

LCN-GRT

Temperature sensor and IR receiver in glass design (LCN-GT series)

The LCN-GRT is a temperature sensor and IR receiver for surface mounting in LCN-GT series design. In combination with the integrated logic, the digital temperature sensor supplies almost noiseless measured values, which it transmits to the connected LCN module via the I port.

Description:

The LCN-GRT is used for the measurement of room temperatures and the integration of the LCN-RT remote control and LCN-EFS humidity sensor. It can be linked to additional sensors on the LCN bus in order to implement an energy-efficient and user-friendly control system for individual rooms, heating, air conditioning and ventilation.

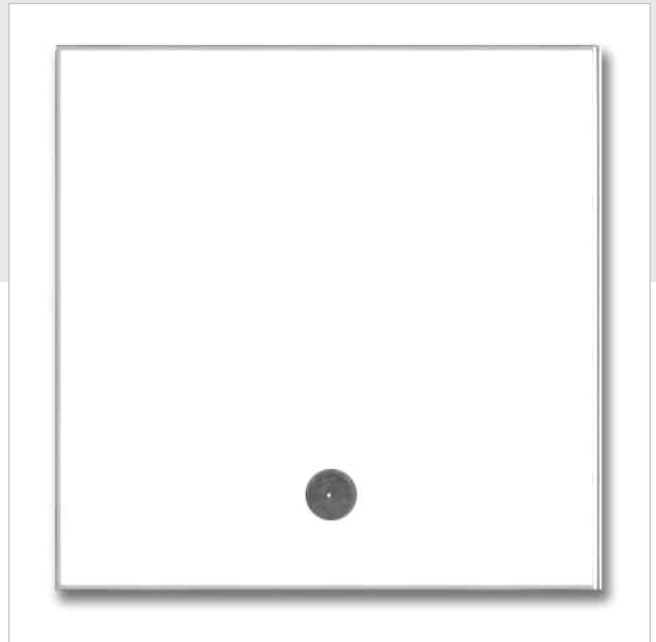
The integrated LCN-RR IR receiver allows the LCN-GRT to process the signals of LCN remote controls. It can receive and forward up to 48 commands, 16 million access codes and 3333 key codes. The LCN-GRT can be combined with any I port peripheral equipment at the I port of all intelligent LCN modules (-UPP, -UPS, -UP24, -SH, -SHS, -HU, -LD). The LCN-GRT can take effect on the R1 and R2 controllers as well as the signal thresholds 1-5. Measured values can be exchanged between LCN modules and used for arithmetic operations.

Hardware equipment:

- Temperature sensor
- Infrared receiver
- Installation space for LCN-EFS
- Housing for wall and ceiling mounting
- Cable with plug for I port
- Screw terminal for connection via I-Y(St)Y

Note:

The installation location and position have an influence on the measured values and the reception range: the air currents, installation height and heat sources (lamp radiation) are to be observed. The supply line can be extended by up to 50 m. Detailed information can be found in the installation instructions.



LCN-EFS humidity sensor:

A humidity sensor (LCN-EFS), which can be subsequent installed, is optionally available for the LCN-GRT. The LCN-EFS supplies humidity and dew point values.

Modells:

LCN-GRT

Color: white
black

LCN-GRTW
LCN-GRTB

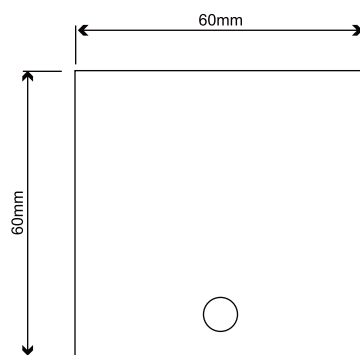


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Dimensions:

Housing (WxL xH): 60mm x 60mm x 24mm
 Depth: 12mm
 Supplied flat cable: 280mm



Assembly: Wall- or ceiling-mounted on 35mm light outlet box or screw mounting

Frame: Available in white and black, customised special colours on request.

Technical data:

Connection

Supply voltage: not necessary (I-port-connection)
 Power consumption: <math><0,1\text{W}</math>

Temperature range:

Effective range: -10°C to $+60^{\circ}\text{C}$
 Resolution: $0,1^{\circ}\text{C}$
 Accuracy: typ. $0,3^{\circ}\text{C}$ from $+15^{\circ}\text{C}$ to $+30^{\circ}\text{C}$
 typ. $0,6^{\circ}\text{C}$ from -20°C to $+85^{\circ}\text{C}$,
 max. 2°C for the complete range

IR receiver:

Carrier frequency: 40kHz

Installation moisture sensor:

(Order separately where appropriate)
 Resolution: 1% humidity
 Accuracy at 20-80% humidity: $\pm 4\%$
 Out of range: $\pm 6\%$

Dew point

Resolution: $0,1^{\circ}\text{C}$
 Accuracy at 20-80% humidity and $10-40^{\circ}\text{C}$ ambient temperature: $\pm 2^{\circ}\text{C}$

Ports:

I-port: Circuit connectors or spring clips

General Data:

Operating temperature: -10°C to $+60^{\circ}\text{C}$
 Humidity: max. 80% rel., no condensation
 Environmental conditions: stationary installation VDE 632, VDE 637
 Safety classification: IP20

Circuit Diagram

