

Air quality sensor

VSPM

The VSPM air quality sensor is used to measure carbon dioxide content and the amount of PM1, PM2.5, PM4 and PM10 particles. Additionally, it measures relative humidity and room temperature. Thanks to the application of a sensor, the air handling unit, on the basis of the readout data, regulates the flow of the exhaust and supply air stream to the rooms, maintaining the desired comfort in them.

PM1 and PM2.5 particles are in the group of the most harmful particles to health. These are atmospheric aerosols which a diameter is less than 1 micrometres. Such fine dust can enter the alveoli, blood vessels and eventually the bloodstream. It is therefore harmful to both the respiratory and cardiovascular systems. People with lung and heart conditions, the elderly and children are considered more susceptible to the harmful effects of particulate matter. People who exercise regularly are also exposed to the consequences of these particulates.

PM4 and PM10 is, in turn, a particulate matter that primarily affects the respiratory system. The particles it contains are less than 10 microns in diameter. They are responsible for coughing fits, wheezing, deterioration in the condition of people with asthma or acute, violent bronchitis. Studies indicate that PM10 particles indirectly increase the risk of heart attack and stroke.

The unit’s compact design allows it to be mounted anywhere not obvious to the eye. The sensor is mounted in the room where the measurement is to take place. It can be used in rooms without excessive vapour condensation and in the permissible operating temperature range from 0°C to 55°C.

The sensor is equipped with a signaling LED that provides real-time information about the level of air pollution.



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COMPATIBILITY

HRU type	Intended use
AUROS VER305	•
AUROS VER405	•
AUROS VER505	•
AUROS VER605	•
AVIRA VAVP305	•
AVIRA VAVP405	•
AVIRA VAVP505	•
AVIRA VAVP605	•
AQUILA VARS305	•
AQUILA VARP305	•