Merlin IAQ

Indoor Air Quality Monitor

S&S NORTHERN

IAQ 1.0
Efficient
Sleek Design
User Friendly
Plug And Play
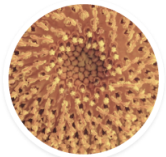Track Data With API +
Air Quality Made Simple

What IAQ Measures

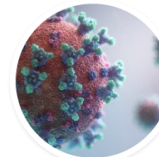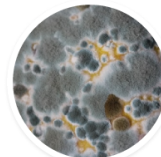**Particular Matter PM1, PM2.5 & PM10**

VOC's

Humidity & Air Pressure

Improves Ventilation To Reduce Airborne Viruses

Promotes Healthier Working Environment

CO2

Product Overview

The Merlin Indoor Air Quality Monitor is specifically designed for use indoor commercial and public areas to monitor multiple local and environmental and air quality factors. The Merlin IAQ Monitor is wall mounted and provides various outputs to integrate with ventilation systems and Building Management Systems (BMS).

In total, our Merlin IAQ Monitor detects 8 different factors—temperature, relative humidity, atmosphere pressure, CO2, Particle Matter (PM1, PM2.5, PM10) & Volatie Organic Compounds all within 1 detector housing.

To simplify the information for a user and to make the monitor easy to understand, the monitor runs an internal algorithm which then gives an overall air quality scores with traffic light indication.
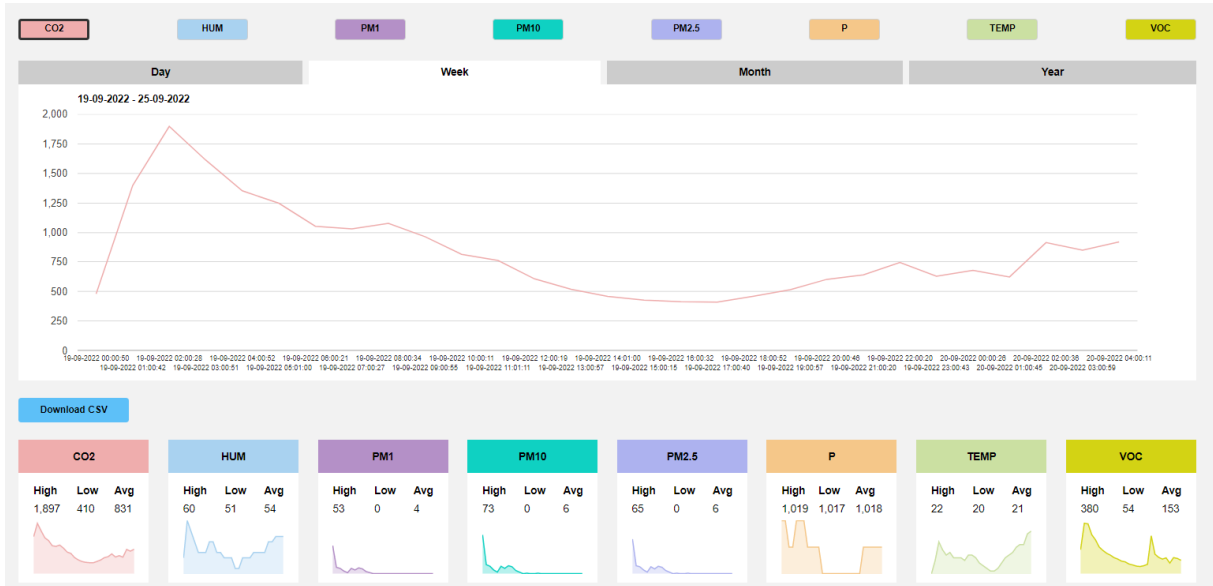
The score is displayed from A (Green) to G (Red) and displayed on the TFT Screen for real time reading, as well as a 1 hour average & 8 hour average.

Why Install An Indoor Air Quality Monitor?

CO2 Monitoring is the most common mode of indoor air quality monitoring within commercial buildings. High levels of CO2 Monitoring can lead to lower productivity and poor concentration levels, however CO2 is only one element of the air which we breathe in. Various other elements within the air can be harmful, such as—

✓ PM (Particle Matter) consists of a large number of chemical compounds, some which of can be toxic. PM1 particles for instance are so small that they can be inhaled and lodge in vital organs in the human body and cause serious health concerns for anyone with existing respiratory problems or other illnesses.

✓ VOCs similarly include a number of different elements such as formaldehyde, benzene and acetone which can all have negative respiratory effects.

✓ High levels of relative humidity means the air around us is filled with moisture, this therefore reduces the amount of moisture which the human body can release and can increase the number of common illnesses, sore throats, congestion etc.

Website Portal & WIFI Connections - www.viewmyair.com

CO2	HUM	PM1	PM10	PM2.5	P	TEMP	VOC

Day	Week	Month	Year

19-09-2022 - 25-09-2022

2,000
1,750
1,500
1,250
1,000
750
500
250
0

Download CSV

CO2	HUM	PM1	PM10	PM2.5	P	TEMP	VOC
High Low Avg	High Low Avg	High Low Avg	High Low Avg	High Low Avg	High Low Avg	High Low Avg	High Low Avg
1,897 410 831	60 51 54	53 0 4	73 0 6	65 0 6	1,019 1,017 1,018	22 20 21	380 54 153

S&S Northern Ltd and the Merlin Indoor Air Quality Monitor can be connected to WIFI to allow the end user or any facilities managers to remotely monitor the air quality for every device in your buildings since its installa-tion. All the information can be exported in CSV.

Supporting Documentation & Guidance

PART F JUNE 2022 UPDATE

1.21—Indoor Air Quality Monitoring—In new buildings a means of indoor air quality monitoring should be included in all offices and all occupiable rooms where member of the public are likely to gather. For example, hotels, gymnasiums, indoor sports venues, school classrooms, places of assembly etc.

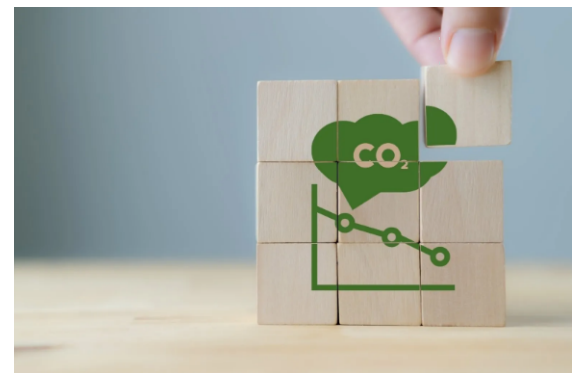**CIBSE TM68: 2022 MONITORING INDOOR ENVIRONMENT QUALITY**

Exposure to elevated levels of pollutants indoors can have significant health impacts, especially for respiratory and cardiovascular health, and can particularly affect susceptible individuals, such as those with pre-existing health conditions.

WELL PERFORMANCE VERIFICATION GUIDEBOOK

Several WELL features within the WELL Building Standard version 2 (WELL v2) and WELL Ratings can be pursued through the implementation of permanently installed continuous monitors that measure environmental parameters through sensor technology.

Monitors must be distributed throughout the project and to the extent possible, representative of all HVAC zones, faces of a building, and regularly occupied spaces (e.g., open office areas, private offices, conference rooms and classrooms).

Net Zero + IAQ

The Merlin IAQ can communicate with your HVAC systems (in real time) by sending signals when fan speeds should increase to provide clean air and also to remove dirty air. Importantly, the IAQ can send signal instructing a HVAC system to idle - reducing wasting energy and CO2 emissions. It does this by using real time indoor air quality monitoring.

Find out more

S&S Northern Ltd

www.snsnorthern.com

Head office:
Wallace Francis House, Barnes Wallis Way,
Buckshaw Village, Lancashire, PR7 7JN

Tel: 01257 470983
Email: info@snsnorthern.com