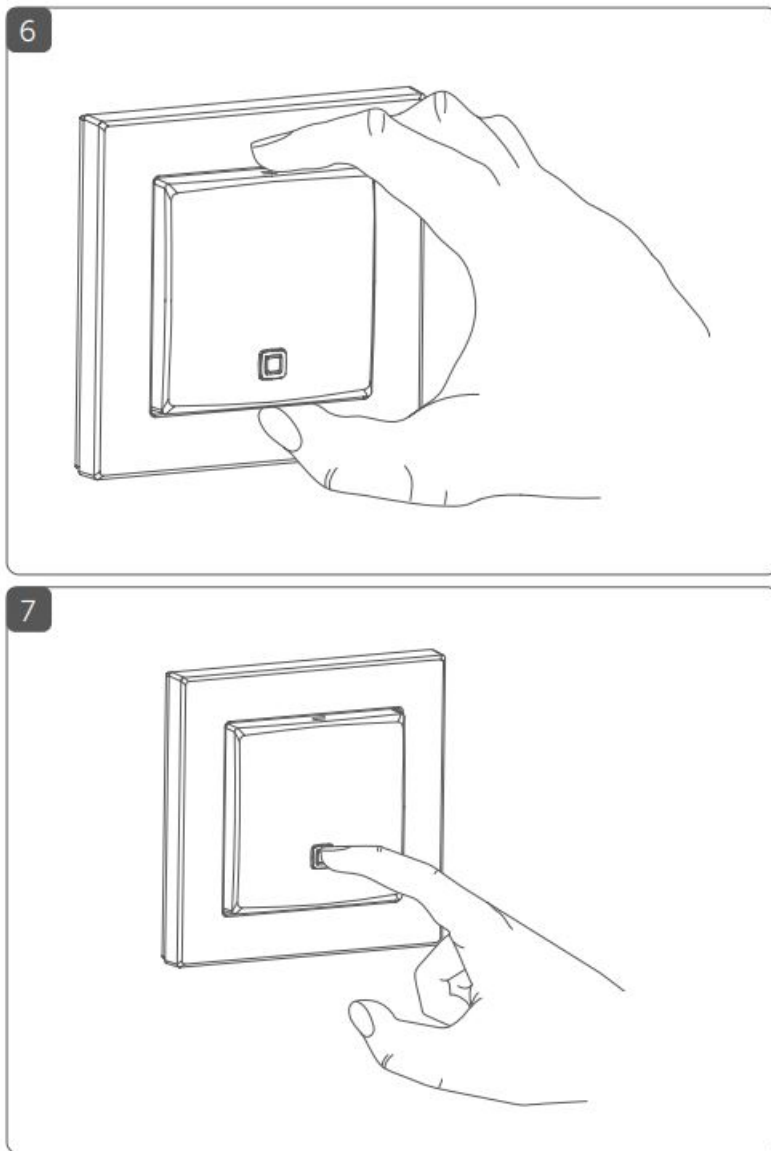


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### **Package contents**

Quantity Description

1 Homematic IP Wired Temperature and Humidity Sensor – indoor

1 Clip-on frame

1 Mounting plate

2 Screws 3.2 x 15 mm

2 Screws 3.2 x 25 mm

1 User manual

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## 1 Information about this manual

Please read this manual carefully before beginning operation with your Homematic IP Wired component. Keep the manual so you can refer to it at a later date if you need to. If you hand over the device to other persons for use, please hand over this manual as well.

### Symbols used:

⚠ Attention! This indicates a hazard.

i Please note: This section contains important additional information.

## 2 Hazard information

⚠ Do not open the device. It does not contain any parts that can be maintained by the user. If you have any doubts, have the device checked by an expert.

⚠ For safety and licensing reasons (CE), unauthorized change and/or modification of the device is not permitted.

⚠ Do not use the device if there are signs of damage to the housing, control elements or connecting sockets, for example. If you have any doubts, have the device checked by an expert.

⚠ The device may only be operated in dry and dust free environment and must be protected from the effects of moisture, vibrations, solar or other methods of heat radiation, cold and mechanical loads.

⚠ The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around. Plastic films/bags, pieces of polystyrene, etc. can be dangerous in the hands of a child.

⚠ We do not assume any liability for damage to property or personal injury caused by improper use or the failure to observe the hazard information. In such cases, any claim under warranty is extinguished! For consequential damages, we assume no liability!

⚠ When connecting to the device terminals, take the permissible cables and cable cross sections into account.

⚠ The device is part of the building installation. The relevant national standards and directives must be taken into consideration during planning and set-up. The device is intended for operation within the Homematic IP Wired bus only. The Homematic IP Wired bus is a SELV power circuit. Common cable routing of power supply and the Homematic IP Wired bus in installation or junction boxes is not permitted. The required isolation for power supply of the building installation to the Homematic IP Wired bus must be observed at all times. Non-compliance with the installation instructions can cause fire or introduce other hazards.

⚠ The device may only be used for fixed installations. The device must be securely attached within a fixed installation.

⚠ Observe the installation instructions for installation in distribution systems (DIN VDE 0100-410).

**i** The device may only be operated within domestic environment, in business and trade areas as well as in small enterprises.

**i** Using the device for any purpose other than that described in this operating manual does not fall within the scope of intended use and shall invalidate any warranty or liability.

### 3 Function and device overview

With the Homematic IP Wired Temperature and Humidity Sensor you can regulate your floor heating time-controlled in connection with Homematic IP Floor Heating Actuators and adapt heating phases to your individual needs.

The temperature and humidity sensor serves to measure the temperature and humidity in a room. The data is cyclically transmitted to floor heating actuators in order to regulate the room temperature precisely.

Device overview (see figure 1):

- (A) Clip-on frame
- (B) Electronic unit (thermostat)
- (C) System button (pair button and LED)
- (D) Mounting plate

### 4 General system information

This device is part of the Homematic IP smart home system and works with the Homematic IP protocol. All devices of the system can be configured comfortably and individually with the user interface of the Central Control Unit CCU3 or flexibly via the Homematic IP smartphone app in connection with the Homematic IP cloud. All available functions provided by the system in combination with other components are described in the Homematic IP Wired Installation Guide. All current technical documents and updates are provided at [www.eQ-3.com](http://www.eQ-3.com).

### 5 Start-up

#### 5.1 Installation instructions

**i** Since the bus is powered by the Homematic IP Wired Access Point (HmIPW-DRAP), you must first set-up a Homematic IP Wired Access Point (HmIPW-DRAP) to enable power supply for the device.

**i** Before installation, please note the device number (SGTIN) labelled on the device as well as the exact application purpose in order to make later allocation easier. You can also find the device number on the QR code sticker supplied.

⚠ Please note the insulation stripping length of the conductor to be connected, indicated on the device.

⚠ Please observe the hazard information in section „2 Hazard information“ on page 23 during installation.

⚠ Please note! Only to be installed by persons with the relevant electro-technical knowledge and experience!\*

Incorrect installation can put

- your own life at risk;
- and the lives of other users of the electrical system.

Incorrect installation also means that you are running the risk of serious damage to property, e.g. because of a fire. You may be personally liable in the event of injuries or damage to property.

Contact an electrical installer!

\*Specialist knowledge required for installation: The following specialist knowledge is particularly important during installation:

- The “5 safety rules” to be used: Disconnect from mains; Safeguard from switching on again; Check that system is de-energised; Earth and short circuit; Cover or cordon off neighbouring live parts;
- Select suitable tool, measuring equipment and, if necessary, personal safety equipment;
- Evaluation of measuring results;
- Selection of electrical installation material for safeguarding shut-off conditions;
- IP protection types;
- Installation of electrical installation material;
- Type of supply network (TN system, IT system, TT system) and the resulting connecting conditions (classical zero balancing, protective earthing, required additional measures etc.).

Permitted cable cross sections for connecting to the temperature and humidity sensor are:

**Rigid cable:** 0.12-0.50 mm<sup>2</sup>

⚠ For reasons of electrical safety, only the following cables must be used for connecting to the Homematic IP wired bus:

- Telephone cable J-Y(ST)Y with 2 x 2 x 0.8 (= 0.5 mm<sup>2</sup>) or 4 x 2 x 0.8 (= 0.5 mm<sup>2</sup>), shielded, TP
- Ethernet installation cable S/FUTP, Type Cat5e or higher with 2 x 2 x AWG22 (= 0.34 mm<sup>2</sup>) or 4 x 2 x AWG22 (= 0.34 mm<sup>2</sup>), shielded, TP

⚠ The shield (continuity wire) must be connected to “” (=GND) at the bus connection of the Wired Access Point (HmIPW-DRAP). The shield may not be connected to the temperature and humidity sensor.

## 5.2 Installation

**i** The bus is powered by the Homematic IP Wired Access Point (HmIPW-DRAP). For further information, please refer to the operating manual of the corresponding Wired Access Points.

**i** To facilitate connection to the terminals, the green push-in terminal can be removed from the device. To do this, release the mounting plate, press the latch on the back next to the lock symbol and slide the clamp out of the mounting plate to the side.

For the installation, please proceed as follows:

- Connect the Homematic IP wired bus to the bus connecting terminals (E) (see figure 2). To connect and loosen the single wires, press the orange clamp using a small screwdriver.
- Place the mounting plate (D) in the flush-mounted box and fasten it to the flush-mounted box using the screws supplied (see figure 3).
- Place the frame of your existing switch series or the supplied clip-on frame (A) to the mounting plate (see figure 4).
- Place the electronic unit (B) of the temperature and humidity sensor into the frame by fully snapping the connection pins (F) into the appropriate bracket of the mounting plate (see figure 5+6).

## 5.3 Installation in multiple combinations

You can mount the temperature and humidity sensor with the attachment frame (A) provided or use it with frames

of other manufacturers as well as integrate the electronic unit (B) into a multi-gang frame. For mounting with multiple combinations, make sure that the mounting plate of the temperature and humidity sensor is seamlessly aligned to the already fixed mounting plate/retaining ring. Frames of the following manufacturers can be used:

<b>Manufacturer</b>	<b>Frame</b>
Berker	S.1, B.1, B.3, B.7
Busch Jaeger	carat*, future linear*, solo*, Busch-axcent*, Busch-dynasty*, balance SI
ELSO	Joy
GIRA	Standard 55, E2, E22, Event, Esprit, ClassiX, E3
merten	1-M, Atelier-M, M-Smart, M-Arc, M-Star, M-Plan, M-Pure, System Antik*, System Fläche*, System Design*
JUNG	A 500, AS 500, A plus, A creation
Kopp	Athenis

\*with 55 mm intermediate frames of the manufacturer

## 5.4 Pairing

- i** Please read this entire section before starting the pair procedure.
- i** Please refer to the Homematic IP Wired System Manual for detailed information on setup and control options.

To integrate the temperature and humidity sensor into your system and enable it to communicate with other devices, you must teach it in first. You have the following setup and control options for the temperature and humidity sensor:

Connecting to the Homematic IP Central Control Unit CCU3 For local, software-based configuration and control via PC, you have the possibility to connect the temperature and humidity sensor with a Central Control Unit CCU3 and to use in comprehensive programs (see „5.4 Pairing” on page 38).

### Connection to the Homematic IP cloud

For a flexible control via free smartphone app, you can connect the temperature and humidity sensor to the Homematic IP cloud (see „5.4.2 Connecting to the Homematic IP cloud via Wired Access Point” on page 41). You can

- control the wired system via smartphone app using the Homematic IP Wired Access Point (HmIPW-DRAP) or
- combine wired devices with wireless Homematic IP devices via the Homematic IP Access Point (HmIP-HAP).

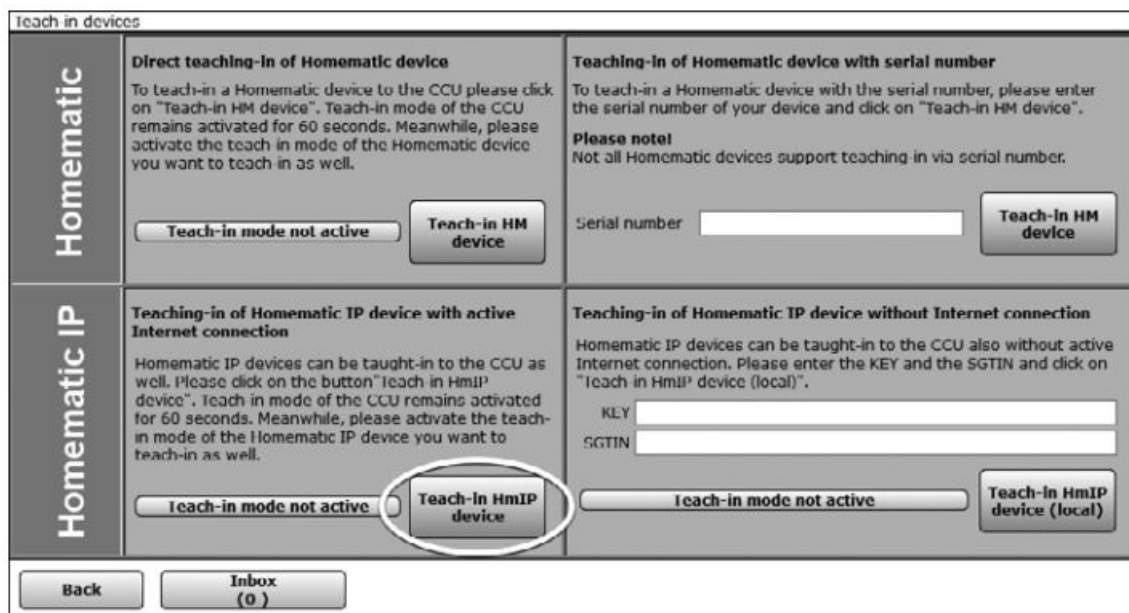
#### 5.4.1 Add to Homematic IP Central Control Unit CCU3

To control and configure Homematic IP wired devices software-based and comfortably as well as use it in central control unit programs, you have to connect it to the Web UI. To connect the temperature and humidity sensor to the Central Control Unit CCU3, proceed as follows:

- Set up your Central Control Unit CCU3 as described in the operating manual and connect the Homematic IP Wired Access Point.
- Start the user interface “WebUI” on your computer.
- Click the “Add devices” button on the right-hand side of the screen.



- To activate pair mode, click “Add HmIP device” in the next window. The pair mode of the Central Control Unit will be activated for 60 seconds. An information box shows how much pair time remains.



- After the power supply has been established, the pair mode of the temperature and humidity sensor is active for 3 minutes. You can manually start the pair mode for another 3 minutes by pressing the system button (C) shortly (see figure 7).
- Please wait until add is completed.
- If adding was successful, the LED (C) lights up green. The device is now ready for use. 40
- If the LED lights up red, please try again.
- After a short time, the newly connected device appears in the inbox of your software interface.

Newly connected devices and the corresponding channels are ready for operation and configuration only after they have been configured in the inbox. You will find further information in the Homematic IP Wired Installation Guide, available for download at [www.eQ-3.com](http://www.eQ-3.com).

**i** For operation without Internet connection, please select the option “Adding of Homematic IP device without Internet connection”. Please enter the SGTIN and key of the device into the corresponding fields. You will find the

SGTIN and the key on the supplied sticker. Please keep the sticker in safe place.

#### 5.4.2 Connecting to the Homematic IP cloud via Wired Access Point

If you want to control your Homematic IP Wired devices flexibly via smartphone app, they can be connected to the Homematic IP cloud. To do this, please proceed as follows:

- Open the Homematic IP app on your smartphone.
- Connect the Homematic IP Wired Access Point via the smartphone app to the Homematic IP cloud, as described in the corresponding user manual
- Select the menu item "Add device".
- After the power supply has been established, the pair mode of the temperature and humidity sensor is active for 3 minutes.

You can manually start the pair mode for another 3 minutes by pressing the system button (C) shortly (see figure 7).

- Your device will automatically appear in the Homematic IP app.
- To confirm, please enter the last four digits of the device number (SGTIN) in your app or scan the QR code. Therefore, please see the sticker supplied or attached to the device.
- Please wait until add is completed.
- If adding was successful, the LED (C) lights up green. The device is now ready for use.
- If the LED lights up red, please try again.
- Select the desired solution for your device.
- In the app, give the device a name and allocate it to a room.

**i** If you are already using Homematic IP devices in your smart home system or if you want to combine your Homematic IP Wired devices with wireless Homematic IP components, you can also connect the Homematic IP Wired devices to an (installed) Access Point. Therefore, connect the Homematic IP Wired Access Point to the (installed) Homematic IP Access Point, as described in the user manual. Afterwards, please proceed as described above to connect the temperature and humidity sensor.

## 6 Error codes and flashing sequences

Flashing code	Meaning	Solution
Short orange flashing	Data transfer	Wait until the transmission is completed.
1x long green lighting	Operation confirmed	You can continue operation.
1x long red lighting	Operation failed	Please try again.
Short orange flashing (every 10 seconds)	Pair mode active	Please enter the last four numbers of the device serial number for confirmation (see „5.4 Pairing“ on page 38).
6x long red flashing	Device defective	Please see your app for error message or contact your retailer.
1x orange and 1x green lighting (after establishing power supply)	Test display	After the test display has stopped, you can continue.

## 7 Restore factory settings

**i** The factory settings of the device can be restored. If you do this, you will lose all your settings. To restore the factory settings of the temperature and humidity sensor please proceed as follows:

- Press and hold down the system button (C) for 4 seconds until the LED (C) quickly starts flashing orange (see fig. 7).
- Release the system button again.
- Press and hold down the system button again for 4 seconds, until the LED lights up green.
- Release the system button to finish the procedure.

The device will perform a restart. After the restart, you can again integrate your device into your Homematic IP system.

## 8 Maintenance and cleaning

**i** The product does not require any maintenance. Enlist the help of an expert to carry out any repairs.

Clean the device using a soft, lint-free cloth that is clean and dry. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

## 9 Technical specifications

Device short name:	HmIPW-STH
Supply voltage:	24 VDC, +5 % -20 %, SELV
Current consumption:	20 mA max.
Cable type and cross section	Rigid cable 0.12-0.50 mm <sup>2</sup>
Installation:	only in normal commercial switch boxes (device boxes) in accordance with DIN 49073-1
Degree of protection:	IP20
Protection class:	III
Ambient temperature:	0 to 50 °C
Dimensions (W x H x D):	
Without frame:	55 x 55 x 42 mm
Including frame:	86 x 86 x 42 mm
Weight:	73 g
Method of operation:	Type 1
Degree of pollution:	2
Software class:	Class A
Withstand voltage:	330 V
Temperature glow wire test:	850 °C
Temperature ball pressure test:	125 °C
PTI value of housing material:	IIIb with 100 < CTI < 175

**Subject to technical changes.**

**Instructions for disposal**



Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.



#### Information about conformity



The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.

**i** For technical support, please contact your retailer.

Kostenloser Download der Homematic IP App! Free download of the Homematic IP app!




<https://itunes.apple.com/de/app/homematic-ip/id1012842369?mt=8>



<https://play.google.com/store/apps/details?id=de.eq3.pscc.android&hl=de>

Manufacturer's authorised representative: eQ-3 AG Maiburger Straße 29 26789 Leer / GERMANY  
[www.eQ-3.de](http://www.eQ-3.de)

**Documents / Resources**

<div><div>homematic</div><div>IPW</div><div>Installation- und Bedienungsanleitung Installation instruction and operating manual</div><div>Wired Temperatur- und Luftfeuchtigkeitssensor - innen Wired Temperature and Humidity Sensor - indoor</div><div>5.2 p. 27</div><div></div><div>HmIPW-STH</div></div>	<p><a href="#">homematic HmIPW-STH Wired Temperature and Humidity Sensor Indoor</a> [pdf] User Manual</p> <p>HmIPW-STH Wired Temperature and Humidity Sensor Indoor, HmIPW-STH, Wired Temperature and Humidity Sensor Indoor, Humidity Sensor Indoor, Sensor Indoor, Indoor</p>
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References

- [eStart - eQ-3](#)
- [eStartseite - eQ-3](#)