

WZ-SENS-TMP-p: Wireless temperature measurement module

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Technical data

Supply voltage
3V DC

Battery type
1 x CR2032

Measured temperature
-10 – 55°C

Dimensions

Width
47mm

Height
47mm

Depth
18mm

Environment

Temperature
-40 – 55°C

Humidity
≤95%RH, non-condensing

The image above is for illustration purpose only. The actual module may vary from the one presented here.

General features

The WZ-SENS-TMP-p module is a temperature measurement sensor from the WZ family of wireless modules. The module is powered by a single CR2032 battery and has a long transmission range (up to 300 m in open terrain). The measured temperature value is sent to the base station module and from there is fed to the CAN bus.

Measurement

The sensor is distinguished by its high measurement accuracy (0,1° C). The sensor performs a measurement every set time T_P (15 minutes). If the current measurement result (T'') differs from the previous value (T') by the set hysteresis value ($h_P = 0.3^\circ \text{C}$), the measurement result is sent to the controller. Otherwise, the transmission does not take place. If the temperature changes for the next 10 measurements are smaller than the hysteresis value, the temperature is sent to the controller only after the obligatory time ($T_{ob} = 150 \text{ min}$).

Pressing the *PROG.* button on the sensor casing immediately sends the temperature value to the controller.

Programming

Programming of the module is carried out using the [Ampio Designer](#) tool. It allows modifying the module's parameters and defining its behaviour in response to signals directly available to the module. It also provides access to all the information coming from all the devices present within the building automation bus.

Before starting configuration activities, it is necessary to pair the device with the module acting as the Ampio WZ base station in the wired part of the building automation installation. To do this, using the Ampio Designer software, enter the base station module into the search mode for modules of the WZ group. While the search mode is active, press the pairing button on the activated radio module. If the operation is successful, the found device will appear in the list of paired wireless modules in the Ampio Designer software.

We do not recommend using more than 8 Ampio WZ wireless modules per base station module. Installing more modules may result in excessive load on the wireless network and malfunction of the system.

The programming of rules for which the WZ-SENS-TMP-p module is to be the executing device is defined within the configuration of the base station module. In order to create rules whose triggering is to depend on the state of the WZ-SENS-TMP-p module, it is necessary to add it to the device list as a *virtual device*.

Changing the battery

- Use a screwdriver to unscrew the back flap.
- Remove the electronics board.
- Slide out the battery.
- Press the PROG button several times.
- Install the new battery paying particular attention to the polarity. The polarity is marked on the terminal (potential '+'). **CAUTION:** Incorrect installation of the battery can damage the sensor!
- Insert the electronics board into the casing.
- Install the back cover.
- Check correct operation - when pressing the PROG button, the diode should light up as if transmitting.

Module dimensions

Dimensions expressed in millimeters.

