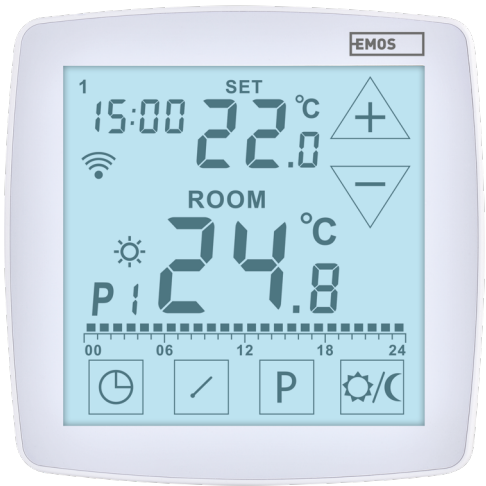


# P56S01



GB | Thermostat



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## Safety Instructions and Warnings



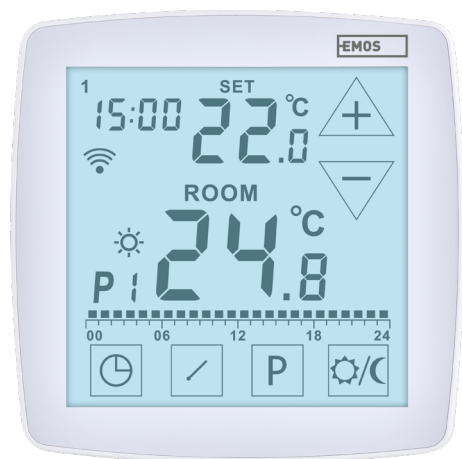
Read the user manual before using the device.



Follow the safety instructions provided in the manual.

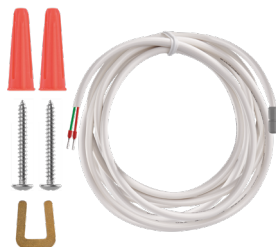
- Read the manual carefully before using the product.
- Do not expose the product to direct sunlight, extreme cold and humidity and sudden changes in temperature. These could reduce detection accuracy.
- Do not place the product in locations prone to vibration and shocks – may cause damage.
- Do not expose the product to excessive force, impacts, dust, high temperatures, rain or humidity - these may cause malfunction, shorten energy life and deform plastic parts.
- Do not expose the product to rain or high humidity, or dropping or splashing water.
- Do not place any open flame sources on the product, e.g. a lit candle, etc.
- Do not put the product in places with inadequate air flow.
- Do not insert any objects into the product's vents.
- Do not tamper with the internal electrical circuits of the product – doing so may damage the product and will automatically void the warranty.
- The product should only be repaired by a qualified professional.
- Clean the product using a soft, slightly damp cloth. Do not use solvents or detergents – they could scratch the plastic parts and cause corrosion of the electrical circuits.
- Do not immerse the product in water or other liquids.
- In the event of damage or a defect on the product, do not perform any repairs by yourself. Bring it for repair to the shop where you bought it.
- This appliance is not intended for use by persons (including children) whose physical, sensory or mental disability or lack of experience and expertise prevents safe use, unless they are supervised or instructed in the use of the appliance by a person responsible for their safety. Children must always be supervised to ensure they do not play with the appliance.

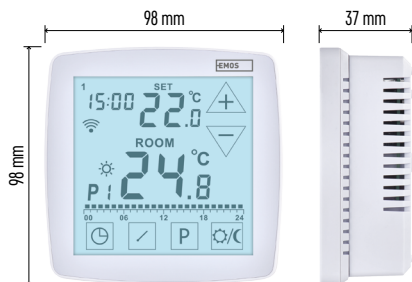




## Package Contents

thermostat  
 floor sensor  
 2 screws  
 2 wall plugs  
 wire coupler





## Technical Specifications

Switched load: max. 230 V AC; 16 A for resistive loads; 5 A for inductive loads

Temperature measurement: 0 °C to 80 °C with 0.1 °C resolution;  $\pm 1$  °C accuracy at 20 °C

Temperature setting: 7 °C to 30 °C in 0.2 °C increments

Temperature setting for the floor sensor: 15 °C to 65 °C in 0.2 °C increments

Floor sensor: 10k 3 m

Temperature differential setting: 0.1 °C to 1.0 °C in 0.1 °C increments

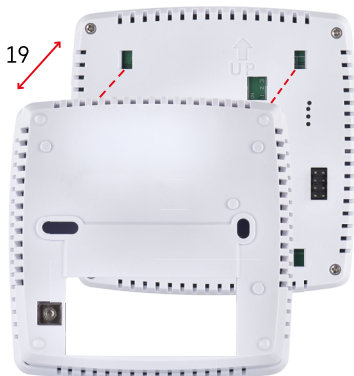
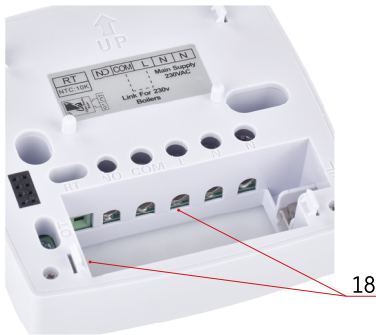
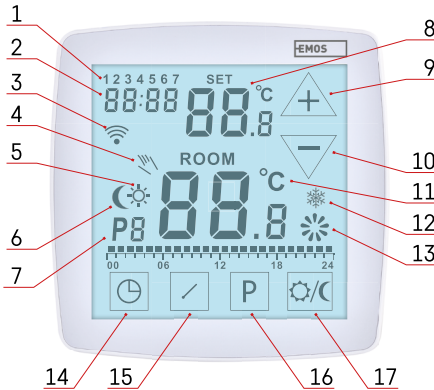
WiFi frequency: 2.4 GHz, max. 25 mW e.i.r.p.

Power supply: 230 V AC/50 Hz

Dimensions: 98 × 37 × 98 mm



## Thermostat Description



- 1 - day of the week
- 2 - clock
- 3 - WiFi signal reception
- 4 - manual control
- 5 - comfort mode (comfort temperature)
- 6 - economy mode (economy temperature)
- 7 - programme presets and temperature chart for the day
- 8 - set temperature
- 9 - UP button
- 10 - DOWN button
- 11 - current room temperature
- 12 - antifreeze mode
- 13 - operation (activation) icon
- 14 - time setting button
- 15 - comfort and economy temperature setting button
- 16 - programme setting button
- 17 - button for switching between comfort/economy mode
- 18 - contacts for connection
- 19 - removing the rear cover of the thermostat



## Installation and Assembly

### Attention

Before the first use, make sure to carefully read the instruction manual for the thermostat, as well as the manual for the boiler or air-conditioning equipment. Installation may only be carried out by a qualified professional! Follow applicable standards during installation.

Before changing the thermostat, disconnect the heating system from the mains power in your home. This will prevent potential injury by electric current.

### Mounting the Thermostat onto a Wall

1. Remove the rear cover of the thermostat.
2. Mark the spots for holes.
3. Drill two holes, carefully insert the plastic wall plugs into them and use two screws to fasten the rear thermostat cover.
4. Connect the wires to the marked terminals according to the wiring diagram.
5. Complete the installation by fitting the thermostat onto the mounted rear cover.

### Placement of the Thermostat

The placement of the thermostat significantly affects its functioning. Choose a location where members of the family spend most of their time, preferably near an inside wall where air circulates freely, with no direct sunlight. Do not place the thermostat in the vicinity of heat sources (such as TV sets, radiators, fridges), or close to a door. Failure to comply with these recommendations will prevent proper control over room temperature.

### Wiring Diagram

The P56S01 thermostat can be used with any single-stage heating or air-conditioning system.

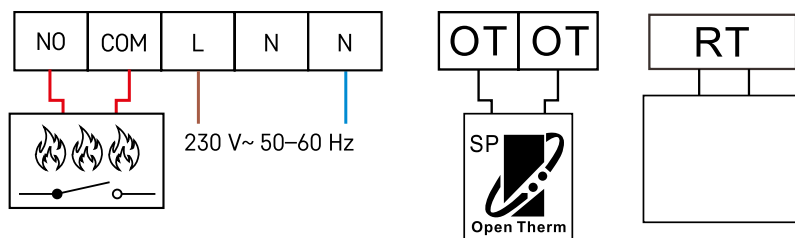
NO – normally open contact

COM – contact for the switch

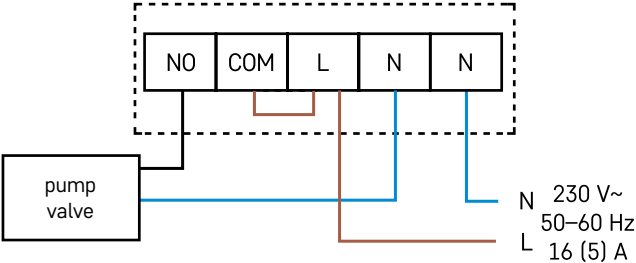
L, N – phase, neutral (thermostat power supply)

OT – OpenTherm connection

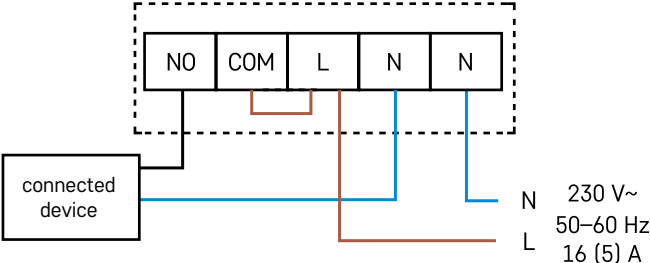
RT – floor sensor



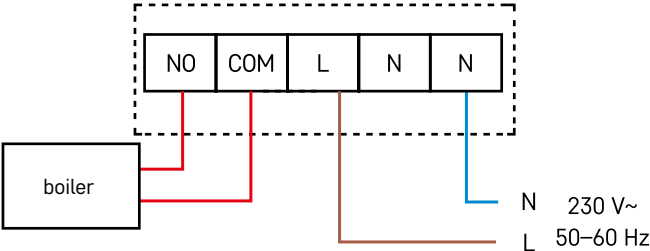
**Pump/Motorised Valve Wiring Diagram**



**Floor Heating Wiring Diagram**

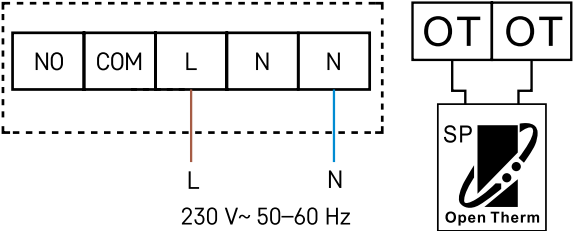


**Boiler Wiring Diagram (Zero Voltage Switching)**



- The pre-installed wire coupler between COM and L will not be connected.

**OpenTherm Wiring Diagram**



## Basic Setup

*Warning: Remember that the first pressing of a button activates screen illumination, the next pressing sets values/functions.*

## Selecting Heating/Cooling System

1. Long-press the "P" button, then short-press the "P" button again; the screen will show settings.
2. Use the + and – buttons to set the heating mode (HEAT) or cooling mode (COOL).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

## Selecting Temperature Differential

1. Long-press the "P" button, then short-press the "P" button 2×; the screen will show "DIFF".
2. Use the + and – buttons to set the differential value (0.1 °C to 1.0 °C, in 0.1 °C increments).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

The temperature differential (hysteresis) is the difference in temperature required for the system to switch on and off. If, for example, you set the temperature in the heating system to 20 °C and differential to 0.2 °C, the thermostat activates heating as soon as room temperature drops to 19.8 °C and switches heating off when temperature reaches 20.2 °C.

## Room Temperature Calibration

1. Long-press the "P" button, then short-press the "P" button 3×; the screen will show "CAL" and the set value will be flashing.
2. Use the + and – buttons to set the desired value (-3.0 °C to 3.0 °C, in 0.5 °C increments).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

Calibration of room temperature is used, for example, if the thermostat displays 21 °C but you want it to display 20 °C. In that case, the calibration value should be set to -1 °C.

## Setting Button Sound

1. Long-press the "P" button, then short-press the "P" button 4×; the screen will show "bEEP".
2. Use the + and – buttons to set: Button beeping active – ON, Button beeping inactive – OFF.
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

## Temperature Sensor Selection/Setting Floor Sensor Temperature Protection


1. Long-press the "P" button, then short-press the "P" button 5×; the screen will show "SEN".
2. Press the + or – button repeatedly for:
  - Internal sensor – IN
  - Floor sensor – OUT
  - Internal and floor sensor – ALL
3. If you have selected ALL, confirm by pressing the "P" button and "FL" will be displayed – temperature protection of the floor sensor.
4. Press + or – repeatedly to adjust the value (20 °C to 65 °C, in 1 °C increments).

If the set value is exceeded, the thermostat's relay will switch off.





*Note: If no floor sensor is connected and you select OUT or ALL, the screen will show "E2".*



## Resetting the Thermostat

1. Long-press the "P" button, then short-press the "P" button 6×; the display will show "rESE".
2. Press the  button 2×; the thermostat will reset to factory settings.
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.







## Setting the Day/Time

Press the  button. The day number will start flashing (1 – Monday to 7 – Sunday). Use the + and – buttons (holding the button speeds up setting) to set the current day and press . Set the hour, then press  again and set the minutes. Confirm by pressing  or wait 15 seconds for the setting to save automatically.

## Screen Illumination

Pressing any button will illuminate the screen for 10 seconds.

## Setting Target Temperature

1. Press the  button to switch to temperature setting mode. The temperature value will start flashing.
2. Repeatedly press the / button to switch between setting the economy temperature ( icon) and comfort temperature ( icon).
3. Use the + or – button to set both temperatures in 0.2 °C increments.
4. Use the  button to save the setting.

If no button is pressed for 10 seconds, setting mode ends automatically. The default comfort temperature is 21 °C for the heating system and 23 °C for cooling; the default economy temperature is 18 °C for the heating system and 26 °C for cooling. Values can be changed as needed.

Setting a Programme



Selecting Week/Day

- 1. Press the "P" button; the day indicator will start flashing.
  - 2. Repeatedly press the + or – button to select the day you wish to programme.
- You can choose to programme: days individually / workdays (1, 2, 3, 4, 5) / weekend (6, 7) / whole week (1, 2, 3, 4, 5, 6, 7). Once you have chosen the days, continue by selecting a preset programme.



Selecting a Pre-Set Programme

- 1. Press the "P" button again to select a preset programme.
- 2. Use the + or – button to select one of the programmes: P1–P6. These programmes are factory presets (cannot be modified) and their profiles are shown in the figure.
- 3. Press the "P" button again to confirm the selected programme for the given day/week and exit the setting mode.



Programme Number	Programme profile of the day: 24 h; resolution: 1 hour
Programme 1: Comfort temperature all day	
Programme 2: Economy temperature all day	
Programme 3: Combination of comfort and economy temperature	
Programme 4: Combination of comfort and economy temperature	
Programme 5: Combination of comfort and economy temperature	
Programme 6: Combination of comfort and economy temperature	
Programme 7: Custom	
Programme 8: Custom	
Programme 9: Custom	

Dark fields  indicate that comfort mode is set, otherwise the economy mode  is set.




Setting a Custom Programme

- 1. If you select a custom programme (P7, P8, P9) during programme selection, you can press the "P" button to adjust the programme's temperature settings.
- 2. Press the + or – button repeatedly to choose the hour, which is indicated by the flashing of the  icon.
- 3. Press  to choose whether you want the system to be set to comfort or economy mode at that time.
- 4. After you have set the profile for the entire day, press the "P" button to confirm the selected programme and exit the setting mode.

Temporary Change of a Set Programme





In standard mode, where temperature is controlled by a selected programme, pressing the  button switches from the currently set programme to comfort or economy mode. When the selected programme is switched over in this way, the  icon is displayed together with the selected control mode icon. This setting will cancel automatically upon the next temperature change in the programme.

## Temporary Change of Temperature Setting


In standard mode, where temperature is controlled by a selected programme, you can press the + or – button to override the current temperature setting. The newly set temperature will be displayed along with the  icon, the  and  icons will not be displayed. Pressing any button (except + or –) exits the temperature setting mode. If no button is pressed for 10 seconds, setting mode ends automatically. This setting will cancel automatically upon the next temperature change in the programme.


*Note: If you wish to use the manually changed temperature for an extended period of time, we recommend doing so in programme no. 1 or 2.*

## Antifreeze Mode

Antifreeze mode is activated by pressing and holding the + and – buttons simultaneously for approx. 5 seconds (applies to heating mode only).  and  will appear on the screen and  and  will not be displayed. The preset temperature for this mode is 7 °C. Pressing any button cancels antifreeze mode.








## Button Lock

Simultaneously hold the  and + buttons for approx. 5 seconds. All buttons will be locked and the thermostat screen will flash LOC on the top left.

To unlock the thermostat, press the  and + buttons simultaneously again for approx. 5 seconds; UNLO will flash on the screen.

## Setting OpenTherm Parameters

Applies only to heating mode.

1. Long-press the  button to access OpenTherm settings. "01" will appear in the left corner and water temperature in the OpenTherm boiler will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
2. Press the  button. "02" will appear in the left corner and temperature of the water returning back to the boiler will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
3. Press the  button. "03" will appear in the left corner and the temperature of hot water will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
4. Pressing the  button opens settings for temperature limit switching values. "04" will appear in the left corner and OFF will start flashing in the centre of the screen. Use + or – to select ON/OFF.
5. If you selected ON in the previous step, pressing  opens settings for the maximum temperature limit switching value. "05" will appear in the left corner and temperature will appear in the centre. You can adjust the temperature using the + and – buttons (30 to 80 °C in 1 °C increments).
6. Pressing  opens settings for hot water switching. "06" will appear in the left corner and OFF will start flashing in the centre of the screen. Use + or – to select ON/OFF.
7. If you selected ON in the previous step, pressing  opens settings for hot water temperature. "07" will appear in the left corner and temperature will appear in the centre. You can adjust the temperature using the + and – buttons (25 to 65 °C in 1 °C increments).
8. Pressing opens the control switching settings. "08" will appear in the left corner and ON will start flashing in the centre of the screen. Use + or – to select ON/OFF.
9. Press the "P" button to confirm the setting.

## OpenTherm Error Indication

If an error occurs in the OpenTherm boiler, an "Exxx" error code will appear on the screen, where "xxx" is between 0 and 255.




## Mobile Application

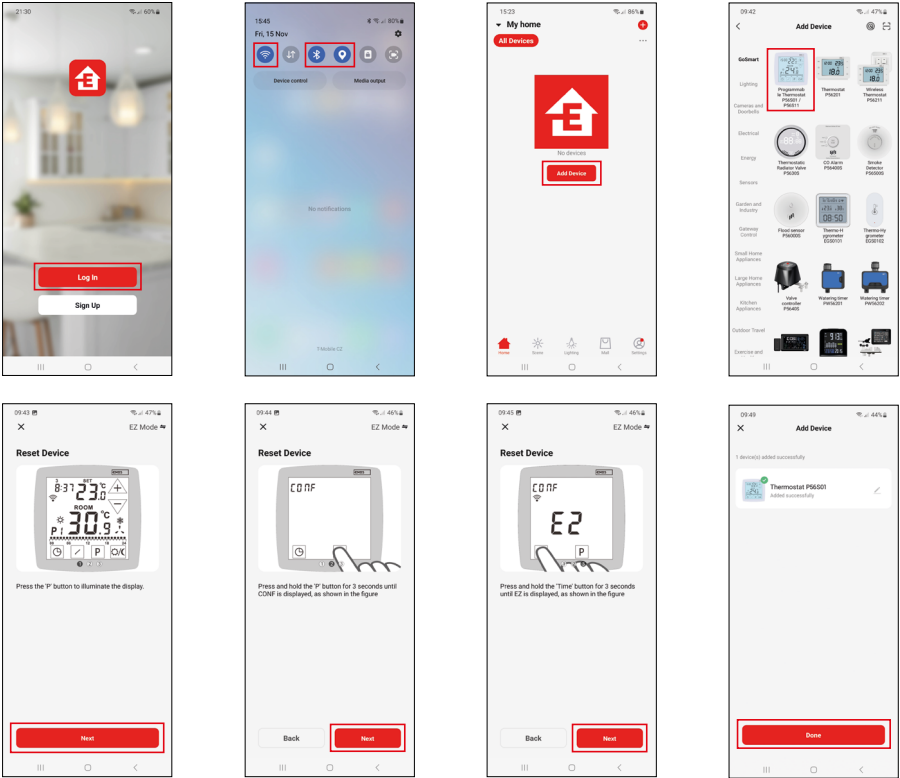


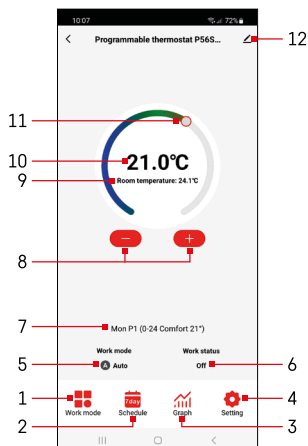
The thermostat can be controlled using a mobile app for iOS or Android.  
Download the EMOS GoSmart app for your device.  
Tap the Log In button if you have used the app before.  
Otherwise, tap the Sign Up button and register.

Pairing with the App

Long-press the "P" button, the screen will display CONF. Then long-press , the screen will display E2 and the WiFi icon will be flashing. Tap Add Device in the app. Tap the GoSmart list on the left and tap the Programmable Thermostat P56S01/P56S11 icon. Follow the instructions in the app and enter the name and password for your 2.4 GHz Wi-Fi network. The gateway will pair with the app within 2 minutes.

*Note: If the device fails to pair, repeat the process. 5 GHz Wi-Fi networks are not supported.*





## Controls and Functions

- 1 – temperature mode settings
- 2 – temperature programme settings
- 3 – graph
- 4 – settings
- 5 – set temperature mode
- 6 – relay status
- 7 – set programme
- 8 – temperature setting
- 9 – room temperature
- 10 – set temperature
- 11 – change temperature
- 12 – advanced settings

## Temperature Mode Settings

Auto – automatic temperature control according to the programme

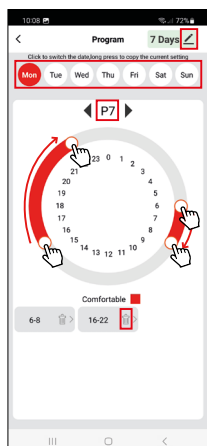
Manual – manual temperature control

Temporary – temporary manual temperature change valid until the next scheduled temperature change

Boost – temporary manual change in temperature for 1 to 9 hours, set in 1 hour increments

Holidays – long-term manual temperature change for 1 to 99 days, set in 1 day increments

OFF – anti-freeze mode, temperature fixed to 7 °C



## Temperature Programme Settings

Tap the pencil icon in the top right and choose the days setting:

- 7 – calendar week
- 5+2 – workdays + weekend
- 24h – individual day

Tap to mark the programmed day, then long tap to copy the programmed schedule to other days.

Use the left/right arrow to select one of the P1–P9 programmes.

P1–P6 are factory preset programmes and cannot be modified.

P7–P9 are programmes that can be modified.

The circle represents a day divided into 24 hours, with 1 hour resolution.

Tap into the circle and drag your finger to mark the desired time range for setting the comfort temperature – red.

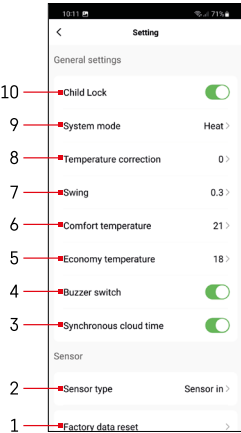
The time you do not mark is automatically set as economy temperature – grey.

To change the time span, either click and drag your finger around the circle again, or click the grey box with the time at the bottom.

Tapping the trash bin icon deletes the setting.

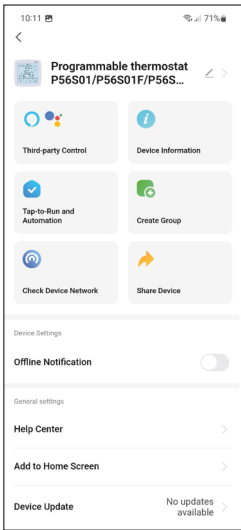
Graph

Displays a chart of set and measured temperature within the last max. 7 days.



Settings

- 1 – restore to factory settings (reset)
- 2 – sensor type (internal, floor, both sensors)
- 3 – time synchronization with the cloud
- 4 – button sound settings
- 5 – economy temperature setting
- 6 – comfort temperature setting
- 7 – temperature differential setting
- 8 – room temperature calibration setting
- 9 – heating/cooling system settings
- 10 – button lock



Advanced Settings

- Third-Party Control - connection to voice assistant
- Device Information – basic information about the device
- Tap-To-Run and Automation – scenes and automations assigned to the device
- Create Group – creates a group of similar devices
- Check Device Network – Wi-Fi network test
- Share Device – shares control of the device with another person
- Offline Notification – notifies when the device is offline for over 8 hours (e.g. power outage)
- Help Center – displays frequently asked questions and their solutions and provides the option to send us a question/suggestion/feedback directly
- Add to Home Screen – adds an icon for the device on the phone's home screen
- Device Update – updates the device



## Troubleshooting FAQ

### The thermostat is not working

- check that all cables are intact and correctly connected
- check if the floor sensor is undamaged
- test the functioning of the WiFi connection
- check that the OpenTherm setting is configured correctly on both devices
- check that the target temperature on the thermostat is set correctly. If the temperature set on the thermostat is lower than current temperature in the room, the boiler or heating will not activate
- check that the Heating/Cooling mode is set correctly
- restart the thermostat

