

SENSORS & CONTROLS

SENSORS @ CONTROLS

CO₂-VOC-RH-T AIR VELOCITY DEW-POINT HVAC-SENSORS Temperature Humidity Air Quality Air Flow

www.tasseron.nl

# UP TO 4-IN-1 SENSORS Combination of CO<sub>2</sub>-VOC-RH-T

Plug and play. Choose what you want to measure. Combine to your liking. Select the features that matter to you.

A good environment is of paramount importance. With our sensors you can monitor and control the key factors that attribute to this.

A single housing makes it very easy to measure the temperature (T), humidity (RH),  $CO_2$  and VOC in a specific area. Another combination of these 4 indicators is also possible. We can customize this to your needs.

# UP TO 4-IN-1 ROOM



• Carbon dioxide (CO<sub>2</sub>): A clear indicator of ventilation performance. Elevated CO<sub>2</sub> levels can lead to fatigue, headaches, and health issues. Our sensor monitors these levels accurately for a healthier living and working environment.

Ø 12 m

205 mm

- Volatile Organic Compounds (VOC): Detects chemicals that can pollute the air. VOCs are potential culprits for respiratory and neurological problems, even cancer. Our sensor provides early warnings to minimize health risks.
- Humidity (RH): A crucial aspect for respiratory comfort. Excessive or insufficient humidity can cause respiratory problems. With our sensor, you can maintain the optimal humidity level for a pleasant atmosphere.
- Temperature (T): Plays a vital role in determining air quality. Extreme temperatures are not only uncomfortable but also potentially hazardous. Our sensor gives you control to 7 optimize the ambient temperature.

We manufacture standardized and custom solutions. This way we can provide a fitting solution for every application. Our unique 'off the shelf' solutions are convenient to install.

### UP TO 4-IN-1 DUCT

40,1 mm



## **Features**

- Up to 4-in-1 sensor. Also available as 3-in-1, 2-in-1 or 1-in-1 with combinations of CO\_2/VOC/RH/Temp
- Different output options available, including Modbus
- Additional passive NTC/RTD temperature elements available
- Equipped with a removable hinged cover with a tool-free clasp that offers high ingress protection
- Quick Connect wire terminals for secure and tool-free wiring
- Appealing and easy to install
- Made in The Netherlands

# **DUCT AND ROOM ENCLOSURE**

	PRODUCT VARIATIONS	MEASUREMENT PRINCIPLE	MEASURING RANGE	ACCURACY	OUTPUT	POWER SUPPLY	CONNECTOR	GENERAL
<b>1-IN-1</b> ∙⊺	T	CMOS-Sensor	-10°C +40°C -40°C +70°C 0°C +40°C	± 0,3°C	4 - 20mA or 0 - 10V or	15V DC - 35V DC 24V AC ± 20% (AC not for 4-20mA)	Spring-loaded push in connectors	CE, RoHS, WEEE Transport & storage : -20°C+60°C Humidity 0 95% RH, non-condensing Custom ranges available upon request White label product possible
	T (optional)	NTC / Platinum sensor	-40°C +70°C		RUDADUS			
<b>2-IN-1</b> ∙RH ∙T	RH	CMOS-Sensor	0100%	2% RH 3% RH 5% RH	4 - 20mA or 0 - 10V or Modbus	15V DC - 35V DC 24V AC ± 20% (AC not for 4-20mA)	Spring-loaded push in connectors	Calibration-free technology Outstanding long-term stability CE, RoHS, WEEE Transport & storage : -20°C +60°C Humidity : 0 95% RH, non-condensing Custom ranges available upon request
	т	CMOS-Sensor	-10°C+40°C -40°C +70°C 0°C +40°C	± 0,3°C				
	T (optional)	NTC / Platinum sensor	-40°C +70°C					
•CO <sub>2</sub> •T	CO <sub>2</sub>	Dual channel NDIR	0 2000 ppm	30ppm ± 3% mv	0 - 10V or Modbus	15V DC - 35V DC 24V AC ± 20%	Spring-loaded push in connectors	Automatic CO2 self-calibration Outstanding long-term stability CE, RoHS, WEEE Transport & storage : -20°C +60°C Humidity : 0 95% RH, non-condensing Custom ranges available upon request
	Т	CMOS-Sensor	-10°C +40°C -40°C +70°C 0°C +40°C	± 0,3°C				
	T (optional)	NTC / Platinum sensor	-40°C +70°C					
<b>3-IN-1</b> •CO₂ •RH •T	CO <sub>2</sub>	Dual channel NDIR	0 2000 ppm	30ppm ± 3% mv	0 - 10V or Modbus	15V DC - 35V DC 24V AC ± 20%	Spring-loaded push in connectors	Automatic CO2 self-calibration Outstanding long-term stability CE, RoHS, WEEE Transport & storage : -20°C +60°C Humidity : 0 95% RH, non-condensing Custom ranges available upon request
	RH	CMOS-Sensor	0100%	2% RH 3% RH 5% RH				
	т	CMOS-Sensor	-10°C +40°C -40°C +70°C 0°C +40°C	± 0,3°C				
	T (optional)	NTC / Platinum sensor	-40°C +70°C					
•VOC •RH •T	voc	Metal hot-plate	0 100%	< ± 15 index points < ± 15% mv	0 - 10V or Modbus	15V DC - 35V DC 24V AC ± 20%	Spring-loaded push in connectors	Calibration-free technology Outstanding long-term stability CE, RoHS, WEEE Transport & storage : -20°C +60°C Humidity : 0 95% RH, non-condensing Custom ranges available upon request
	RH	CMOS-Sensor	0100%	2% RH 3% RH 5% RH				
	т	CMOS-Sensor	-10°C +40°C -40°C +70°C 0°C +40°C	± 0,5°C				
	T (optional)	NTC / Platinum sensor	-40°C +70°C					
<b>4-IN-1</b> •CO <sub>2</sub> •VOC •RH •T	CO <sub>2</sub>	Dual channel NDIR	0 2000 ppm	30ppm ± 3% mv	0 - 10V or Modbus	15V DC- 35V DC 24V AC ± 20%	Spring-loaded push in connectors	Automatic CO2 self-calibration Outstanding long-term stability CE, RoHS, WEEE Transport & storage : -20°C +60°C Humidity : 0 95% RH, non-condensing Custom ranges available upon request
	VOC	Metal hot-plate	0 100 %	< ± 15 index points < ± 15% mv				
	RH	CMOS-Sensor	0100%	2% RH 3% RH 5% RH				
	Т	CMOS-Sensor	-10°C +40°C -40°C +70°C 0°C +40°C	± 0,5°C				
	T (optional)	NTC / Platinum sensor	-40°C +70°C					

### Discover what our products can do for you! Need a custom solution? Get in touch!

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#### PROCESS SENSOR

These universal sensors are made to perfection. These industry favorites can be made with several outputs and equipped with an optional transmitter. Indirect measurement though immersion offers many advantages. Aside from easy placement, these sensors are ideal for applications with an aggressive medium or high pressure.

#### **RADIATION SHIELDED SENSOR**

Our weatherproof temperature and humidity sensor can withstand various weather conditions. Equipped with a radiation shield, this sensor is designed to shield against rain, snow, hail, and radiated heat.

#### SPECIFICATIONS

- Temp range: -40...+50°C
- RH range: 10...90% (non condensing)
- Output: 0 10V
- Supply voltage: 15-35VDC or 24VAC±20%

#### SPECIFICATIONS

- Single of dual measuring element (NTC/Pt)
- Temperature range -20°C...+150°C
- Also available with 4 20mA output and selectable temperature ranges
- Different lengths
- Private label optional





#### AIR VELOCITY SENSOR

Air velocity transmitters are dedicated for accurate and reliable measurement in building automation and ventilation applications. Transmitters employ sensor element which operates on the thermal anemometer principle based on thin film technology.

#### SPECIFICATIONS

- Different measuring ranges:
- 0...10 m/s and 0...20 m/s
- Output: 0 10V
- Duct version or remote version
- Probe length: 205mm (duct), 350mm (remote)
- Supply voltage: 19 29VDC or 24VAC±20%



#### DEW-POINT SWITCH

The dew point switch provides an earlywarning signal to control condensation in critical environments. It quickly and accurately monitors relative humidity and temperature, triggering a condensation warning at 90% threshold and indicating potential electronic failure with a status LED light.

#### SPECIFICATIONS

- Supply voltage: 24V DC/AC±20%
- Operation range: 0...+50°C, 0...100%RH non-condensing
- Mounting: Flat on surface
  (screwed) or direct on pipe (strapped)
- Switching points: >90%±3 (dry to wet)
  <85%±3 (wet to dry)</li>
- Response time: t<sub>63</sub> >3 min

