

# LCN-TSA

## Prec.-temperature sensor (0,1°C) for outdoor application

The LCN-TSA is an especially small, high precision, digital temperature sensor for outdoors. With its own processor it records almost noiseless measurements and sends them via the I-Port connector to the connected LCN module.

### Description:

The temperature sensor is used for determining outdoor temperature. By connecting further sensors to the LCN bus, an energy saving and user friendly single room heating regulation system can be implemented which, among other things, includes control of the ventilation system.

It additionally allows for the calculation of indoor and outdoor temperature differences (e.g. for passive nocturnal cooling and conservatory control).

The LCN-TSA can operate in parallel with all other modules connected to the I-port connector on all intelligent LCN modules (UPP, UPS, UP24, SH, HU).

The module enables the option of having two continuous action control circuits plus 5 thresholds which can also be used for regulating purposes.

Measured values can be exchanged between operational LCN modules and their differences calculated.



### Hardware equipment:

#### LCN-TSA:

Temperature sensor, in protective mould

Wall or ceiling mounting with PVC clip

2m connecting cable with plug to I-Port connector

#### LCN-IV:

Cable with plug for the I-Port connection

2 spare I-Port sockets for connection of further peripherals

Screw terminals for cable up to 0,8mm Ø

### Note:

The assembly position and location may influence the recorded values: air-streams, mounting height and heat sources (heat radiating from lighting) are all to be considered.

If the supply cable is to be extended outdoors, then a terminal connector in IP65 protective casing is to be used.

The supply cable can be extended up to 50m.

For more detailed information please refer to the installation instructions.



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## Dimensions:

Sensor LCN-TSA (L x Ø): 65 mm x 15 mm Ø

LCN-IV (L x W x H): 22 mm x 12 mm x 13 mm

Supply cable: 2 m



## Technical Data:

### Sensor data:

Mesured range: -20°C to +85°C  
 Resolution: 0,1°C  
 Accuracy: +15°C to +30°C: typical 0,3°C  
 -20°C to +85°C: typical 0,6°C  
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Supply cable: 2 m, LiYCY, multi core

### General details:

Operating temperature: -20°C to +85°C  
 Enviromental conditions: Stationary installation according to VDE632, VDE637

### Safety classification:

Sensor LCN-TSA: IP 65  
 LCN-IV: IP 20

## Assembly:

**LCN-TSA:**  
 Roof or wall mount using cable clip

**LCN-IV:**  
 Decentral Installation

## Circuit Diagram

