Room Sensor | Humidity

Controls, Switches and Sensors

For use with Titon HRV Q Plus Range

Room humidity sensor is used to monitor the air quality inside buildings and effectively control ventilation (HVAC) systems according to current levels of air pollution.

The sensor measures the relative humidity (RH) in air. It is suitable for living rooms, bathrooms, warehouses, ateliers etc.

Measurement of the relative humidity is based on the principle of capacitive polymer sensor.

The sensor has one analog output for the actual concentration of RH. The trigger level of RH output relay can be set by a rotary element.

Ventilation, air conditioning and heat recovery units can be directly controlled based on the output signal of the sensor in very efficient way.

Current air quality can be easily checked by three LED indicators. When ambient light is dimmed, the indicators turn off automatically to not disturb you at night.

Sensor

Features & Benefits

- **Measures relative humidity in air**
- **LED indication with automatic turn off according to ambient light (at night)**
- **Analog voltage output 0-10V**
- **Output relay NO/C**
- **Maintenance or calibration not required during operation**
- **Long life and stability**
- **Colour: Front – White, Base – Grey**

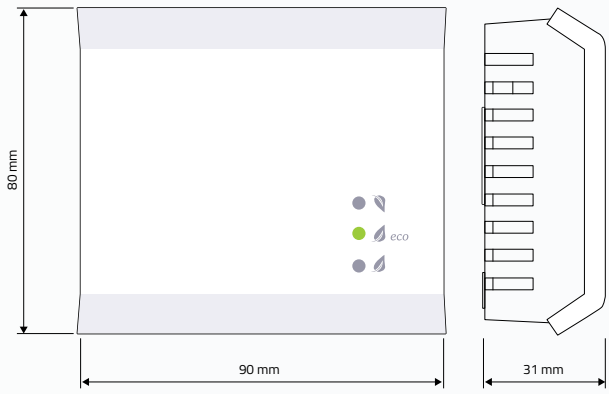
Product Number

Room Humidity Sensor - **TP542**

Specification

Parameter	Value	Unit
Supply voltage range	12 – 35	V DC
	12 – 24	V AC
Consumption	max 1.5	W
RH measuring range	0 – 100 %	RH
RH accuracy 20 – 80 %	± 3 %	
RH accuracy 0 – 100 %	± 6 %	
RH switching hysteresis	5 %	
Voltage output	0 – 10	V DC
Max. switching voltage	250/30	V AC / V DC
Max. switching current	5/5	A AC / A DC
Working humidity non condensing	0 – 90 %	RH
Working temperature	0 to +50	°C
Storage temperature	-20 to +60	
Expected lifetime	min. 10	years
Ingress protection	IP20	
Dimensions	90x80x31	mm

Drawing and Dimensions



Dimensions in mm

[1] Output type and range can be set with jumpers. Factory setting range is TVOC 0 - 3000 µg/m³.

[2] Calculated estimated CO_2 concentration (estimated CO_2 - eCO_2).

[3] Minimum achievable output value corresponds to minimum value of the selected measuring range.