

## DALI Temp



### Datasheet

### Temperature Sensor

DALI sensor unit for temperature measurements

Art. Nr. 86459544

# DALI Temp Temperature Sensor

## Overview

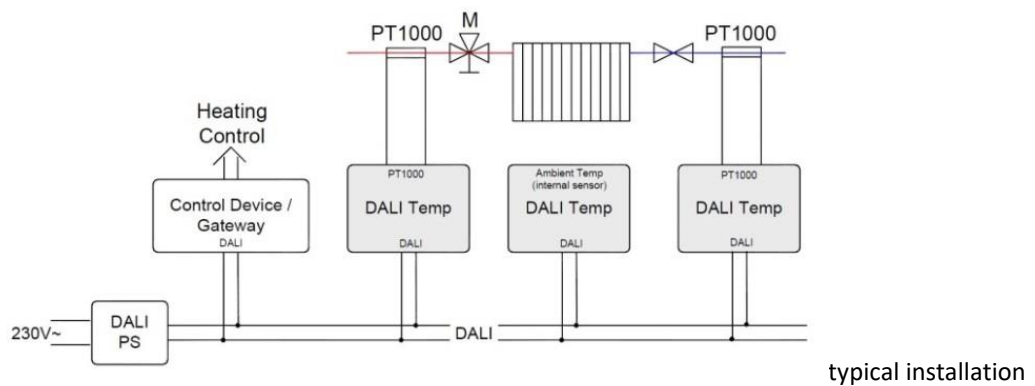
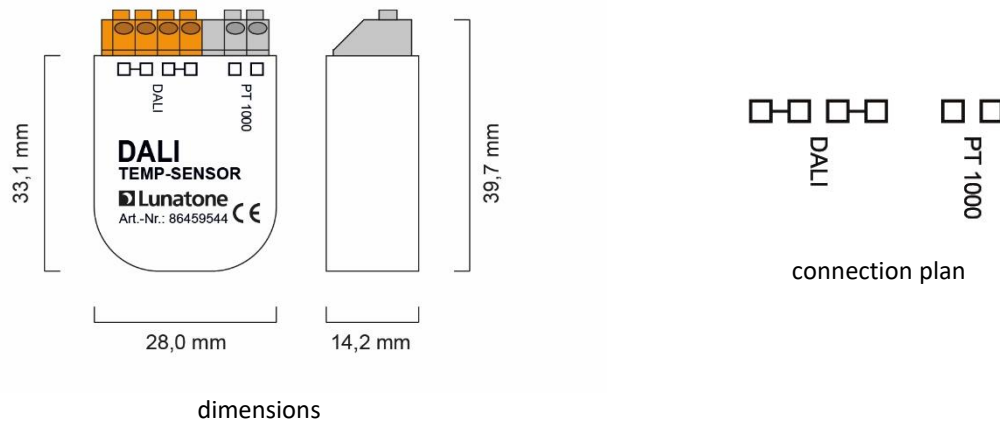
- DALI sensor unit for temperature measurements
- Internal sensor and terminals for connecting an external PT1000 (other external sensors on request)
- The measurement values of internal and external sensor can be queried via DALI
- Suitable for measuring and monitoring temperature e.g. for heating and ventilation technology
- The module does not require an additional power supply, it is supplied by the DALI-line directly
- Double DALI terminals – the DALI signal line is connected through

## Specification, Characteristics

type	DALI Temp
article number	86459544
<b>electrical data:</b>	
power supply	via DALI- Bus
typ. current consumption	2.6 mA
output	DALI
number of used DALI addresses	1
input (optional)	PT1000
<b>technical data:</b>	
temperature measurement range (internal sensor)	0°C to... +75°C
accuracy (internal sensor)	0.5°C
temperature measurement range (external PT1000)	-25°C ... +125°C
accuracy (external PT1000)	0.4°C
storing and transportation temperature	-25°C ... +75°C
operational ambient temperature	-25°C ... +75°C
protection class	IP20
connecting wire cross section	0.5-1.5 mm <sup>2</sup>
dimensions	39,7mm x 28mm x 14mm
mounting	back box

### Application in heating technology e.g. for:

- measurement of flow temperatures
- measurement of return temperatures
- measurement of ambient temperatures



## Querying and Evaluating Temperature Values

### Query Measurement Values

The measurement values of the internal and the external sensor can be queried via scene values. Each measurement value is a 16bit value (2bytes), for low resolution (1°C) reading out the high byte only is sufficient.

Internal sensor:

HiByte: Scene 0 (Command: QUERY SCENE 0)

LoByte: Scene 1 (Command: QUERY SCENE 1)

External sensor:

HiByte: Scene 2 (Command: QUERY SCENE 2)

LoByte: Scene 3 (Command: QUERY SCENE 3)

### Evaluating the temperature

Formula for combining the two bytes and generating a value in °C:

$$\text{Temp}[^{\circ}\text{C}] = \text{HiByte} + \text{LoByte}/256$$

range HiByte (signed): [-128 ... +127]

range LoByte (unsigned): [0...255]

For measurements with low resolution reading the HiByte only is sufficient. The value of the HiByte corresponds directly to the temperature value in °C. For higher resolutions the LoByte can be queried after having read out the HiByte.

Example:

-5,75°C: HiByte=-6, LoByte= 64;

+5,75°C: HiByte=5, LoByte=192;

## Purchase Information

**Art.Nr. 86459544:** DALI Temp, temperature sensor (internal: 0°C ... +75°C), external PT1000 (-25°C ... +125°C), back box

## Additional Information

Datasheets and manuals

<https://jumitech/produkter>

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

## Contact

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## Disclaimer

Subject to change. Information provided without guarantee.  
The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.