i-team®

i-teamglobal.com

i-sense®

Air quality meter

faster cleaner greener safer better

It's not *just* about cleaning...

While cleaning has never been more important, we believe effective cleaning is more than 'just' the removal of soil. It means ensuring the health and safety of people, while making the job easier, simpler, more efficient and even fun. It means consistent results all over the world, while protecting the world.

Did you know that indoor air quality can be up to **5-10 times** worse than outdoor air quality? Not something to take lightly, considering that we spend an average of 90% of our time indoors. The rooms where we work, cook, clean, shower, and sleep, are possible points of origin for the spread of contaminants.

...It's about *happy & healthy* people

Our indoor environment is influenced by several factors. On the one hand, there are invisible threats in the air that directly impact the air quality and our health (e.g. dust, chemicals and CO_2). On the other hand, there are factors that make or break the conditions for such threats (humidity and temperature).

To create a healthy, comfortable indoor environment, we need to optimize the indoor conditions. But to be able to do so, we need to make the invisible visible. With i-sense you can instantly measure temperature, humidity and indoor air-quality.

Read the room

More than meets the eye

The quality of the air has a direct impact on everyone who uses or visits an indoor space. Poor indoor quality can result in allergic reactions, asthma attacks, and virus transmission. Moreover, an unpleasant smell immediately tells our senses that a space is unclean and stale, dry or humid air can even negatively impact our mood or result in headaches and fatigue. It doesn't do much for your company image either.

With i-sense you can measure the 5 main factors that influence our indoor environment.

Air contaminants

VOCs

Particulate Matter 2.5

CO_2

Factors that impact air contaminants

Humidity

Temperature

About air contaminants **Take a breath**

We inhale about 11.000 liter of indoor air per day and spend around 90% of our day inside. Most of us are unaware of how big the influence of our surroundings actually is. Indoors, we're exposed to hundreds of different air contaminants in three categories:

VOCs (Volatile Organic Compounds)
The VOC levels are often influenced by our day-to-day activities. They can rise for instance from harmless sources, such as the smell of coffee or perfume. But there can also be harmful gasses in the air, such as; paints, cleaning detergents, building materials, cosmetic products and pesticides.

PM (Particulate matter)
Particulate matter is a mixture of solid and liquid particles, which includes dust, dirt, soot, smoke, and drops of liquid. General sources of particulate matter pollutants are heavy industrial pollution and vehicle exhaust fumes.

CO_2 (Carbon Dioxide)
When we exhale, we breathe out mostly carbon dioxide. Often when CO_2 levels rise there are (too) many people in a room, which facilitates the spread of bacteria and viruses. When CO_2 numbers get too high this can also result in fatigue, dizziness and headaches.

About humidity and temperature **A balancing act**

We all like to be in a room with a comfortable temperature and humidity level. But temperature and humidity influence more than only our comfort. It influences our health. Moreover, the right balance between indoor temperature and outdoor humidity prevents the growth and survival of viruses and other contamination.

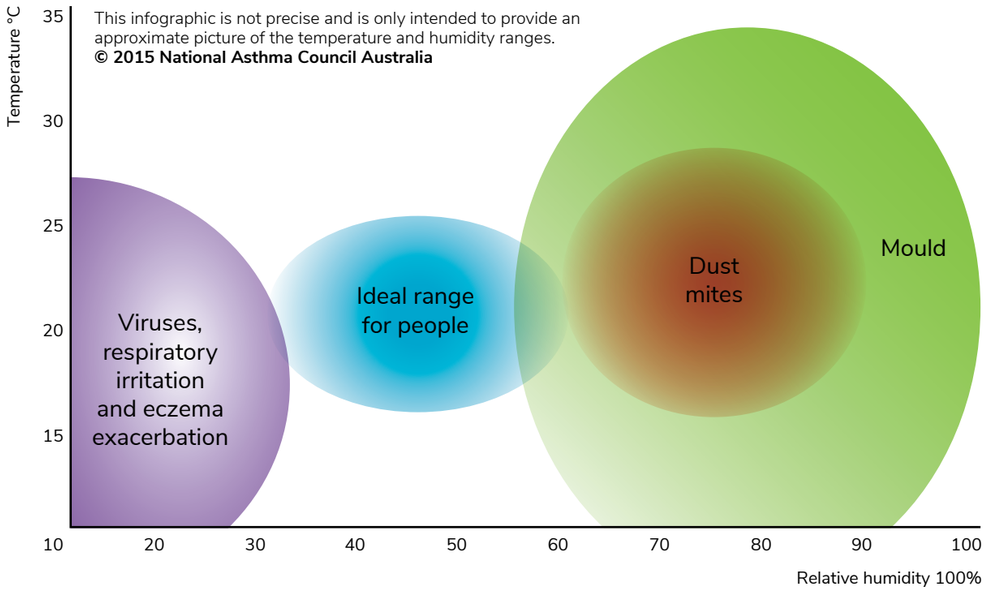
Humidity
Too much or too little indoor humidity both lead to breathing difficulties. When humidity is too high, the growth of mold, fungus and dust increases. When humidity is too low, people's skin can get itchy and it often leads to coughing and soar throats.

Temperature
When the indoor temperature is too high or too low, people will get uncomfortable or even sick. The ideal day temperature lies somewhere between the 20°C and 24°C, depending on personal preferences.

Microbiological contamination
These are mainly bacteria, viruses and moulds. Sources are numerous; waste containers, pets, kitchens, hazardous microbes in hospitals and many, many more. When temperature and humidity in a room rise, so does the spread of microbiological contamination.

Indoor temperature and outdoor humidity

The balance between indoor temperature and outdoor humidity either prevents or facilitates the growth and survival of contamination.



Ideal indoor humidity levels by outdoor temperature

In general, this temperature guide will show you where to keep your indoor relative humidity levels to ensure a comfortable and healthy indoor environment.

Outdoor temperature	Indoor humidity levels
over 10˚C	shouldn't exceed 50%
over -7˚C	shouldn't exceed 40%
between -12˚C and -7˚C	shouldn't exceed 35%
between -18˚C and -12˚C	shouldn't exceed 30%
between -23˚C and -18˚C	shouldn't exceed 25%
between -29˚C and -23,5˚C	shouldn't exceed 20%
at -29˚C or lower	shouldn't exceed 15%

Feel the difference **A healthy environment**

The quality of the indoor environment has a direct impact on everyone who uses or visits an indoor space. Poor indoor air quality can result in allergic reactions, asthma attacks, and virus transmission. Moreover, an unpleasant smell immediately tells our senses that a space is unclean. Humid or dry air can even negatively impact our mood or result in headaches and fatigue. It doesn't do much for your company image either.

It benefits everyone in the room if the indoor environment is in optimal condition.

√ **Improved productivity**
clean air and the right indoor temperature and humidity result in better performance

√ **Less absenteeism**
e.g. asthma, allergies, viruses

√ **Improved company image**
a fresh and comfortable environment without stale or nasty smells

√ **Fresh air gives more energy**
while stale, humid or dry air results in fatigue and headaches

√ **A positive and healthy environment**
where everyone feels happy and comfortable

Make the invisible visible **i-sense air quality meter**

With i-sense you can monitor the air quality inside your building. Thanks to the smart display design it's clear in just one glance whether the air is clean or if it's necessary to take action. With i-sense you can accurately measure VOCs, particulate matter (to 2.5), CO_2, humidity and room temperature.

VOCs

Particulate Matter 2.5

CO_2

Humidity

Temperature

Easy does it
User-friendly design

The small, square device can easily be mounted on the wall or placed on a shelf or table. Click on the buttons to view a one-week chart, which allows you to compare dates. The icons change colour based on the current air quality*.

Green

Good air quality

Yellow

Medium air quality

It's recommended that you check the room

Red

Poor air quality

Action is required

* based on the US wellness indoor quality standards

Step by Step
Take action

Thanks to i-sense you know when it's needed to improve the indoor quality. Often there are small, measurable steps that you can take.

Possible solutions to improve air quality

VOCs
- → Good ventilation
- → Air purification system

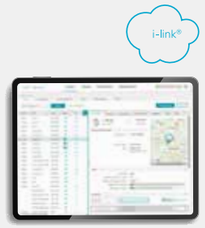
Particulate matter
- → Air purification system

CO_2
- → Good ventilation

Humidity
- → Good ventilation
- → Air (de)humidifier

Temperature
- → Good ventilation
- → Air conditioning
- → Central heating

Different models



	Basic	Plus	Pro
1 LCD Touchscreen	✓	✓	✓
2 LED Indicator Lighting	✓	✓	✓
3 VOC Measurement	✓	✓	✓
4 PM2.5 Measurement	✓	✓	✓
5 CO_2 Measurement	✓	✓	✓
6 Temperature	✓	✓	✓
7 Humidity	✓	✓	✓
8 Historical graphs (5 days)	✓	✓	✓
9 Wall power	✓	✓	✓
10 Battery power	–	✓	✓
11 Analog Clock	–	✓	✓
12 i-link® built in 24/7 room monitoring Location services Custom alerts	–	–	✓ ✓ ✓ ✓

Clean the air i-air PRO

It's clear that we need to breathe clean and healthy air to improve our living conditions and health. That's why we designed the i-air PRO: a high capacity air healer that improves indoor air quality in medium to large spaces of up to 500m^2.

i-air PRO filters out solid contaminants, breaking down all VOCs and neutralising all living harmful microbes - including viruses.

The i-air PRO is the only stand-alone unit on the market that delivers MERV19 class air to medium to large spaces. Minimum Efficiency Reporting Value (MERV) is an assigned rating according to the ability to filter out large particles. MERV19 means that even the smallest particles (≥0,2µ) of bacteria, viruses and other micro-organisms are filtered.

Future proof
Measure the difference

Want to discover the benefits of i-air PRO or other air improvement systems, such as ventilation, (de)humidifiers or air conditioning? Measure the indoor air quality with i-sense for one week before you install the i-air PRO or other systems. Then measure the indoor air quality again for a week while the i-air PRO or other systems are in place and compare the results. Make adjustments if necessary and repeat. This way you can monitor the effects of your chosen solutions and discover if extra measurements are needed.

Knowledge is power
Stay on top of things

By checking the i-sense regularly, you can precisely monitor the conditions of the indoor environment in a certain space. You know in one glance what the temperature and humidity is. The air quality is clearly indicated on the i-sense with icons that change colour based on the current situation.

Technical Specifications

Model	i-sense basic	i-sense plus	i-sense pro
Body size (L x W x H	130 x 129 x 65 mm	145 x 130 x 145 mm	145 x 130 x 145 mm
Weight (excl. battery)	0.36 kg	0.81 kg	0.91 kg
Weight (incl. battery)	Not applicable	1.51 kg	1.61 kg
Power source	5 V USB-C wall power	i-power 8.7 battery or 5V USB-C wall power	i-power 8.7 battery or 5V USB-C wall power
Battery spec i-power x	Not applicable	14.4 V 8.7 Ah	14.4 V 8.7 Ah
Run time on battery	Not applicable	≈ 85 hours	≈ 85 hours
Charger type	Not applicable	External	External
USB-C charging (5 V 2 A) time	Not applicable	≈ 200 hours	≈ 200 hours
i-charge 5 time	Not applicable	≈ 1 hour	≈ 1 hour
i-charge 7 time	Not applicable	≈ 2 hours	≈ 2 hours
VOC measurement range and accuracy	0 - 1000 ppb ± 75 ppb	0 - 1000 ppb ± 75 ppb	0 - 1000 ppb ± 75 ppb
PM measurement range and accuracy	400 - 5000 ppm ± 100 ppm	400 - 5000 ppm ± 100 ppm	400 - 5000 ppm ± 100 ppm
CO_2 measurement range and accuracy	0 - 600 µg/m³ ± 10%	0 - 600 µg/m³ ± 10%	0 - 600 µg/m³ ± 10%
Temperature measurement range and accuracy	-45 - 125 °C ± 5 °C	-45 - 125 °C ± 5 °C	-45 - 125 °C ± 5 °C
Humidity measurement range and accuracy	10 - 100 % ± 1 %	10 - 100 % ± 1 %	10 - 100 % ± 1 %

Readings according to the standard

TVOC (µg/m³)	GREEN(<400) YELLOW (400-500) RED (>501)
PM2.5 (µg/m³)	GREEN (<10) YELLOW (10-15) RED (>15)
CO_2 (ppm)	GREEN (<1000) YELLOW (1100-1500) RED (>1500)

i-team Global HQ
Hoppenkuil 27B • 5626DD Eindhoven • The Netherlands • +31 40 266 24 50 • hello@i-teamglobal.com