

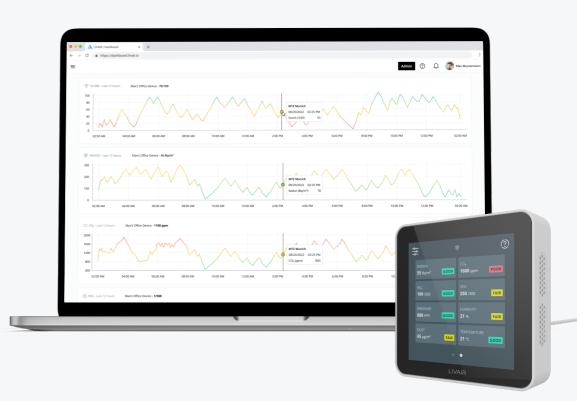
LIVAIR One

Indoor Air Quality System for Business

LivAir One provides real-time, accurate measurements of Radon, CO_2 , NO_X , VOC, Dust, Humidity, Temperature, Pressure, as well as Light and Noise readings. It gives you the tools and insight you need to create a healthier, safer, and more productive indoor environment.







Benefits of Air Quality Monitoring

We take 21,600 breaths every single day. Optimizing indoor air can have measurable benefits and help people and businesses thrive.







Productivity



Profits



Energy Saving



Compliance





Sensor Specifications

A Radon

Radon is a natural, invisible, odorless but radioactive gas. It is formed in the soil and occurs everywhere. It can provoke lung cancer.

Technology	Lucas Cell
Initial measurement value	10 min
Measurement range	0 – 1,000,000 Bq/m³
Sensor output resolution	1 Bq/m³
Accuracy	<± 10 %

Carbon Dioxide (CO₂)

Carbon Dioxide or CO_2 is a natural greenhouse gas emitted by the exhaled air of humans. High levels in a room can cause fatigue and impaired concentration.

Technology	Non-dispersive infrared (NDIR)
Measurement range	400 – 5,000 ppm
Sensor output resolution	1 ppm
Accuracy	± 50 ppm

Nitrogen Oxides (NO_x)

Nitric oxide is a colorless, odorless gas that is harmful and toxic to humans. It can cause respiratory and lung diseases, as well as cardiovascular diseases.

Technology	Metal oxide (MO _x) sensor
Measurement range	0 – 500 NO _x Index points
Sensor output resolution	1 NO _x Index point
Accuracy	<± 15 NO _x Index points



್ಲೆ Volatile Organic Compounds (VOCs)

Volatile Organic Compounds (VOCs) are a diverse group of chemicals. They can cause headaches, fatigue, allergic skin reactions, eye and throat irritation, as well as affect comfort, concentration and productivity.

Technology	Multi-pixel metal oxide gas sensor
Measurement range	0 – 500 VOC Index points
Sensor output resolution	1 VOC Index point
Accuracy	<± 15 VOC Index points

Pressure

Air pressure, also known as atmospheric or barometric pressure, is the force applied by air molecules as they press down on the earth and all other surfaces. It can cause headaches, joint pain, and fatigue. Moreover, radon levels may increase due to prevailing negative pressure in the building.

Technology	Digital sensor
Measurement range	300 – 1,200 hPa
Sensor output resolution	± 0.002 hPa
Accuracy	± 1 hPa

Oo: Dust / Particulate Matter (PM2.5)

Particulate matter is a range of particles of dust, dirt, and aerosols that become suspended in the air. They can cause allergy and asthma attacks, and can lead to chronic and acute bronchitis.

Technology	Laser particle sensor (light scattering)
Measurement range	0 – 1,000 μg/m³
Sensor output resolution	1 μg/m³
Accuracy	$\pm 5 \%$ at 0 – 100 µg/m³ and $\pm 10 \%$ at 100 – 1,000 µg/m³





Humidity

Humidity is a natural part of our atmosphere. It can lead to cold or flu symptoms, can aid the spread of mold, viruses, and bacteria, and can cause respiratory diseases.

Technology	Digital sensor
Measurement range	0 – 100 % RH
Sensor output resolution	0.01 % RH
Accuracy	± 4.5 % RH at 25 °C, 30 – 70 % RH



Temperature

The temperature is shaped by the natural seasons and adjusted by heating and cooling. It can suppress the immune system, aid the spread of viruses, and can affect well-being and performance. In addition, tempering by feel may favour energy waste.

Technology	Digital sensor
Measurement range	-10 – 50 °C
Sensor output resolution	0.01 °C
Accuracy	± 0.45 °C at 15 – 30 °C, 50 % RH



The light is determined by the time of day and changed with artificial light sources. Inadequate light intensity can lead to eye strain or eye irritation, fatigue and headache. In addition, lighting that is not needed can encourage energy waste.

Technology	Digital sensor
Measurement range	0 – 600,000 lx
Sensor output resolution	4 lx
Accuracy	± 1.2 times





Noise can be caused by running machinery, road traffic and people. High noise levels can affect the concentration, stress levels and productivity.

Technology	Digital sensor
Measurement range	20 – 140 dBA
Sensor output resolution	1 dBA
Accuracy	± 0.45 °C



General Device Specifications

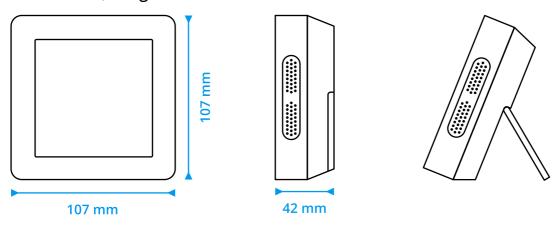
Durability and Warranty

Lifetime	> 10 years operating continuously 24h/day
Calibration	recommended every 3 years
Operating conditons	-10 – 50 °C, 5 – 95 %RH
Warranty	1 Year

Power, Connectivity and Integration

Power	100 mW via USB-C
Connection	Wi-Fi Connection 2.4 GHz 802.11 b/g/n, optional: NB-ioT
Integration	Open API

Dimensions, Weight and Placement



Weight: 250 g

The LivAir One is easily mounted onto any wall with just three screws, or placed on sideboards and tables with the stand folded out.

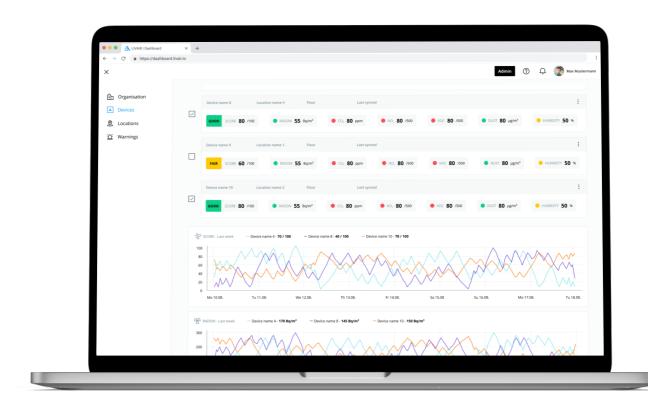
The device should be placed at least five meters away from operable windows, at least five meters away from air filters and fresh air diffusers, and at least 90 centimeters above the ground.



THE LIVAIR DASHBOARD

The LivAir Dashboard

Use the LivAir web application (dashboard.livair.io) to monitor and manage your devices in one portal. You also have access to trends and advanced analytics for both real-time and historical data.





Monitor, manage and compare multiple devices



View real-time data and trends



Set and receive warnings



Export historical data



Involve multiple users with different roles



Identify air pollutants



POWERFUL AUTOMATION AND CONTROL

Powerful Automation and Control

Maximize the performance of your filtration and HVAC systems with flexible connectivity options. Seamlessly integrate to your building's automation control system trough our open API.



API

Wi-Fi

NB-ioT



Security and Data Policy

Data Logging

Log Interval: 1 min, 1 hour, 12 hours

Data Push Interval: 1 minute

Data Collection

LivAir collects relevant information to ensure that you receive an accurate and customized application that meets your specific needs. This information can include readings from air quality sensors and information about your sensor location.

The data collected by LivAir One is stored in a cloud, allowing us to provide you with valuable insights into your data and indoor air quality monitoring.

The data in the cloud is always linked to your account and no one else has access.

Only a handful of employees in our company have access to your database and we use it to help customers with support cases.

We do not provide any data to third parties, nor do we access anyone's data unless it is in alignment with our Privacy Notice.

Your personal information is stored on LivAir's servers until it is edited or deleted. Backup copies of deleted information may need to be retained for a longer period of time, if required to do so for legal purposes.

Data Handling

LivAir uses multiple protocols for data transfer purposes. Below is a list and diagram to outline which protocols are used, and for what purposes.



LivAir One

MQTTS (port 8883)

This protocol is used for real-time communication.

HTTPS (port 443)

This protocol is used for transactional communication between LivAir One and LivAir's cloud service.

LivAir Webapp

HTTPS (port 443)

This protocol is used for transaction information and requesting information from our cloud to display in the webapp.





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