

COMPUTHERM T32

COMPUTHERM T-32 Digital Room Thermostat User Manual

Model: T32

1. INTRODUCTION

The COMPUTHERM T-32 room thermostat is designed for controlling most boilers and air conditioners available in the EU. It can be easily connected to any gas boiler with a two-wire thermostatic connection point, and to all air conditioning systems or electrical appliances, whether they have a 24V or 230V control circuit.

This digital thermostat allows for more precise temperature measurement and adjustment compared to traditional thermostats. It helps reduce energy costs while maintaining comfort by regulating the connected appliance (e.g., a gas boiler or pump) based on the measured and set temperatures.

Key Features:

- **Precise Temperature Control:** Easily set desired temperature between 5°C and 30°C in 0.5°C increments.
- **Constant Indoor Temperature:** Switching sensitivity of $\pm 0.2^{\circ}\text{C}$ or 0.1°C ensures a uniform and stable room temperature.
- **Versatile Compatibility:** Suitable for boilers with a two-wire connection and various HVAC systems (24V or 230V).
- **Heating and Cooling Modes:** Supports both heating and cooling functions.
- **Digital Display:** Provides clear and accurate temperature readings.

2. SETUP AND INSTALLATION

Important: The device must be installed by a competent person.

2.1 Package Contents

Verify that all components are present:

- 1x COMPUTHERM T-32 Digital Room Thermostat
- 2x AAA Batteries
- Mounting hardware (screws and wall plugs)



Figure 1: Package contents including the thermostat, batteries, and mounting hardware.

2.2 Battery Installation

1. Carefully remove the back cover of the thermostat.
2. Insert the two AAA batteries into the battery compartment, ensuring correct polarity (+/-).
3. Replace the back cover.

2.3 Mounting and Wiring

The thermostat is designed for wall mounting in a room. Choose a location away from direct sunlight, drafts, or heat sources that could affect temperature readings.

1. Separate the front panel from the back plate.
2. Mark the desired mounting position on the wall.

3. Drill holes and insert the wall plugs.
4. Secure the back plate to the wall using the provided screws.
5. Connect the two-wire control circuit from your boiler or HVAC system to the terminals on the back plate. Refer to the wiring diagram on the back of the thermostat for correct connections.
6. Carefully reattach the front panel to the back plate.

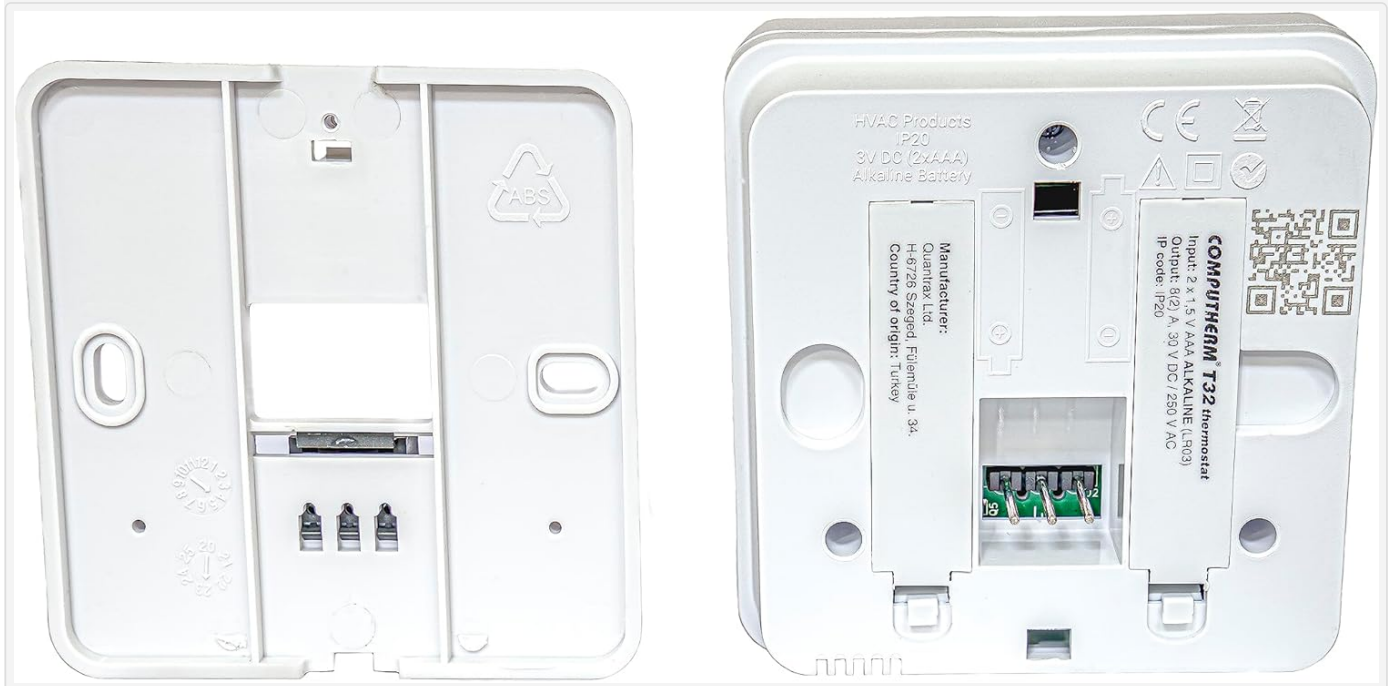


Figure 2: Rear view of the thermostat with wiring terminals and battery compartment details.

3. OPERATION

3.1 Display Overview

The digital display shows the current room temperature and the set desired temperature. The thermostat features three control buttons below the display.

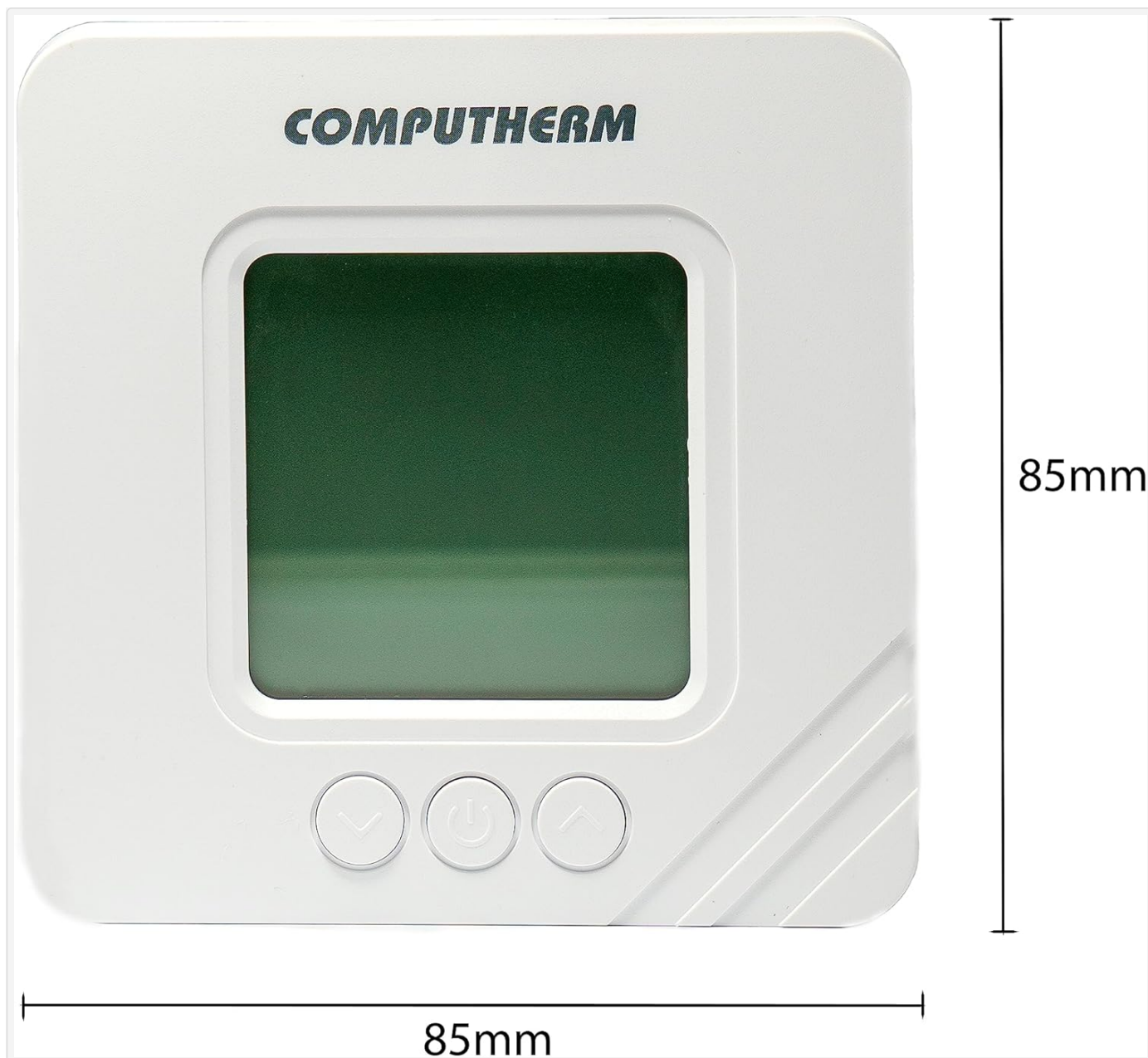


Figure 3: Front view of the COMPUTHERM T-32 thermostat with its digital display and three control buttons.

3.2 Setting the Desired Temperature

Use the temperature control buttons (typically marked with up and down arrows or similar symbols) to adjust the desired temperature. Each press changes the temperature by 0.5°C within a range of 5°C to 30°C.

- Press the **Up Arrow** button to increase the desired temperature.
- Press the **Down Arrow** button to decrease the desired temperature.

The thermostat will automatically regulate the connected heating or cooling appliance to maintain the set temperature within its switching sensitivity of $\pm 0.2^\circ\text{C}$.

3.3 Heating Mode Operation

In heating mode, if the measured room temperature falls below the set temperature minus the switching sensitivity (e.g., $22^\circ\text{C} - 0.2^\circ\text{C} = 21.8^\circ\text{C}$), the thermostat will activate the heating appliance. It will deactivate the heating when the room temperature rises above the set temperature plus the switching sensitivity (e.g., $22^\circ\text{C} + 0.2^\circ\text{C} = 22.2^\circ\text{C}$).

3.4 Cooling Mode Operation

In cooling mode, the operation is reversed. If the measured room temperature rises above the set temperature plus the switching

sensitivity, the thermostat will activate the cooling appliance. It will deactivate cooling when the room temperature falls below the set temperature minus the switching sensitivity.

Note: After a temperature change using the thermostat's adjustment buttons, the switching sensitivity is temporarily not considered, allowing the thermostat to react to a difference of $\pm 0.1^{\circ}\text{C}$ for immediate response.

4. MAINTENANCE

- **Cleaning:** Wipe the thermostat with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Battery Replacement:** Replace batteries when the low battery indicator appears on the display. Always use new AAA alkaline batteries.
- **Avoid Obstructions:** Ensure no objects block the thermostat's ventilation slots or sensor, as this can affect temperature accuracy.

5. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--|---|---|
| Thermostat display is blank. | Dead or incorrectly installed batteries. | Replace batteries, ensuring correct polarity. |
| Heating/Cooling system not responding. | Incorrect wiring; system power off; thermostat in wrong mode. | Check wiring connections (consult a professional); ensure system power is on; verify thermostat is set to appropriate mode (heating/cooling). |
| Inaccurate temperature reading. | Thermostat located near heat source/draft; sensor obstructed. | Relocate thermostat if possible; ensure no obstructions around the sensor. |
| Temperature fluctuates too much. | High switching sensitivity setting (not applicable for T-32 as it's fixed). | The T-32 has a fixed sensitivity of $\pm 0.2^{\circ}\text{C}$. Ensure proper placement and insulation of the room. |

6. SPECIFICATIONS

- **Model:** T32
- **Power Source:** 2x AAA 1.5V Alkaline Batteries (included)
- **Control Voltage:** 24V AC or 230V AC
- **Load Capacity:** 8 Amperes
- **Temperature Measurement Range:** 5°C to 30°C
- **Temperature Setting Range:** 5°C to 30°C
- **Temperature Setting Increment:** 0.5°C
- **Switching Sensitivity:** $\pm 0.2^{\circ}\text{C}$ (or $\pm 0.1^{\circ}\text{C}$ after manual adjustment)
- **Dimensions (L x W x H):** 8.5 x 8.5 x 2.8 cm
- **Weight:** 160 grams
- **Connectivity:** Wired
- **Color:** White



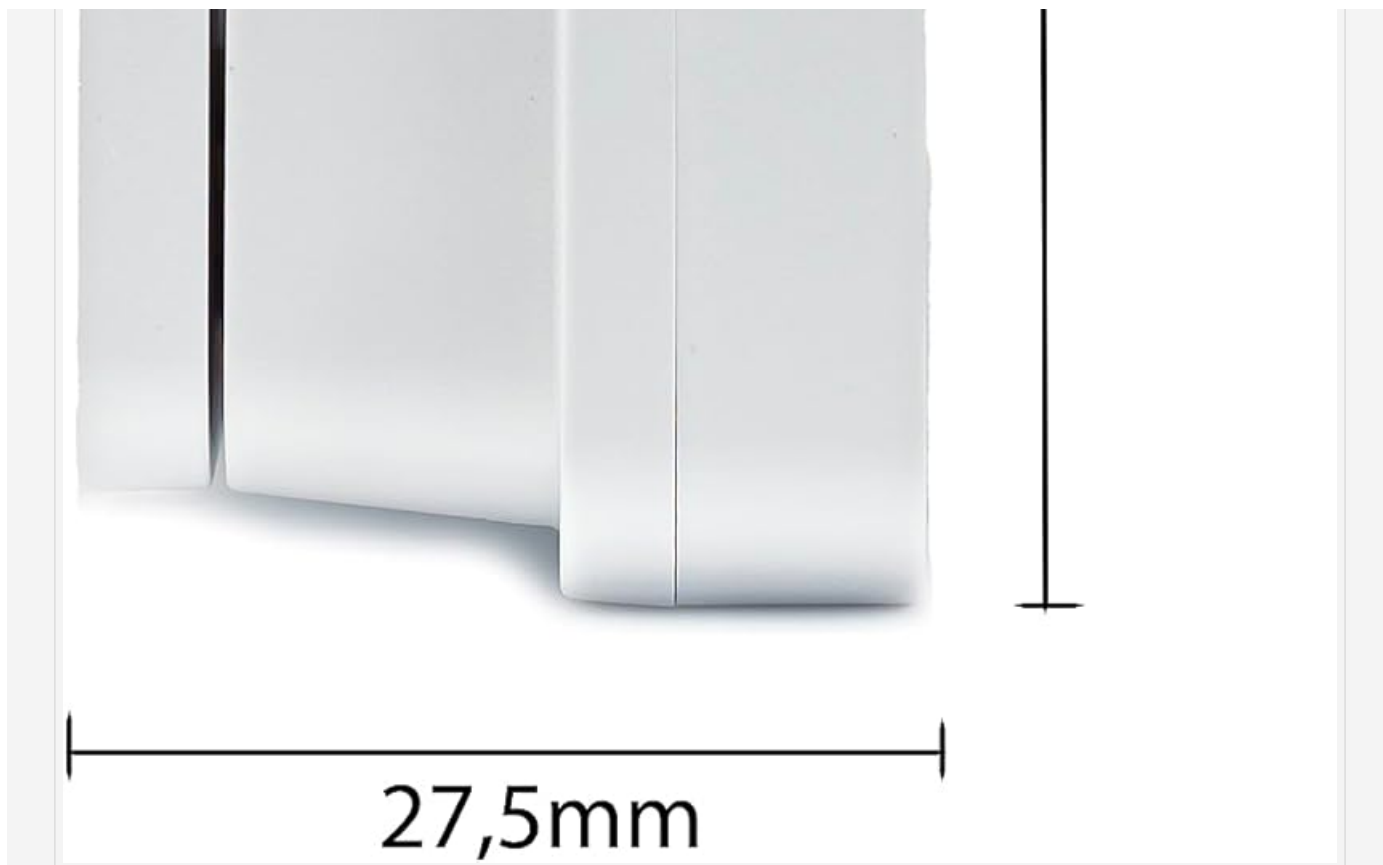


Figure 4: Dimensions of the COMPUTHERM T-32 thermostat.

7. WARRANTY

The COMPUTHERM T-32 Digital Room Thermostat comes with a **5-year manufacturer's warranty**. Please retain your proof of purchase for warranty claims. The warranty covers defects in materials and workmanship under normal use.

8. SUPPORT

For further assistance or if you encounter issues not covered in this manual, please refer to the official COMPUTHERM website or contact your retailer. Always ensure that any electrical work is performed by a qualified professional.

For more information, you may visit the manufacturer's website: www.calorsol.de



Figure 5: Product packaging displaying warranty information and technical data.