NL-ECO-TVOC | Room sensor VOC

Room sensor NL-ECO-TVOC is used to continuously monitor indoor air quality and for effective control of ventilation (HVAC) systems according to current air quality. The sensor monitors the concentration of VOC - Volatile Organic Compounds in air. It can be effectively used in restaurants, kitchens, fitness centres, toilets, changing rooms, gyms, offices, commercial buildings, schools, households etc.

- monitors VOC
- TVOC output in conformance with EPA and UBA standards
- detects the true cause of ventilation demands
- three-level LED indication
- no disturbance at night – automatic turn off of LED indication
- analogue voltage output 0-10V
- three selectable TVOC ranges
- eCO_2 output compatible with CO_2 standard
- output relay C/NO
- maintenance free during operation
- long life and stability
- wide range of supply voltage

Built-in advanced VOC sensor is sensitive to volatile organic compounds typically contained in the exhausted air - gaseous metabolic products of human bodies and other gaseous pollutants such as formaldehyde, disinfectant vapours, cooking vapours, fumes from paints, varnishes, adhesives, detergents, cigarette smoke etc. that the CO_2 sensor does not detect.
There is possibility to select so called eCO_2 (estimated CO_2) measurement mode. In this mode the sensor uses special algorithm to estimate CO_2 concentration based on the assumption that the TVOC produced by human metabolism is proportional to the exhaled CO_2. The analogue voltage output of the sensor is adjusted as equivalent to a standard CO_2 sensor in range of 400–2000 ppm of estimated CO_2.
The trigger level of output relay can be set by a rotary element. Ventilation and heat recovery units can be directly controlled based on the output signal of sensor in the most efficient way.
Current air quality can be easily checked by three LED indicators.
Explanation of abbreviations and technical terms can be found on our website in the Glossary section.

Parameter	Value	Unit
Supply voltage range	12 – 35 12 – 24	V DC V AC
Consumption	max 1,5	W
Measuring range TVOC [1]	0 – 1000 0 – 3000 0 – 10000	µg/m^3
Measuring range eCO_2 [1] [2]	400 – 2000	ppm
Relay - hysteresis	5% from selected range	
Voltage output [3]	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	10 – 95 %	RH
Working temperature	0 to +50	°C
Storage temperature	-20 to +60	°C
Expected lifetime	10	years
Ingress protection	IP20	
Dimensions	90x80x31	mm

[1] Output type and range can be set with jumpers. Factory setting range is TVOC 0 - 3000 µg/m^3.
[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.