

# Room Sensor 1-Wire 55 mm flush-mount variant UP

Digital room temperature sensor with communication via 1-wire bus in combination with °CALEONbox.



#### **Technical Data**

Power Supply 3,3 VDC ... 5 VDC SELV or PELV

Measurement Range 0 °C ... 60 °C

Accuracy: +/- 1 °C Resolution: 0,1 °C

Protection Class IP20

Max. Cable Length up to 100 m powered (three-wire connection recommended),

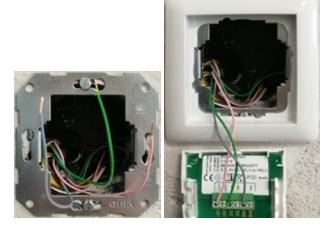
up to 50 m parasitic (two-wire connection),

using twisted pair cables

Dimension 80 mm x 80 mm

Housing Design white plastic housing pure white Installation Methods flush-mounted switch box

### Wall Installation



Mount the sensor in a suitable location.

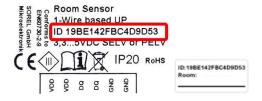


Pay attention to suitable environmental conditions. Direct sunlight, sources of heat and cold, e.g. radiators and windows must be avoided.

#### **Mounting on Pastic Wall Socket**

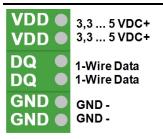
Using the enclosed screws (3.0 x 16) fix the mounting frame to the switch box. Open the terminals with a screwdriver and make the electrical connection as described below.

## Type Plate and Sticker with 1-Wire ID



Each sensor has a unique 16-digit 1-Wire ID. This ID is required for sensor-room assignment in the °CALEON Room Controller. The ID can be found inside the sensor on the type plate and on the supplied sticker. To simplify the later configuration of the system, we recommend to place the sticker in the table of the °CALEONbox operating instructions or on the °CALEONbox terminal diagram sticker.

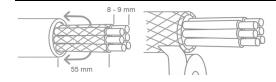
#### **Electrical Connection**



One of the terminal points VDD/DQ/GND is required for the connection of a sensor. The additional three clamping points are for easy connection of further sensors.



Only to be used with SELV or PELV protective extralow voltage.

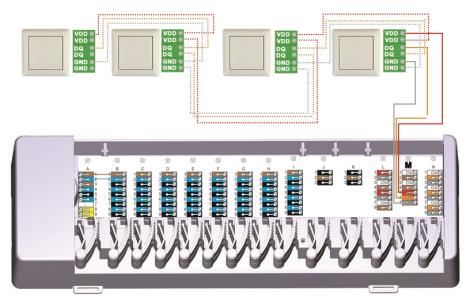




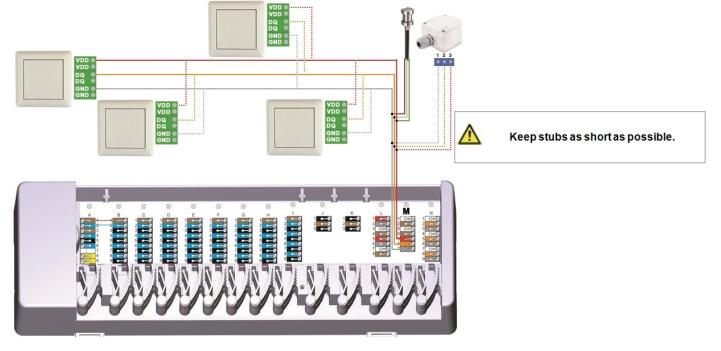
If shielded cables are used, contact between the shielding and the PCB can cause damage to the device and lead to malfunctions.

# **Connection Examples 1-Wire Sensors**

**Example 1:** Series connection. The installation leads from one sensor to the next.



**Example 2:** Tree structure. Several stub lines lead from one main line to the individual sensors.



## **Insert the Element**



- 1. Hold the cover frame to the mounting frame.
- 2. Align the 55-mm element with the mounting frame.
- 3. Push in the 55-mm element until it snaps into the frame.