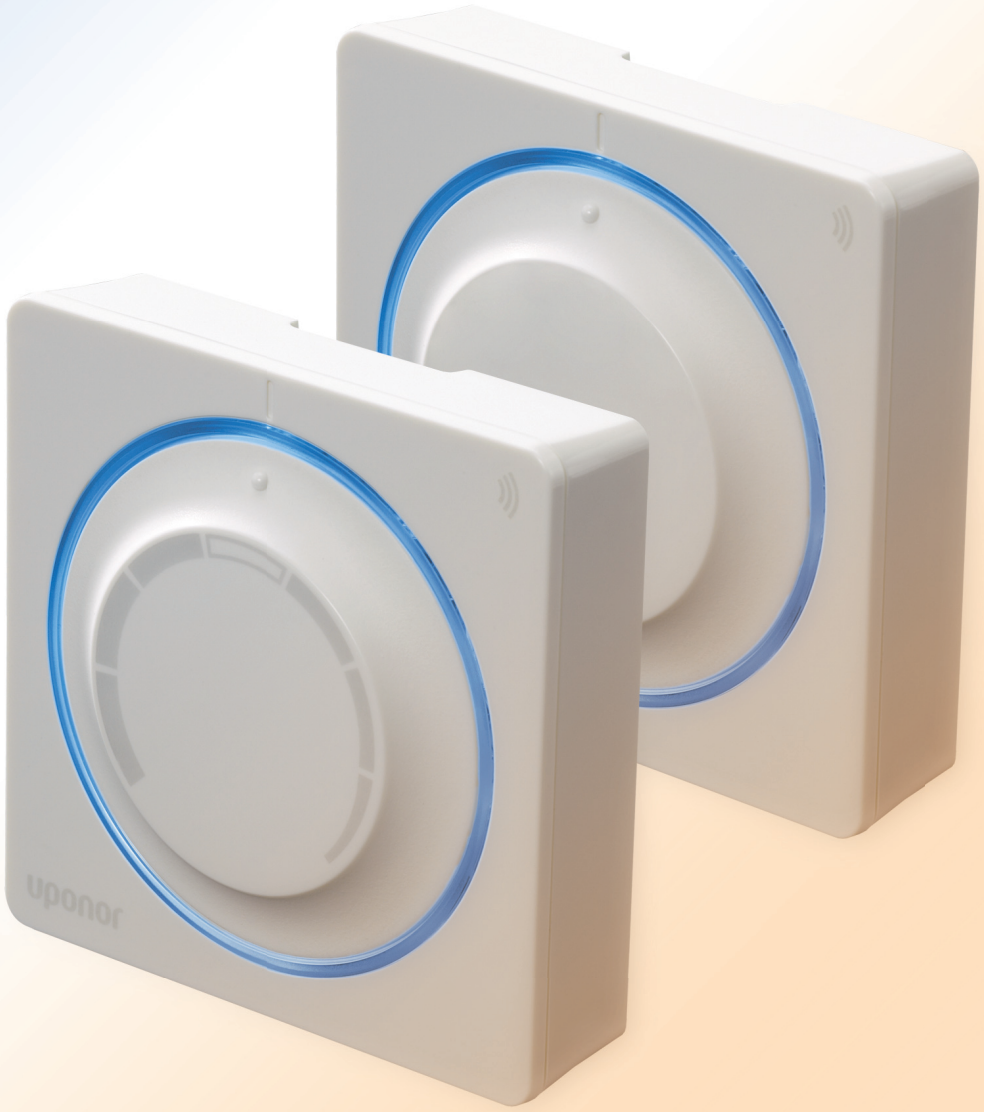
Uponor Smatrix Wave thermostat standard T-165

Analogue thermostat for individual room temperature control



Individual room temperature control with Uponor underfloor heating

A pleasant room temperature is important for our well-being. The temperature that we actually feel is a combination of the air temperature and the temperature of the surrounding surfaces, such as the floors, walls and ceiling.

With even radiant heat from the floor, you can heat your home at air-temperatures 1–2 °C lower compared with radiator heating and save energy without compromising on warmth and comfort. The room temperature that you find most comfortable is ultimately up to you.

Your Uponor underfloor heating system has been designed according to the heat requirement for the individual rooms. The outputs have been calculated to ensure that the specified room temperatures are always reached, even at low outdoor temperatures. In transitional periods (e.g. outdoor temperature +5 to 12 °C), the floor may feel cold. This is normal, as the floor temperature – and therefore the heat output – drops automatically when there is a low heat requirement.

Ideal temperature in any room with Uponor Smatrix Wave Thermostat standard T-165

Uponor Smatrix Wave, featuring autobalancing technology, is an easy to use, intelligent room control system. Autobalancing optimises energy use and comfort by constantly monitoring and adapting the system to changing demands. A further advantage is the wireless functionality of the thermostats adding flexibility and speed to an installation.

Main characteristics

- Adjust temperature setpoint with large dial.
- LED ring indication when turning the dial (changing temperature setpoint).
- Setpoint range is 5 – 35 °C (maximum and minimum setting may be limited by other system settings).
- LED in lower right corner indicating, for about 60 seconds, whether a heating or cooling demand exists.
- Enable or disable Comfort/ECO scheduling for the room with a dip switch on the back.

You can set the desired room temperature using the Uponor Smatrix Wave Thermostat standard T-165. When the room temperature measured by the thermostat deviates from the setpoint value, information is sent to the controller, which then adapts the supply to the floor heating circuits in the room using actuators on the distribution unit and thus adjusts the room temperature.

Please note that there is a delay when setting the desired room temperature value. This depends on factors such as the floor structure, the floor covering (e.g. carpet, parquet, tiles) and the installed system.

You will soon learn that there is no need to significantly increase or lower the desired room temperature.

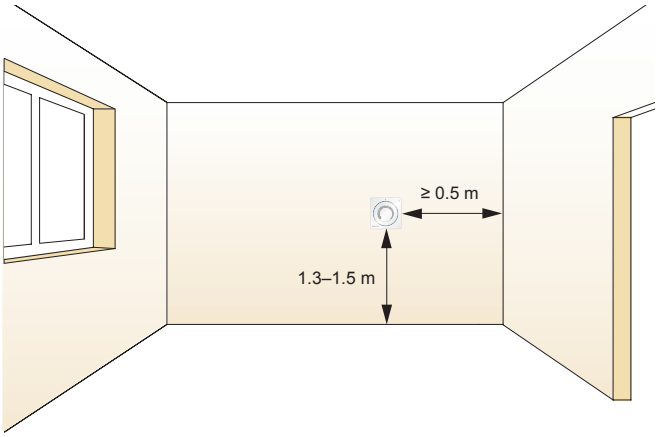
Tip

When changing the setpoint room temperature on the thermostat, adjust it in small increments. A change in the room temperature of just 0.5 °C will result in the room feeling significantly warmer or cooler (after a slight delay).

Analogue standard thermostat

Uponor Smatrix Wave thermostat standard T-165 is a wireless dial single room temperature sensor. It is available in two different versions; one with a white dial (T-165) and the other with a printed dial (T-165 POD).

The thermostat measures the perceived room temperature, transmitting the values to the wireless control unit. When determining where to best place the room thermostats, follow the guidelines described in the illustrations below:



Uponor Smatrix Wave
Thermostat standard
T-165

Uponor Smatrix Wave
Thermostat standard T-165 POD

Safety instructions

- Conform to the following measures when installing and operating any Uponor equipment. Installation must be performed by a competent person in accordance with local regulations.
- Read and follow the instructions in the installation and operation manual.
- All power supplies must be switched off before starting any wiring work.
- **Warning!** The Uponor system uses 230 V AC, 50 Hz power. In case of emergency, immediately disconnect the power.
- Do not use water to clean Uponor components or expose them to flammable vapours or gases. Uponor cannot accept any responsibility for damage or breakdown that can result from ignoring these instructions.

Limitations for radio transmission

The Uponor system uses radio transmission. The frequency used is reserved for similar applications, and the chances of interference from other radio sources are very low.

However, in some rare cases, it might not be possible to establish perfect radio communication. The transmission range is sufficient for most applications, but each building has different obstacles affecting radio communication and maximum transmission distance.

If communication difficulties exist, Uponor recommends relocating the thermostat or the antenna to a more optimal position, and not installing Uponor radio sources to close to each other, for solving exceptional problems.

Important information

Important notes

- The Smatrix Wave Thermostat standard T-165 does not contain any internal components or controls that are of relevance for you as a user. You should therefore never open the control unit.
- The standard thermostat T-165 transmits data wirelessly and runs on two AAA batteries. Under normal operating conditions, the battery life is approximately two years. Replace the batteries of the thermostat when the demand LED flashes. Data is retained during battery replacement.
- Make sure that no water gets into the Smatrix Wave Thermostat standard T-165. This could damage or even destroy the control unit.
- This user guide describes the settings that you as a user can make yourself. Do not adjust any settings on the standard thermostat T-165 other than those described in this user guide.
- If you are unsure whether or not you can adjust any settings, contact your heating installer.

Our request to you

Your Uponor underfloor heating system is practically maintenance-free. If a problem occurs, do not try to fix it yourself. Call the heating installer.

- He installed your system.
- He knows your system.
- He is the best person to help you.

Your heating installer

Standard thermostat T-165 – operation

During normal operation, a discreet LED on the thermostat is lit (B) for about 60 seconds if there is a demand for heating or cooling.

A Room temperature setpoint dial control

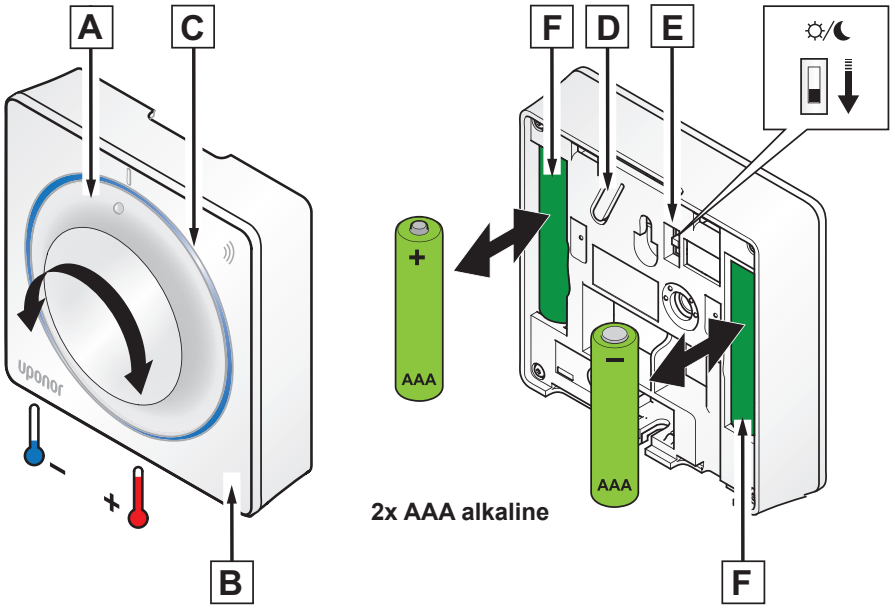
B Heating/cooling demand LED

C Backlight (LED indicator)

D Registration button

E Disable timer switch

F Batteries



A

Temperature adjustment

Use the dial on the thermostat to adjust the temperature. A backlight will light up when turning the dial. It shuts off after about 10 seconds of inactivity. The 21 °C position is marked on the dial.

To adjust the thermostat temperature setpoint:

- Turn the dial clockwise for a higher temperature.
- Turn the dial counter-clockwise for a lower temperature.

E

Timer function

The standard thermostat T-165 has a switch on the reverse allowing the user to disable the timer function (Comfort mode) for the channels controlled by the thermostat

The switch is set to Comfort/ECO from the factory.

F

Insert/replace batteries

The thermostat batteries supplied typically last for up to 2 years. Replace the batteries of the thermostat when the demand LED (B) flashes. Ensure that the batteries are correctly inserted.

The thermostat will perform a self test, for about 10 seconds, when the batteries have been inserted. The system will be blocked for input and the thermostat LED flashes during this period.

STOP

Factory reset

Do not factory reset the thermostat unless absolutely necessary. A factory reset removes the registration data from the thermostat and all parameter values are reset to default settings.

Technical data

CE marking	
ERP	IV
IP (degree of inaccessibility to active parts of the product and degree of water)	IP20
Max. ambient RH (relative humidity)	85 % at 20 °C
Low voltage tests	EN 60730-1* and EN 60730-2-9***
EMC (electromagnetic compatibility requirements) tests	EN 60730-1 and EN 301-489-3
ERM (electromagnetic compatibility and radio spectrum matters) tests	EN 300 220-3
Voltage	2.2 V to 3.6 V
Operating temperature	0 °C to +45 °C
Storage temperature	-10 °C to +65 °C
Radio frequency	868 MHz
Transmitter duty cycle	<1%
Connection terminals (thermostats only)	0.5 mm² to 2.5 mm²

EAC

Usable in all Europe CE 0682

Declaration of conformity:
We hereby declare under our own responsibility that products dealt with by these instructions satisfy all essential demands linked to the R&TTE 1999/5/CE Directive dated March 1999.

For further information, if necessary, please read the Uponor Smatrix Wave/ Wave PLUS Installation and operation manual.

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