

**Future of Sensory Technology** 





#### **Corporate Overview**

Scentroid is the world leader in air pollution and odour measurement equipment and services. Based in Toronto, Canada, we export to over 45 countries around the world. We are the world's premier manufacturer of odour sampling and analysis equipment. With decades of experience developing state-of-the-art instrumentation for environment, nuclear, and medical industries, we bring new and innovative technologies to the field of odour measurement. Our clients include government agencies, environmental laboratories, research institutions, and industries dealing with odour nuisances.

#### **Our Mission and Vision**

Our mission is to empower our clients with vast in-depth knowledge, state-of-the-art instruments, and the most extensive customer support. To this end, we strive in every aspect of our operation to put our client first and to use our research expertise to develop the most innovative and effective products and services in the sensory industry. We envision a future where environmental impacts will be easily and accurately measured and mitigated. Scentroid's vision is to make this future of sensory technology a reality, through innovation and creativity.









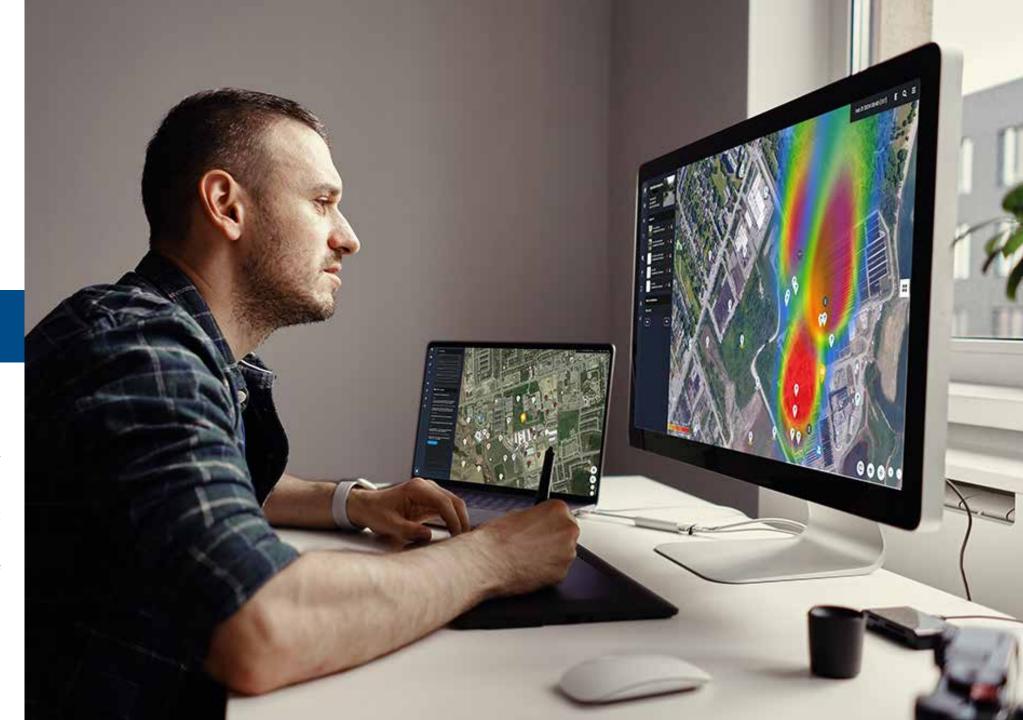
# SIMS3

## Sensor Information Mangement Software

SIMS3 sensor information management software, is our all-inclusive software used to view and analyze historical data, run diagnostics, make predictions, and configure various settings for your supported Scentroid device. It offers a complete and integrated suite for ambient air chemical analysis and odor management. SIMS3 can collect data from thousands of devices covering an entire area, using a unique and highly intuitive facility control system.

# Powered by **Artificial Intelligence**

SIMS3 transforms air quality monitoring and odor complaint management with the power of Al. Our user-friendly interface offers intuitive access to a range of features including pollutant threat assessment, air quality alerts, historical data analysis, sample tracking, plume detection, and complaint management, empowering users of all levels to conduct sophisticated data analytics effortlessly.





#### CTair Continuous Monitor

The CTairAir Quality Monitor is a fixed unit that collects information on the air quality by city and presents the collected data in an easy to understand graphical interface. It has been designed to be dispatched into a wider network of CTair units. Due to its lightweight design at 10 lbs, the CTair unit can easily be installed and mounted to a light fixture or utility pole. By applying information collected from multiple data points, the CTair allows the user to gain a complete understanding of the chemical compounds being monitored.



## Compact Indoor Air Quality Monitoring

The AQmini Compact Indoor Air Quality Monitor will detect whenever a particular room's air quality drops to below optimal levels. This device offers a comprehensive understanding of your indoor air quality over time and will assist you with improving poor Indoor Air Quality.





#### **Pollutracker**

Scentroid Pollutracker TR+8 is a complete air quality mobile laboratory. This instrument allows the user to measure hundreds of chemicals using up to 10 sensors and analyzers including Photo-Ionization Detectors (PID) sensors, Non-dispersive Infrared (NDIR) sensors, Electrochemical and Metal Oxide

sensors. Pollutracker includes, Built-in 10" touchscreen interface, On device data logging and wireless transfer via email, Remote (internet based) firmware update, Built in sampling pump, Simultaneous data analysis of all gases, Built-in rechargeable battery, On-screen Calibration Procedure and External decontamination device.

#### **OdoTracker**

The Scentroid's OdoTracker is a wearable multi-sensor device that measures the concentrations of two chemicals in ambient air at the same time. Select from close to 50 chemicals for monitoring at the time of ordering. Data logging feature provides continuous chemical, GPS position, Temperature, and Humidity logging. The OdoTracker can measure chemical composition of ambient air or sample stored in a PTFE, Tedlar or Nalophan bags. It can measure chemicals such as H2S close to detection threshold at ppb level.





## Ilving

## Flying Laboratory Drone

The Scentroid DR1000 consists of a flying laboratory and a commercial drone. The DR1000 can be used to sample and analyze ambient air at heights of up to 150 meters above ground level that was previously impossible to accomplish. Air quality mapping, model verification, analysis of potentially dangerous sites are all made possible by this novel innovation. DR1000 will come with simultaneous GPRS and WIFI communication capabilities. The GPRS is used to send data to our new cloud server based Drone Information Management System (DRIMS). The secure online system will allow you to remotely monitor and even control the flying laboratory as well as store and process the data collected.



## **PMD100**

## Scentroid Personal Monitoring Device

PMD100 offers several benefits for workers in hazardous environments. Firstly, the visual and audible alarm systems can alert workers when air quality levels are unsafe, helping them to take immediate action to protect themselves.

Secondly, the device can provide workers with real-time data on their personal exposure levels, helping them to monitor their own safety and avoid exposure to harmful pollutants. This can be particularly important in facilities or spaces where workers may be exposed to high levels of pollutants in confined areas.



#### **Scentinal**

The Scentinal Ambient Air Monitoring Station provides high accuracy (ppb level) detection of odorous gases such as H2S, NH3, VOCs, SO2 & odour concentration. The flexible intelligent sensor network allows live monitoring of plant odour emissions on Scentroid's cloud servers. The innovative design of Scentinal offers the most reliable and cost effective odour monitoring solution in the world. The central monitoring station is hosted on a secure cloud based server allowing remote access via any internet based computer. The access is restricted and the data is encrypted for maximum security. Users are given a password and user name which will define their permission level.



## **AQSafe Indoor Air Quality Monitor**

In order to successfully protect your Indoor space and/or storage facilities against loss of moisture, decay, and aging, the proper tools must be used to regulate your air quality. Oxygen and nitrogen levels, carbon dioxide as well as relative humidity and temperature plus much more must be both monitored and controlled. Let Scentroid's AQSafe help you protect your Important spaces. Whether you operate a data center/server room, hospital, school, or even a cannabis facility, keep your space AQSafe!



#### **UrbanScanner**

The Urban Scanner™ is a complete platform that provides detailed air quality information within urban landscapes. It achieves this by collecting and combing a variety of information such as air pollution concentrations, a 3D map of the city, traffic conditions, micro-weather patterns, and more. Data is collected using a weather-proof, easily mountable device installed on the roof of a vehicle. The data is then processed using sophisticated Al-based algorithms in order to extract key information and correlate them to an air quality value at any location within the sampling environment. An advanced deep learning algorithm is then used to generate geo-spatial predictions of urban pollution.



#### **HVAC** Warden

The Scentroid HVAC Warden will keep your facility occupants safe by providing real-time air quality monitoring based on high accuracy detection of dangerous gases, including the temperature and humidity of the sample. Instead of letting your HVAC run constantly, the warden helps to reduce energy costs by sending monitored information to the building's ventilation system control system, and then optimizing air change rates. This energy saving concept was designed for hospitals, laboratories, and university research centres with high air change rates per hour.



#### SM100 Infield Olfactometer

The SM100 is the world's most advanced personal olfactometer. This odour measurement apparatus allows users to accurately quantify odour concentration of ambient air and source samples. This revolutionary odour measurement device offers an easy-to-use and cost effective alternative to guessing at odour strength or using expensive odour measuring laboratories. SM100 is the most cost effective method of obtaining accurate and reliable odour concentration measurements. With practically no cost per sample, the user can perform more measurements for routine monitoring, trending, optimization, and complaint follow up.



#### SM100i Intelligent Olfactometer

The Scentroid SM100i , represents the next evolution in personal olfactometry. This automated olfactometer can conduct full odour analysis including YES/NO and Hedonic Tone test modes in full accordance to the international EN13725 standard. The SM100i can analyze from a sample bag or be deployed in the field for direct olfactometry and ambient odour measurement. The SM100i, Intelligent Personal Olfactometer takes out the guess work from personal olfactometry. This olfactometer will automatically screen panelists and conduct YES/NO test mode to determine accurate odour concentration and hedonic tone.





The Scentroid SS600 is the world's most advanced stationary, dynamic, and fully automated olfactometer. It is capable of odour measurement and analysis to all international olfactometry standards: EN13725:2003, ASTM E04-679, NVN2820, VDI 3881, GB/T93-14675, AS 4323.3. The Scentroid SS600 is industry's first olfactometer that uses high-accuracy Mass Flow Controllers to monitor and adjust both the sample air and the clean diluting air, ensuring accurate dilution ratio regardless of variations in ambient pressure or temperature.



#### Portable Olfactometer

The Scentroid SC300 is the world's most advanced mobile olfactometer. It is capable of odour measurement and analysis to all international olfactometry standards: EN13725:2003, ASTM E04-679, NVN2820, VDI 3881, GB/T93-14675. Best of all, it can be transported to site and deployed in minutes for a complete accredited olfactometric laboratory. Built into two rugged waterproof Pelican® cases weighing less than 20 Kg each for ease of transportation via commercial airliners. Designed to be waterproof & shockproof to Military Standards MIL C4150-J & Def Stan41-81.



## Portable 6 Station Olfactometer

Scentroid SS400 olfactometer is an advance mobile 6 station portable olfactometer. The Six Station Portable Olfactometer SS400 is used to assess odour concentration from a sample using 2 presentation modes (Binary or Yes/No) by fulfilling the requirements of the EN13725 and VDI 3881 standards The Scentroid SS400 olfactometer uses the latest technologies to deliver absolute precision & functionality. Users can perform olfactometry analysis to EN13725 & VDI 3881 with Binary, Yes/No. and Hedonic test methods.



# Scientific Olfactometer with EEG Capabilities

The Scentroid SC300-P (Scientific Olfactometer) is a specialized multisensory olfactometer with EEG and FNIR capabilities for advance psychological and physiological research and treatment. The SC300-P has been used by researchers and doctors to research and treat a variety of disorders including Post Traumatic Stress Disorder. The Scentroid SC300-P is loaded with a variety of physiological and psychological test modes such as olfactory/audio psychological evaluation where pulses of odour and visual stimuli are presented in fixed or randomly determined intervals. Other test modes can be easily programmed by the user through the graphical interface.



## N-Butanol Sensitivity Kit

The Scentroid SK5 Sensitivity Kit is designed to provide accurate N-butanol mixtures of 5 to 50 ppm from a liquid N-butanol source. The N-butanol mixture can then be used to screen panelists using the Scentroid SM100 or any other Scentroid olfactometer in accordance to the EN13725 standard. The Scentroid SK5 Sensitivity kit provides an easy and reliable solution for creating exact N-butanol samples that can be used for panelist screening. Liquid N-butanol is mixed with clean odorless air at a fixed ratio using a glass micro-syringe and a stainless steel evaporation chamber.



### Laboratory Information Management Software

The Scentroid SS400 Six Station Portable Olfactometer seamlessly integrates with Scentroid's laboratory information management software (LIMS) for complete automated panelist screening, sample tracking, analysis reporting, and other routine operations. LIMS and SS400 Six Station Portable Olfactometer are designed to make the process of acquiring ISO17025 certification easy and straight forward.



### **Sampling Bags**

Scentroid offers a full line of Sampling Bags including those made of PTFE, Tedlar, Nalophan and Stainless Steel. Scentroid Is the only manufacturer offering PTFE air Sampling Bags. The PTFE Sampling Bags offer a much higher resistance to contamination. All Sampling Odour Bags can be ordered in various sizes. Scentroid also offers a Do It Yourself kit that provides everything you need to make 100+ Nalophan odour Sampling Bags.





#### **Flux Chamber**

The Scentroid Flux chamber (AKA Emission Isolation Flux Hood) is used to determine levels of emissions from solid or liquid surfaces. The SF450 has a 100% solid stainless steel construction to ensure zero cross contamination. Flotation is achieved using 4 stainless steel floats eliminating the need for rubber tubes or foam making the unit easy to clean and maintain. The Flux Chamber designed for both solid and liquid surface sample collections. Four stainless steel fitting provided for sweep air (clean air), sample air, Relief flow, and temperature probe.

#### **Vacuum Chamber**

The Scentroid Vacuum Chambers are easy to use, portable, and cost-effective air sample collection devices. Vacuum chambers are used to pull samples directly without dilution from stack, ambient air, or other sampling devices such as flux chamber or wind tunnel. The Scentroid vacuum chambers are available in multiple sizes to fit bags of up to 10L, 25L and even 50L. Use the Scentroid Vacuum Chambers for soil gas sampling, groundwater testing, stack sampling, hazmat testing, and U.S. EPA Methods 18 and 0040 and ventilation studies. Scentroid Vacuum Chambers, bag sampling box, Designed for Scentroid PTFE sample bags.



# Stack Diluting Sampler

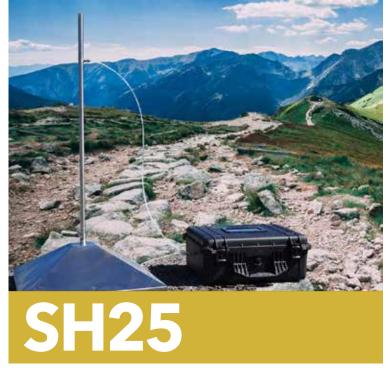
The Stack Sampler is an easy to use device that provides accurate predilution of high temperature gas emissions with nitrogen or zero-air to minimize condensation inside the sample bag. Dilution is achieved inside the heated probe and can be controlled from 1:1 to 1:1300 in 12 steps. With a backpack containing micro-nitrogen tank and simple one push operation the DS5 is the most reliable, fast, and easy to use diluting sampler ever created.



## Heated Air Purger/ Oxidisation Purger

The Scentroid SP20 Heated Air Purger is a revolutionary device designed to provide an effective and reliable cleaning solution for olfactometers, sample bags, PTFE lines, and other equipment which may be contaminated with odours. The Scentroid SP50 Oxidisation Purger is a revolutionary device designed to provide an effective and reliable cleaning solutions for olfactometers, sample bags, PTFE lines, and other equipments which may be contaminated with odours.





#### **Wind Tunnel**

The Scentroid SW60 is the next generation Wind Tunnel Sampler (AKA Ventilated Sampling Hood), used for sampling on solid or liquid surfaces with passive odour emissions in accordance with the EN13725 and VDI3880. The SW60 Wind Tunnel Sampler offers a number of unique features that make it the most accurate and user friendly area source sampler in the world. The SW60 Wind Tunnel Sampler uses a series of 15 fins to direct the air speed within the chamber ensuring complete uniform flow for the highest level of odour sampling accuracy.

#### **Static Hood**

The Scentroid Static Hood Sampler provides an easy to use and contaminate-free solution for taking air samples from bio-filter beds and other surfaces that have a positive air flow. The all stainless steel construction ensures easy decontamination. The stack disassembles for ease of transportation. The SH50 has been designed to meet all European, American, and Canadian sampling standards. Extensive CFD analysis ensures minimal back-pressure and sufficient turbulence before sampling.



#### **Emission Inventory & Impact Assessment**

#### Scentroid provides a complete emission inventory service including:

- Stack Testing
- Source Testing
- Fugitive Emission Measurement
- Air Dispersion Modeling
- Impact Assessment
- Flare Testing (Advance Drone Technologies)
- Complete Emission Inventory Reporting to US EPA standards

#### Scentroid is the only company in the world providing direct flare plume sampling:

- Scentroid's patented Air Sampling Drone can collect plume gases up to 125 meters above the ground
- Samples can be brought down for analysis by a GIC or odour laboratory
- Capability for in-air analysis for Total VOCs, TRS, CO and other chemical elements
- Can be used to model total impact of flaring







## **Environmental Odour Impact Assessment**

Scentroid is the world leader in assessment of odour impact to USA and European standards (EN13725).

- Unique approach developed based on odour patrol, reverse modeling, source testing & olfactometric analysis
- Assessment of odour emission, dispersion and impact on community
- On-site sampling and olfactometric analysis
- Recommended solutions for odour impact reduction





## Air Quality & Ambient Monitoring

Scentroid provides a state-of-the-art air quality monitoring and complaint management system.

- Tailored to specific compounds detected during emission inventory or odour impact assessment
- In field gas chromatography and electro chemical sensor based monitoring
- Live dispersion monitoring and complaint management software
- Automated reporting







# Leak Detection & Repair Program

In a refinery, roughly 40% of all odour related issues and pollutants stem from leaks. Scentroid provides LDAR as part of is odour and air pollution management program.

#### LDAR or Fugitive Emission Management based on US EPA Method 21:

- 1. LDAR Program Setup: mapping streams on P&ID's, database and LDAR software (LEAKDAS V4)
- 2. On-site Support: identification and monitoring of all potential leak sources, electronic and physical labeling of all leaks
- 3. Use of Infrared cameras for identification of large leaks and portable gas detectors for detailed leak detection
- 4. Emission report generation: QC analysis in software, generation of repair orders and writing of report





# Occupational Exposure Assessment

We provide the most comprehensive Occupational Exposure Assessment to US EPA and European standards:

- Hazard identification in the workplace through audits.
- Risk assessment of exposure to workplace
- Fugitive Emission Measurement.
- Air Dispersion Modeling
- Impact Assessment
- Flare Testing (Advance Drone Technologies)
- Complete Emission Inventory Reporting to US EPA standards







### **Scentroid Odour Academy**

The Scentroid Odour Academy is a specialized facility providing training and research in the field of odour sampling and analysis. Qualified instructors and industry experts provide not only in-depth hands-on training on using the Scentroid line of olfactometers but also share general sampling and odour measurement techniques from around the world.

#### Training Facility:

In addition to classroom courses at our Canadian Campus, courses can also be taken online using our e-learning platform. Students visiting our Canadian campus will gain real practical experience using our state of the art simulation room.

#### Trainers:

Our trainers are diverse geographically, living and working in different locales globally, multilingual, and proven expert communicators, with a professional track record in the skill and industry in which he or she teaches. Scentroid trainers are all approved professionals with a wealth of experience both as odour consultant and training providers. Many currently run their own consultancies or communications teams.

#### Certification:

Every student that successfully completes the odour academy will receive certification indicating their proficiency. Our certification programs range from field sampling technician to full odour consultant. For a list of certifications and courses visit our online odour academy at www.scentroid. com/academy



#### Scentroid Distributors/Partners and Conferences

#### Distributors

With distributors around the world we've got the right people in the right place to help you. Scentroid's line of olfactometers and accessories are supported by our specialized team of distributors in over 15 countries and 5 continents. Contact Scentroid to find the distributor that supports your market or submit your request through the Scentroid website at www.scentroid.com and we will put you in contact with the distributor in your area.

#### Conferences:

The Odour Management Conference and Technology Showcase OMCTS conference series has established itself as the principal international conference on environmental odour assessment, mitigation and regulation. Each year 2 conferences will be held around the world to bring new ideas and technologies to the field of environmental odour management.

#### **Odour Conferences:**

Title: OMCTS 2015 (Odour Management Conference & Technology Showcase) Date: September 14-15, 2015

Attendees: 250

Venue: Ontario Science Centre. Toronto

Title: OMCTS 2017 (Odour Management Conference & Technology Showcase)

Date: November 1, 2017

Attendees: 250

Venue: UCLA, Los Angeles, California

Title: Middle East Odour Conference

United Arab Emirates, Ajman Date: May 10, 2015 Attendees: 200

Venue: Al Zorah Centre, Ajman, UAE

Title: AOMCTS 2019 (Air & Odor Management

Conference & Technology Showcase) Date: September 19-20, 2019

Attendees: 200

Venue: Hart House, University of Toronto

#### Clients









































































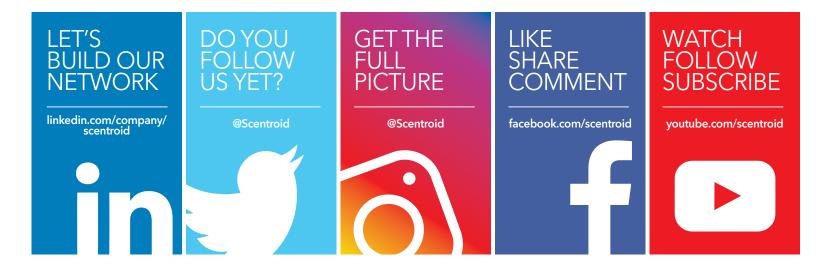








...Plus many more!





#### Scentroid (Division of IDES Canada Inc.)

70 Innovator Avenue, Units #6-8 | Toronto, ON, L4A 0Y2 T: 416. 479.0078 or 1.888.988.IDES (4337) info@scentroid.com | www.scentroid.com