

Sensor with temperature sensor and IR receiver for the I-connection in glass design

The **LCN-GRT** is an indoor temperature sensor and IR-receiver in the same design as the LCN-GT series. For this the additional the humidity sensor LCN-EFS is also available.

The temperature sensor sends temperature values to LCN modules over the I-connection.

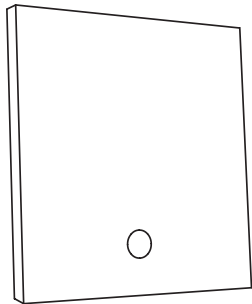
Through the integration of the IR receiver the LCN-GRT can process signals from the LCN-remote controls.

Included in delivery

LCN-GRT, mounting plate, 2 screws (3,2x25)
& I-connection cable.

Connection

The LCN-GRT is suitable for connecting to the I-ports from LCN-UPx, -SH, -SHS, -LD and -HU Serial number 090119 (Jan. 1999) or later. The connecting cable to the LCN module can be optionally extended up to 50 m with an LCN-IV - see "TDi connection from periphery" on our homepage ([www.LCN.de / downloads](http://www.LCN.de/downloads)).



How it functions:

After connecting, the LCN-GRT will be detected automatically and its temperature measured value transferred into the first controller variable (R1-Var) of the module. You can check the value in the status window of the LCN-PRO.

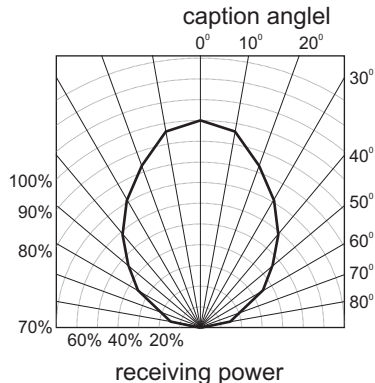
Measured values can be swapped between LCN modules and be used for arithmetic operations.

The receiving power of the IR receiver depends on the strength of the transmitted signal and the angle of caption. In bright indoor rooms, the reflection light from ceilings and walls are often enough. Direct light from fluorescent lamps or sunlight impair the reception. The IR sensor can receive and forward on 48 commands, 16 million access codes and 3333 key codes.

Notes:

On each LCN module, only one LCN-GRT may be connected!

Don't install the temperature sensor near warm and cold sources, like lights, radiators, coolers/ventilation openings. This can cause measured values to be falsified.



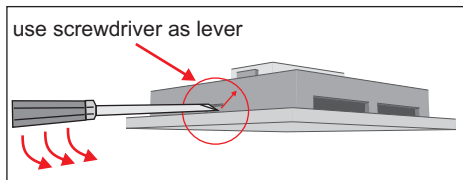
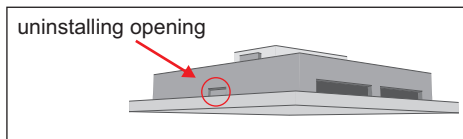
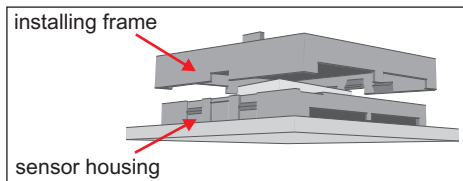
installing/Uninstalling

The LCN-GRT is delivered in a housing, which can be installed on a light outlet box (35 mm, e.g.: Spelsberg type HW 040). An additional screw fitting is possible and often useful.

when installing on ceilings: Check for a safe fixing in every case, to avoid an injury caused by a fallen off glass plate!

After screwing the installing frame on to the wall and plugging in the I-connection, the sensor housing from the LCN-GRT is simply snapped on to the installing frame.

To uninstall the sensor, a screwdriver is placed into one of the both (opposite from one another) uninstalling openings and with a light lever movement, the sensor housing removed from the installing frame.



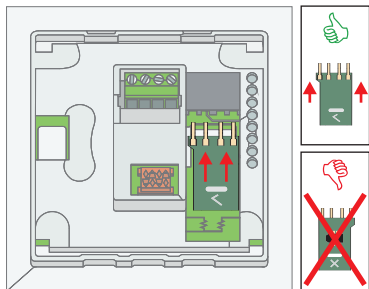
Installing the optional humidity sensor LCN-EFS

An optional humidity sensor LCN-EFS is available to be subsequently built into the LCN-GRT. The use of the built in humidity sensor LCN-EFS is only possible with modules using firmware 160A.. (Oct. 2012) or later. To do this, the jumper bridge must first be removed before inserting. A maximum of one further LCN-EFS may only be operated on one module.

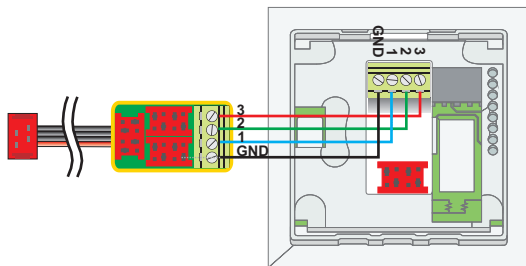
For later installation, please open the service cover on the LCN-GRT and stick the LCN-EFS humidity sensor in. For a correct installation, the tick sign on the circuit board must be visible.

Switch the power off when connecting!

Notes for connecting the LCN-EFS:



scheme extending the I-connection:



Note:

Parallel to the LCN-GRT, the following periphery may be used on the I-connection: LCN-GBL, -RR, -ULT, -GT2, -GT4D, -GT10D, -GT3L, max. 1 further -EFS, but no more than 5 I-periphery devices at the same time on the I-connection.

Important: Operating the LCN-IV as impulse counter / counter input is not possible!

Technical data of the humidity sensor LCN-EFS**Air humidity**

triggering:	1%
accuracy at 20-80% air humidity:	±4%
outside the given areas:	±6%

Dew point

resolution:	0,1°C
accuracy at 20-80% air humidity and 10-40°C environmental temperature:	±2°C

Note: For usage of the LCN-EFS, LCN modules with serial number 160A... or after are required.

Technical data**Connection**

power supply: not needed (over I-connection)
power consumption: <0,1W

LCN-connection: I-connection-jack and
terminals/wire type: screw terminal max. 0,5mm²

Temperature sensor

measuring range: -10°C bis +60°C
resolution: 0,1°C
accuracy: typ. 0,3°C from +15°C bis +30°C
typ. 0,6°C from -20°C bis +85°C,
max. 2°C over the total measurement range

Installation

operating temperature: -10°C bis +60°C
air humidity: max. 80% rel., non condensing
environmental conditions: For use in stationary Installation accord. to VDE632, VDE637
protection art: IP 20
dimensions housing: 60mm x 60mm x 24mm (B x L x D)
construction height: 12mm

Technical information and images are non binding. Changes are reserved.
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