



TH213 Wifi Thermostat

Thank you for purchasing our smart thermostat TH213 Wifi.



Due to the continuous further development of the device software (firmware), the range of functions described here or the method of operation may differ. The current version of the manual can be downloaded from the shop under the [Article Downloads Tab](#).

Features:

- Programmable/operatable by app
- Compatible with Amazon Alexa, Google Assistant and IFTTT
- Easy to install
- Weekly program 4 switching times (App: Monday to Friday and Saturday, Sunday)
- External sensor or room sensor

Technical data:

- Operating voltage: 100-240V/AC
- Switching capacity: 3500W/15A (resistive load)
- Temperature sensor: internal or external sensor (NTC 10kOhm)
- Temperature limitation external sensor: 20 - 90°C / off (recommended max. 26°C)
- Window-Open-Detection
- Optimum start (temperature is reached at the set time)
- Frost protection: 5 - 30°C (1°C steps)
- Operating temperature: +5 ~ 30°C
- Accuracy: +/- 1°C
- LCD-display, illuminated
- Dimensions: 86mm x 86mm x 13mm
- Colour: Silver/Black
- Protection Type / Protection class: IP21 (sensor IP44) / 2
- Certification: CE, ROHS, WEEE
- Operating frequency: 2412-2472 MHz
- Max. transmitted high-frequency power: 20 dBm

Important information before commissioning:

- Please read the complete instructions before starting to install the thermostat.
- The thermostat must be installed by a qualified person.
- Only use the thermostat as described in this manual.
- Always disconnect the power supply during installation work.

Safety notes:

When handling products which are supplied with electrical voltage, the applicable VDE regulations must be observed, in particular VDE 0100, VDE 0550/0551, VDE 0700, VDE 0711 and VDE 0860.

- Before opening the device, make sure that it is de-energized.
- Tools may only be used on the device if it has been ensured that it is disconnected from the supply voltage and that any residual electrical charges stored in components have been discharged beforehand.
- Live cables or lines to which the device is connected must always be checked for insulation faults or breakages.
- If a fault is detected in the supply line, the device must be taken out of operation immediately until the defective line has been replaced.

If these instructions is not clearly state for non-commercial end users in regard to, which electrical characteristic values apply to the device, how external wiring is to be carried out, or which external components or accessories may be connected and what connected loads these external components may have, a specialist must always be requested for information. Before commissioning the device, check whether it is suitable for the planned application!

In case of doubt, it is absolutely necessary to consult experts or the manufacturers of the modules used! Please note that operating and connection errors are beyond our control. We assume no liability for any damage resulting therefrom.

Description of Device keys and LEDs



1. 1. mode & on/off key, short key press change operating mode, long key press (3 sec.) on/off.
2. increase temperature
3. short keystroke reduce temperature, long keystroke (3 sec.) activates pairing mode for connection to Wlan

Press buttons 1 and 3 for 3 seconds to activate or deactivate the key lock.

Description Display symbols

	Heating symbol:	<ul style="list-style-type: none"> - Lights up permanently when heating is in progress and disappears when the target temperature has been reached. - Flashes if the set limiting temperature of the external sensor is reached.
	Window-Open-Detection	<ul style="list-style-type: none"> - Appears if window open detection is enabled. The symbol flashes if an open window is detected and switches off the heating. The unit must detect a temperature drop of 3°C within 1 minute for this function to work. This function is primarily intended for use with the internal temperature sensor (sensor type 00 or 02). In conjunction with a pure floor heating system (sensor type 01), it is generally not practical to use this function.
	Optimum start	<ul style="list-style-type: none"> - Appears if the function has been enabled. With the optimum start function, the thermostat automatically determines (several days learning phase required) when the heating must be switched on so that the desired temperature is already reached at the set time.
	Key lock:	<ul style="list-style-type: none"> - Is displayed if the key lock has been activated.
	Cloud connection:	<ul style="list-style-type: none"> - Shown if the thermostat has been connected to the cloud via the app or if there is a connection to the cloud server.
	Wlan connection:	<ul style="list-style-type: none"> - Lights up permanently if the thermostat is connected via Wlan (see "App integration and programming"). - Flashes if the thermostat has been set to teach-in mode (see "App integration and programming" point 8).
	Manual operation:	<ul style="list-style-type: none"> - Displayed when the temperature has been adjusted manually with the arrow keys. This exits the Away-/Home- or Auto-Mode (weekly program).
AUTO	Auto-Mode:	<ul style="list-style-type: none"> - Is displayed if the week program was activated via the app (Mode: Smart).
 AWAY	Away-Mode:	<ul style="list-style-type: none"> - Is displayed if the Away mode has been activated via the mode button on the device or via the app. The temperature set for the Away-Mode is used.
 HOME	Home-Mode:	<ul style="list-style-type: none"> - Is displayed if the home mode has been activated via the mode button on the device or via the app. The temperature set for the Home-Mode is used.
		<p>Temperature display:</p> <p><u>Left:</u> Current room temperature or temperature of the external sensor (for settings, see manual operation)</p> <p><u>Middle:</u> Arrow flashes if the target temperature has not yet been reached, or if the set limiting temperature of the external sensor is reached.</p> <p><u>Right:</u> shows the desired temperature (set / target temperature)</p>

Manual operation:

The following thermostat functions can also be set without the App.

Function	Key operation
Change the showing ACTUAL temperature in the display (internal/external sensor)	Press the "M" key and ▲ for 3 seconds, the display will show ROOM to the right of the ACTUAL temperature (left display side) when the value of the internal temperature sensor is displayed. If ROOM is not displayed, the value of the external temperature sensor is displayed.
Open the settings menu	Press the ▲ and ▼ button for 3 seconds. Then press the "M" key several times to switch between the following settings. The value of each setting can be changed with the ▲ and ▼ button.
1 Window open detection	00: deactivated, 01 activated, default value 00
2 Optimum Start	00: deactivated, 01 activated, default value 00
3 Sensor Type	00: internal sensor, 01: external sensor, 02 internal and external sensor, standard value 00
4 Temperature limitation external sensor	20 - 95°C / off, standard 28°C, for electric underfloor heating we recommend 26°C
5 Hysteresis	1 - 9°C, standard 2°C
6 Temperature Calibration	-9 - +9°C, standard 0°C
7 Temperature limitation internal sensor	35 - 90°C, standard 35°C
8 Frost protection	0 - 30, standard 5°C
9 Home-Mode Temperature	5 - 35°C, standard 22°C
10 Away-Mode Temperature	5 - 35°C, standard 15°C
11 AUTO-Mode Temperature	standard 20°C, weekly program only adjustable via App
12 Display brightness	1-90, Standard 20 - this menu item is only available for unit with MCU 3.0.9
13 Restart device	Short press ▲ or ▼, display changes from "--" to "==" , wait approx. 30 seconds.
14 Factory settings	Short press ▲ or ▼, display changes from "--" to "==" , wait approx. 30 seconds.

Description of terminals:



1 & 4 Output terminal for connecting the load

2 & 3 Input terminal for the 230V/AC supply voltage of the thermostat

5 & 6 Input terminal to connect the external temperature sensor

App integration and programming:

In order to setup or program the thermostat via Smartphone App, the free TuyaSmart App must first be downloaded and installed from the respective App Store.

Minimum Smartphone requirements: iOS9 or newer, Android 4.1 or newer

TuyaSmart (Tuya Inc.)



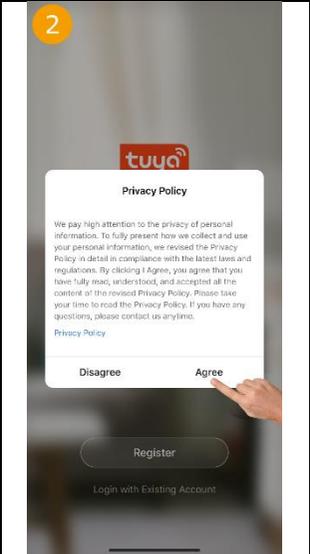
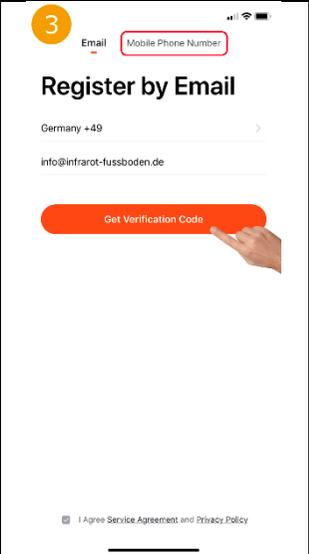
[App für Android](#)

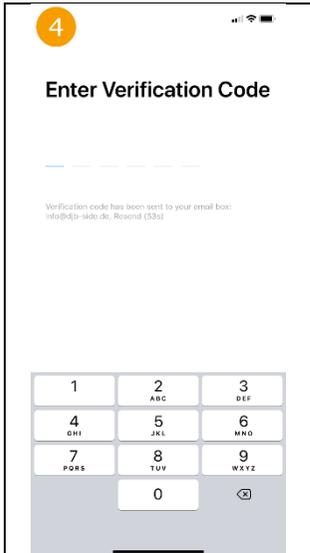


[App für Apple iOS](#)

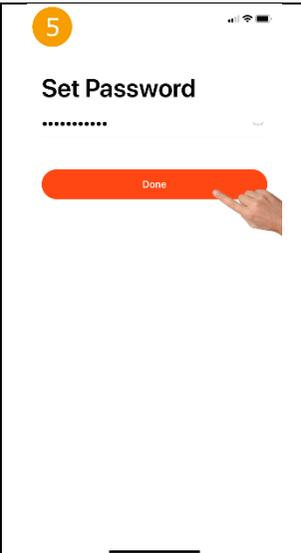


The following steps show the setup of the TuyaSmart App as well as the integration and programming of the thermostat.

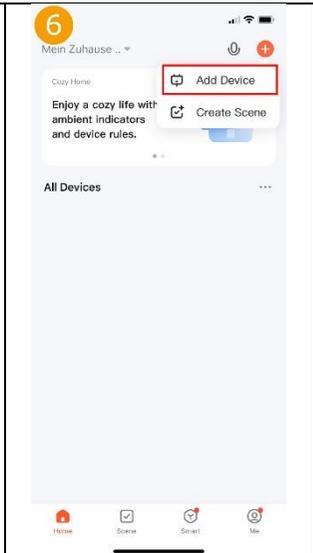
		
<p>When starting the app for the first time, you have to create a Tuya user account.</p>	<p>Agree to privacy policy to continue.</p>	<p>Select your country, enter your email address, and then tapping on "Get Verification Code". Alternatively, the code can also be requested by SMS by tapping on "Mobile Phone Number" at the top.</p>



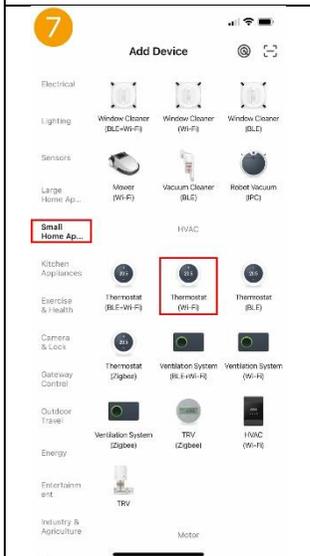
Enter the verification code you received by e-mail or SMS.



Set the password for the Tuya user account and press "Finish".



Now the thermostat can be integrated by touching plus symbol and then on "Add device".



To integrate a thermostat, tap on "Small household appliance" on the left and then select "Thermostat (Wi-Fi)" on the right.

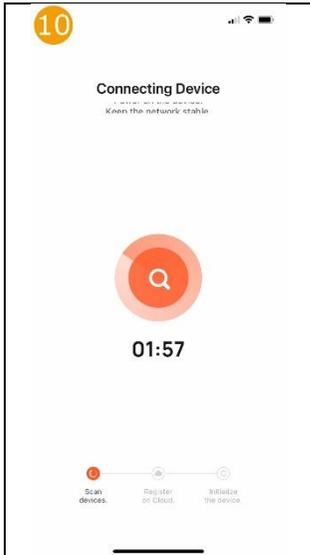
Do not select Bluetooth, Zigbee, BLE+Wi-Fi!



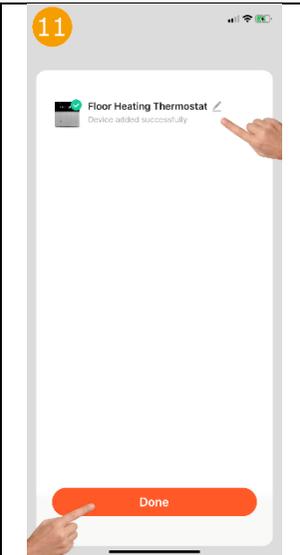
Select the WLAN network (SSID) of the existing router and enter the corresponding WLAN password.



Set the thermostat to teach-in mode: Press the down arrow button on the right of the thermostat for approx. 3 seconds until the WLAN symbol flashes quickly in the upper right corner of the display. Now in the app tap on "Confirm the indicator is blinking rapidly".



After confirming again that the wifi symbol on the unit is flashing quickly, the app searches for available units that are in teach-in mode.



If a device was found, a name can now be assigned. After touching "Done", the integration of the thermostat is successfully completed.



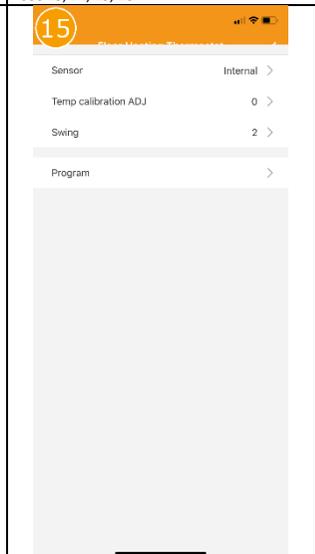
Main view: The setpoint temperature is displayed in the middle and the current room temperature (Indoor Temp) above it. The setpoint temperature can be adjusted manually using the Plus/Minus button. The key lock can be switched on/off using the "Lock" key. Functions of the other buttons see 13, 14, 15, 18.



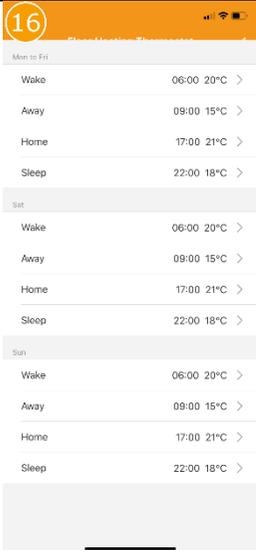
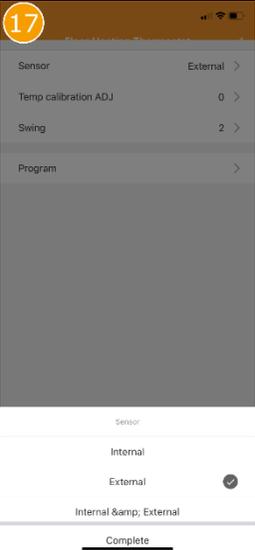
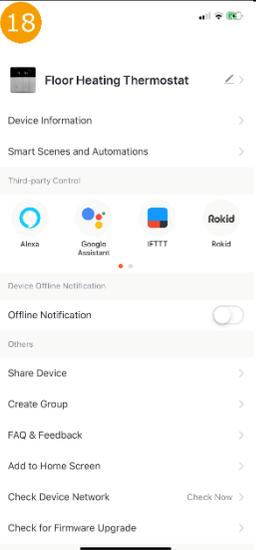
Tap the "Mode" icon in the lower left corner of the main thermostat display to change the thermostat operating mode (Home/Away/Smart/Sleep).



The thermostat can be switched off or on by touching the "switch" symbol in the middle at the bottom of the main thermostat display.



The following settings can be adjusted by tapping the "Gear" symbol in the lower right corner of the main view. Set the sensor to be used (Fig. 17), temperature calibration, hysteresis (Swing) and the weekly program (Fig. 16).

 <p>16</p> <p>Floor Heating Thermostat</p> <p>Mon to Fri</p> <ul style="list-style-type: none"> Wake 06:00 20°C > Away 09:00 15°C > Home 17:00 21°C > Sleep 22:00 18°C > <p>Sat</p> <ul style="list-style-type: none"> Wake 06:00 20°C > Away 09:00 15°C > Home 17:00 21°C > Sleep 22:00 18°C > <p>Sun</p> <ul style="list-style-type: none"> Wake 06:00 20°C > Away 09:00 15°C > Home 17:00 21°C > Sleep 22:00 18°C > 	 <p>17</p> <p>Sensor External ></p> <p>Temp calibration ADJ 0 ></p> <p>Swing 2 ></p> <p>Program ></p> <p>Sensor</p> <ul style="list-style-type: none"> Internal External <input checked="" type="checkbox"/> Internal & External <p>Complete</p>	 <p>18</p> <p>Floor Heating Thermostat </></p> <p>Device Information ></p> <p>Smart Scenes and Automations ></p> <p>Third-party Control</p> <ul style="list-style-type: none"> Alexa Google Assistant iFTTT Rokid <p>Device Offline Notification</p> <p>Offline Notification <input type="checkbox"/></p> <p>Others</p> <ul style="list-style-type: none"> Share Device > Create Group > FAQ & Feedback > Add to Home Screen > Check Device Network Check Now > Check for Firmware Upgrade >
<p>An individual heating profile can be stored here.</p>	<p>Here you can select whether only the internal or only the external sensor is to be used for temperature determination. It is also possible to use both sensors in combination.</p>	<p>By touching the "pen" symbol in the upper right corner of the main view of the thermostat, further settings and integration options in the voice control systems Amazon Alexa and Google Assistant can be called up.</p>

Disposal notes



Do not dispose of this device in household waste! Electronic devices must be disposed of at the local collection points for electronic waste in accordance with the Waste Electrical and Electronic Equipment Directive.

Note on conformity



The CE mark is a free trade mark that is exclusively addressed to the authorities and does not contain any assurance of properties.

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V2.1

Declaration of conformity

Mi-Heat Heizsysteme GmbH hereby declares that the product TH213 is in compliance with the RoHS Directive 2011/65/EU, the EMC Directive 2014/30/EU, the Low Voltage Directive 2014/35/EU and the Radio Equipment Directive 2014/53/EU.

The detailed declaration of conformity can be found under:

https://infrarot-fussboden.de/mediafiles/PDF/1032_EC_Declaration_of_Conformity_TH213.pdf

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