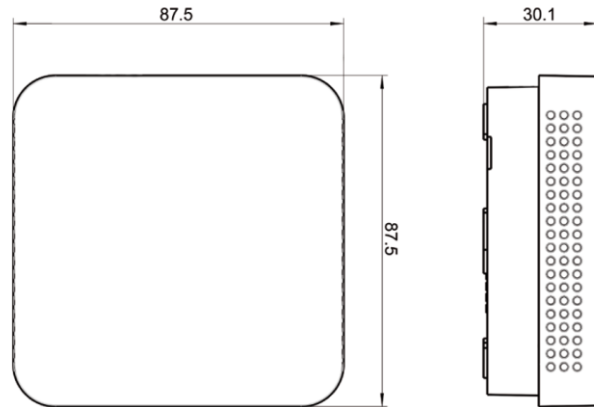


## Technical Drawing



## Mounting Instructions

- The convection must be aligned at the bottom to ensure a flow of air up
- The sensor should always be mounted on the opposite wall of the radiator.
- Ideal mounting height of 1.5 m above the floor.

## Type Selection

Article No.	Output Temp.	Output Humidity	Display
R-HTT-A-1010	0-10V	0-10V	no
R-HTT-A-2020	4-20mA	4-20mA	no
R-HTT-A-10PT1000	passiv	0-10V	no
R-HTT-A-1010D	0-10V	0-10V	yes
R-HTT-A-2020D	4-20mA	4-20mA	yes
R-HTT-A-10PT1000D	passiv	0-10V	yes

**DDCtech** °C Temperatur % Feuchte CO<sup>2</sup> Luftqualität Pa Druck

## R-HTT-A....

Room sensor for humidity and temperature



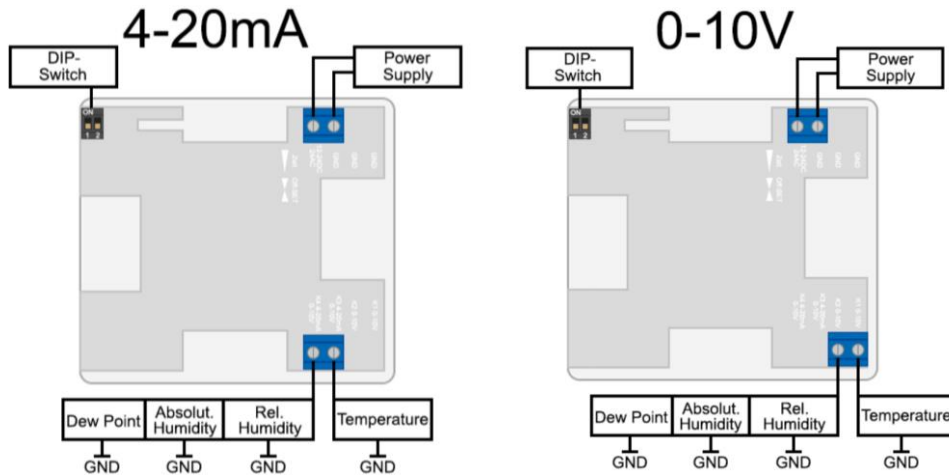
### Application

To measure the relative humidity and temperature optional in homes and offices . The transmitter detects the temperature and relative humidity. Moisture an internal sensor and converts it to a standardized analogue output signal 0-10V or 4-20mA . The active outputs are available in each version , a passive temperature sensor can also be connected. Depending on the model , there are different measuring ranges. The sensor is long term stable and does not need to be recalibrated. Also optional with a epaper display

## Technical Specifications

Power supply at 0-10 V:	16...36 V / DC, 12-24 V / AC
Power supply at 4...20mA:	16...36 V / DC
Sensor element humidity:	capacitive Sensor
Sensor element temperature:	capacitive Sensor
Sensor element temperature with passive sensor:	According to customer
Measuring range humidity:	0...100% r. h.
Output humidity:	0...10V or 4...20mA
Tolerance humidity at 35%...70% r. h.:	± 2% (25...90% r. h.)
Measuring range temperature:	0°C ... +50°C
Output temperature active:	0...10V or 4...20mA
Tolerance temperature:	± 0,5K
Analog output load 0-10V:	10...100 kOhm
Analog output load 4...20mA:	300...1000 Ohm
Operating temperature:	-30°C ... +50°C
Operating humidity:	0...98% r. h.
Response time r. h.:	8 sec. (63% dew)
Connection:	Screw-In terminals 1,5 mm <sup>2</sup>
Casing:	Material ABS, color RAL9010
Measuring range dew point:	-50°C to +100°C
Measuring range absolut humidity:	0-30g/m <sup>3</sup>

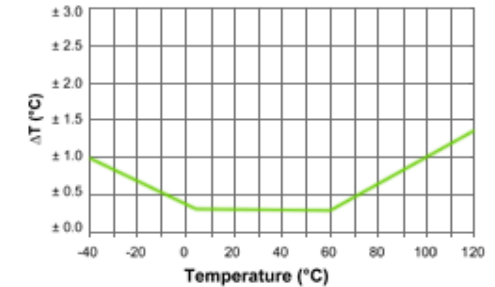
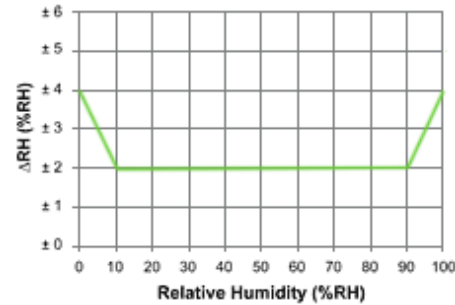
## Electrical Connection



Important: parallel operation with the 24VAC -phase connection is required otherwise a short circuit may occur. The units are designed to operate at low voltage protection. When connecting the equipment, the technical data apply. Data acc. To data sheet. Especially with passive sensors (eg PT100, ...) in two-wire version, the wire resistance of the lead is taken into account. Maybe it has to be corrected in the evaluation electronics. Due to the self-heating of the wire current affects the accuracy of the measurement. Therefore, this should not be chosen larger than 1mA.

Notes:

## Accuracy



## DIP-Switch

- Relative Humidity (0-100%):**  
DIP 1 = Off  
DIP 2 = Off
- Absolut Humidity (0-30g/m<sup>3</sup>):**  
DIP 1 = Off  
DIP 2 = On
- Dew Point (-50°C - 100°C):**  
DIP 1 = On  
DIP 2 = Off

## General Information

- Installation of the equipment must be performed by qualified personnel.
- The units may be connected with the power off.
- The safety of the VDE, the states, the TÜV and the local energy supply company must be observed.
- The EMC guidelines must be observed. It can be used shielded connecting lines, laying parallel with current-carrying lines should be avoided.
- The operating near devices that do not comply with EMC directives may adversely affect the operation of the equipment.
- The buyer is responsible for ensuring compliance with the applicable building and safety guidelines.
- This product should not be used for safety-related tasks, such as for the protection of persons and emergency stop switch on equipment.
- Improper use of any defects and damages are excluded from the warranty and liability.
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- It Only the technical data and connecting conditions of installation and operating instructions supplied with the instrument. Changes are always possible in terms of technical progress and the improvement of the products.
- Changes of the device by the user, all warranty claims.