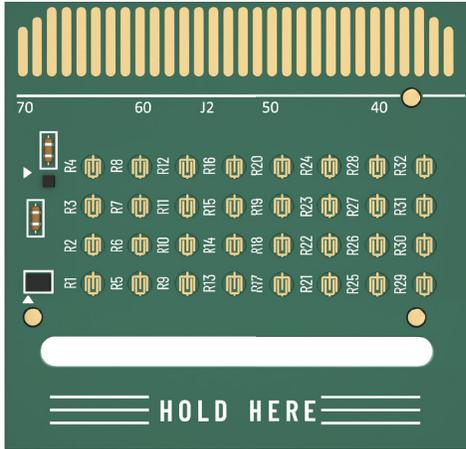


# SafeScent

A TURNKEY LIBRARY OF AIR POLLUTANTS AND MALODOURS COMMONLY FOUND IN THE INDOOR ENVIRONMENT.



SafeScent-enabled sensor

World Health Organization (WHO) data shows that air pollution kills an estimated seven million people worldwide every year.

The short term effects of exposure to pollutants can cause problems such as sneezing, coughing, eye irritation, headaches, and dizziness; while long term exposure is linked to higher rates of cancer, heart disease, stroke, and respiratory diseases.

**Chemical indoor air pollutants** and sources can include fuel-burning appliances, tobacco smoke, household cleaning chemicals, building materials, furnishings, fireplaces, pet litter, spoiled food, volatile organic compounds (VOCs) from **mold and mildew**, and volatiles from **airborne pathogens**.

SAFESCENT IS THE MOST COMPLETE AIR QUALITY SENSING SOLUTION AVAILABLE ON A SINGLE CHIP.



HUMIDITY

CO<sub>2</sub>

CARBON DIOXIDE



ALCOHOL

CO

CARBON MONOXIDE



CIGARETTE

NH<sub>3</sub>

AMMONIA



TEMPERATURE

CH<sub>2</sub>O

FORMALDEHYDE

NO<sub>2</sub>

NITROGEN DIOXIDE



## INSIGHTFUL PRECISION

SafeScent tracks intensity, not just presence. It won't just tell you that there's CO in the air, It will tell you precisely how much.



## EASY INTEGRATION

Through our API you can build direct integrations with our platform and enable access to real-time air quality information and analytics.



## PLUG & PLAY

At only 29mm x 28mm, our SafeScent-enabled sensor can unlock the power of air quality sensing in practically any device or appliance.



## SEAMLESSLY EXPANDABLE

New VOCs or odours can be added to the SafeScent library on-demand without the need to upgrade or replace the sensors already in the field.

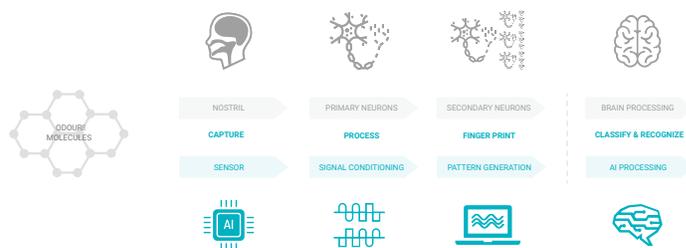
Contact us to discuss the benefits of adopting Stratuscent's Award-Winning Scent Digitization Technology.

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## A BIO-INSPIRED SOLUTION

In a true bio-mimicking fashion, SafeScent doesn't need to be changed for a different sensor to identify different chemicals, in fact, a single sensor can be trained with an unlimited number of new volatiles and scents.

Much like how our olfactory system works, the signal from the sensor (the "nose") is sent to the AI-enabled cloud (the "brain") for processing. Using proprietary machine learning techniques, the AI engine is able to not only identify different scentprints that correspond to various volatiles, but also different concentrations and their evolution over time.



## AN AI POWERED PLATFORM

SafeScent 32-sensing-element chemiresistive array detects, digitizes, identifies, quantifies, and catalogs simple and complex scents, as well as the tiniest scent nuances that are undetectable by the human nose, and creates a **scentprint** that is unique to the type and concentration of the volatile(s).

This scentprint is continuously digitized and relayed to the Stratuscent cloud for interpretation through a secure and encrypted communication protocol. Thus, SafeScent can predict the quality of the air based on its holistic scentprint.



## Specifications

### Power Requirements

750mW Avg / DC 5V / 150mA

### Temperature Ranges

0°C to 65°C  
(32°F to 149°F)

### Humidity Ranges

20% RH to 80% RH

### Sensor Response Time

900 ms to 1,200 ms

### AI Deployment

Secure cloud-based

### Inference Response Time

Real-time

### AI Features

- Humidity & temperature compensation
- Background scent subtraction
- Device-to-device calibration
- Sensor aging compensation

### Sensor Dimensions

Length: 29 mm / 1.14 in  
Width: 28 mm / 1.10 in  
Height: 1 mm / 0.04 in  
Weight: 48 g

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