SCENTROID
Future of Sensory Technology

Airborne Lead Analyzer

PRODUCT BROCHURE

Letter from Scentroid's CEO

Scentroid's 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.

Ardevan Bakhtari

Dr. Ardevan Bakhtari
CEO, Scentroid

Quantify the Concentration of Lead in the Air

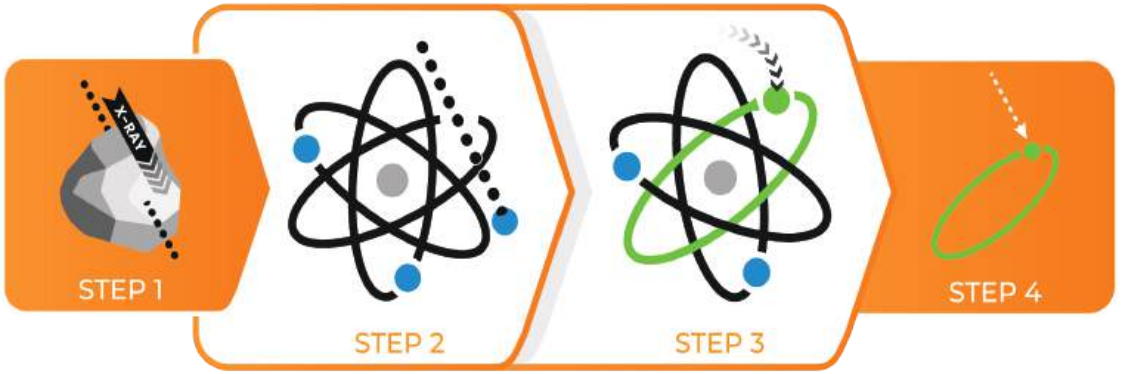
You can now quickly measure total lead concentration in air samples, with results available in just 10 minutes for easy compliance with environmental and occupational health regulations.

How The Airborne Lead Analyzer Works

An ambient air sample is taken through a port into the Airborne Lead Analyzer. The sample is then filtered using a special membrane filter paper. Our X-Ray Fluorescence (XRF) sensor, which is a proven measurement principle and non-destructive analytical technique, scans the sample on the filter and measures the concentration of lead in the air.

Our Lead Analyzer can also analyze a threshold sample in just a few minutes. It is capable of viewing not only lead in ambient air, but a variety of several other theoretical metals!

Users can view instant results in our SIMS3 Software. Autocalibration options are available, and the device can collect and continuously analyze air samples. Scentroid's Airborne Lead Analyzer is a unique and cutting-edge solution in today's market.



X-ray Excitation
High-energy X-rays are directed at the material.

Electron Displacement
The X-rays knock out inner electrons from the atoms in the material.

Energy Emission
The atom becomes unstable, and outer electrons jump to fill the gaps, emitting energy in the form of X-ray fluorescence.

Element Identification
The emitted X-rays have unique energies depending on the element, allowing the instrument to detect and identify the elements present.

Features at a Glance

Lead Standard Compliance
Complies with General Industry Standard for Lead (29CF1910.1025)

Lowers Total Costs
Significantly lowers regulatory costs for compliance compared to XRF or lab methods such as NIOSH 7082

Your Regulatory Assistant
Assists you with following occupational and environmental regulations

Low Maintenance Requirement
Periodic replacement of only the membrane filter depending on usage

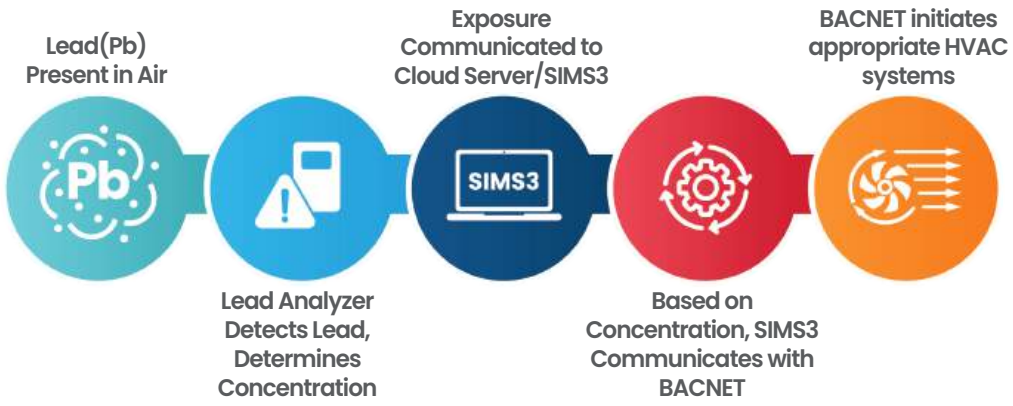
Less Than $2 Per Sample
Total sampling and analysis costs less than $2.00 per sample

Wide Variety of Industries
Mining Operations, Shooting Ranges, Automotive Supply Chains, Lead-acid Battery Manufacturing, Construction, and more...

HVAC Automation with Scentroid Lead Analyzer

The Scentroid Lead Analyzer integrates seamlessly with HVAC systems through BACNET (Building Automation and Control Networks), ensuring real-time response to elevated lead levels. When the analyzer detects an increase in airborne lead concentrations, it can be setup to automatically trigger the building's HVAC system to optimize air quality, further minimizing lead exposure by adjusting airflow, filtration, and ventilation based on the specific contamination levels detected.

The communication between the Lead Analyzer and the HVAC system through BACNET allows for immediate intervention, reducing potential health risks by enhancing air circulation and ensuring harmful lead particles are quickly removed from indoor environments. This setup can be customized to match the building's unique needs, providing tailored responses to lead contamination while maintaining energy efficiency.




LEAD ANALYZER
SCENTROID

Airborne Lead Analyzer Overview

Our Lead Analyzer takes ambient air samples through a port and filters the air using a membrane filter paper. Then, it uses X-Ray Fluorescence (XRF) Technology to scan the filter paper and measure the concentration of lead in the air.

We also offer **Airborne Metal Analyzer** for more metal options. Contact our sales representative for more information and find out which product is best for you!

Specifications

Product Name	Scentroid Airborne Lead Analyzer
Sensors	Lead (Detectable compound), Other theoretical metals (Optional)
Detection Method	X-Ray Fluorescence (XRF)
Sample Methods	Airborne, Threshold
Sampling rate	Every 10 mins/ 1 hour/ 8 hour/ 12 hour/ 24 hour
Min. Detection of Air Sample	0.89 ug/m^3 (1 hour sampling)
Min. Detection of Threshold Sample	2 ppm
Power Input	110-220V 2.5A
Weight	20 kg
Size	460mm x 400mm x 590mm
Internal Storage	64 GB
Communication	WiFi, MODBUS
Cloud Server	SIMS3 Data Logging, Analysis, Alarms, Remote Management
Device Health	Daily Sensor Health & Replacement Check and Reminders
Warranty	24 Months Full Warranty (Parts, Including Sensors)

Ideal for Multiple Industries

The Airborne Lead Analyzer is great for conducting odour Laboratory Research and it can be used in other industries, such as Mining Operations, Shooting Ranges, Automotive Manufacturing and Construction.

Mining Operations

Lead particulate can be present during mining operations, especially in locations where lead ore is extracted. Ore extraction processes that involve crushing and grinding of lead-containing ores can generate fine lead particulate. Moving ore and/or waste materials can release lead particulate into the air. Activities such as smelting, which involves the heating and refining of lead ores, can produce significant quantities of lead emissions.

Exposure to lead particulate in mining can pose significant health risks to workers. Breathing in lead particulate can begin the onset of to lead poisoning, which affects the nervous system, kidneys, and reproductive systems. Lead particulate can settle on surfaces and contaminate food and water sources, increasing exposure risks for local populations. Chronic exposure can result in long-term health issues, including developmental problems in children.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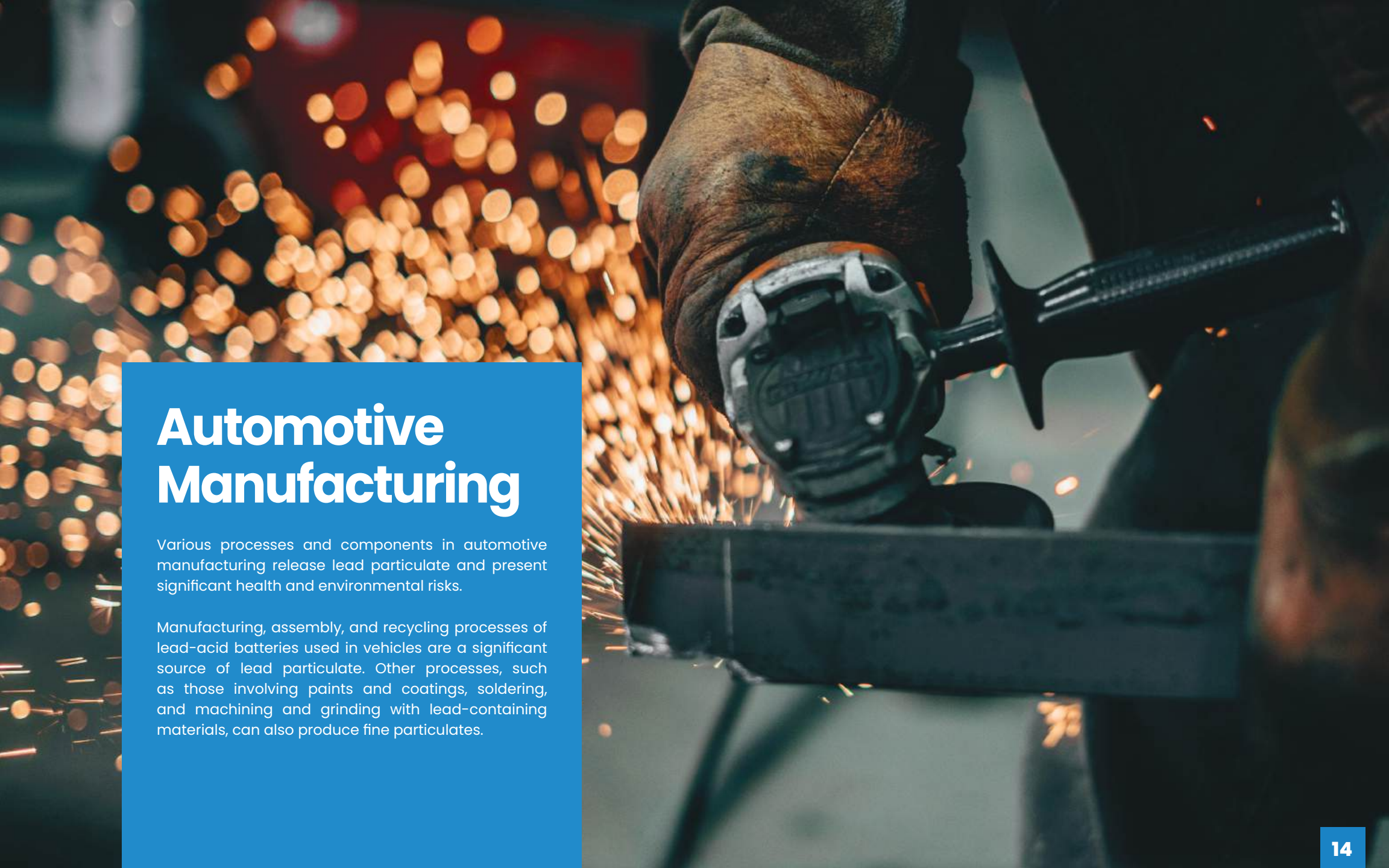
Shooting Range

Airborne Lead particles can commonly be found in many shooting ranges. This can pose health risks, particularly from the inhalation or ingestion of lead particles. Lead is a neurotoxin that can adversely affect the brain and nervous system. Inhalation exposure can contribute to cognitive deficits, memory issues, and behavioral changes.

Our analyzers can measure airborne lead concentrations, allowing users to implement better ventilation systems in the facility and establish necessary safety protocols. Installing our lead analyzers can help ensure compliance with regulations and improve overall safety.



Automotive Manufacturing

Various processes and components in automotive manufacturing release lead particulate and present significant health and environmental risks.

Manufacturing, assembly, and recycling processes of lead-acid batteries used in vehicles are a significant source of lead particulate. Other processes, such as those involving paints and coatings, soldering, and machining and grinding with lead-containing materials, can also produce fine particulates.

Construction

Lead particulate can be released during construction activities for several reasons, particularly in older buildings or projects that involve lead-containing materials.

Demolishing structures that contain lead-based materials (like pipes, paint, or plaster) can create significant amounts of lead particulate. Cutting or grinding materials such as lead pipes, solder, or lead-based alloys can produce particulate. Moreover, if the construction site is located in an area with lead-contaminated soil (due to past industrial activities or lead paint degradation), disturbing the soil can release lead particulate.

Introducing SIMS3: Sensor Information Management System

The sensor information management software, SIMS3, 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.

Facility Organization

All facilities are separately organized so that the users of each will only see data from their own units. Regulators will have an overall view of all facilities within their monitoring scope.

SIMS3 AI

SIMS3 AI utilizes both continuous pollution monitoring and live weather data to calculate a real-time odor plume model, displaying an exact location and spread of odor emissions.

Complaint Designation

Nearby complaints are automatically assigned to facilities, and even sources within facilities, so that the system provides a perfect blend of real-time odor impact estimation, with the registration and further management of odor complaints from neighboring residents.

Modules

The map module itself displays a wealth of information including locations of your air quality monitoring devices, their live sensor readings, the location of sensitive receptors, odor complaint locations, and their justification status. The map module is complemented by a diverse series of user analytics to assist you with determining a wealth of parameters with the click of a button!

User Settings

The system is further supported by a robust settings component, allowing the quick change of user permissions, access privileges, notifications settings and more, all in one convenient window!

Real-Time Data Accessibility

You can now quickly measure total lead concentration in air samples, with results available in just seven minutes for easy compliance with environmental and occupational health regulations.

SMS Notifications

The Scentroid "Sensor Information Management System" (SIMS3) provides the capability for the Scentinal platform to **set up alarms and notifications.** Alarm levels can be set up based on individual pollutants or on the odor concentration. Breaching the designated alarm thresholds will trigger SMS and/or emails alerts to be sent out to the authorized operators. Additionally, Scentinal can be setup to provide localized visual and audible alarms. An authorized user can remotely configure each Scentinal; providing it with the desired sampling rate, transmission rate, purging frequency and more. **Scentinal can also transmit data over WIFI or LAN networks to a local server running a client SIMS database – providing additional security**.

- Odor: 35
- OCU Maint.: 19
- Sludge Delivery: 15
- Settling Tank Mnt.: 17
- Mister 1: 8
- Mister 2: 4

46
New Events

23
Hidden Events

29
Read Events

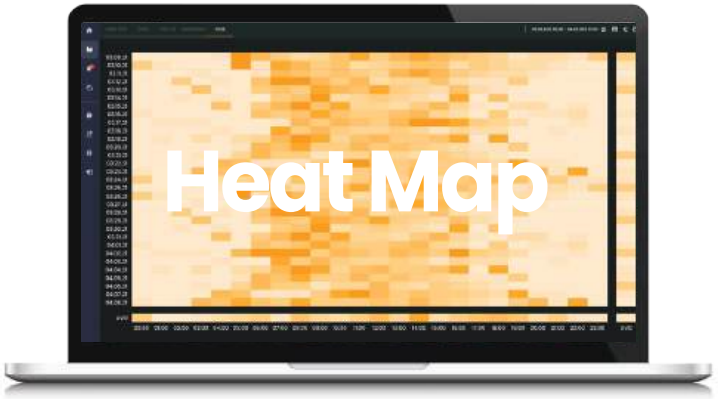
Event Notification List

Status	Type	Registrant	Event Time	Justification	Correlation	Description
New	Odour	SR: Stanley Homes	2022.06.14 7:30 - 14:25	Manual Not Justified	View Correlation	Stanley Homes residences, creat sensitive receptor, repeated com
New	Alarm: H2S	System	2022.06.16 14:05 - 15:30	Manual justified	None	Exceedance alarm triggered 14 tin consecutively within timeframe.
New	OCU Maint.	Benjamin	2022.06.16 15:00 - 17:00	Auto Justified	View Correlation	Scheduled maintainence
New	OCU Maint.	Benjamin	2022.06.17 5:00 - 7:30	Auto Justified	View Correlation	Emergency maintainence
New	Sludge Del...	Benjamin	2022.06.18 18:30 - 20:30	Auto Justified	View Correlation	Scheduled process.
New	Settling Ta...	Benjamin	2022.06.21 8:45 - 11:00	Auto Justified	View Correlation	Scheduled weekly maintainence
New	Odour	SR: Stanley Homes	2022.06.21 9:30 - 14:25	Manual not yet justified	View Correlation	Stanley homes filed a complaint, recorded immediately.
Read	Odour	EXT: Leslie	2022.06.21 9:40 - 17:00	Auto Justified	View Correlation	HI it smell bad outside today very hot day pls remove smell thank y
Read	Odour	EXT: Paolo	2022.06.21 10:20 - 13:20	Auto Justified	View Correlation	Automatically provided by: Neighborhood Odor Watch App

Event & Notification Log

The SIMS3 Event Log contains event data, time frame, justification, occurrences, intensity, and a brief description. At a glance, users can determine the most logged event types, determine the weekly frequency of logged events, and track the most active day, most active time, and total events registered. A series of filters allows users to quickly find a specific event, notification, event type, new or read status, event time, justification status, occurrences, intensity, and more.

Our notification center allows you to quickly view your instrument's alarms through a clean and organized interface. Here, you can access your device, look up a specific sensor, display all of your established alarms, and obtain a detailed breakdown of your alarm status.



For more details on our SIMS3 platform, please see our **SIMS3 Brochure** available at **www.Scentroid.com**

Robust User Analytics

The SIMS3 analytics module provides you with the tools you need to make informed decisions regarding your monitoring projects. This module allows you to view data in several formats including temporal view, statistical view, AQI Analysis view, and heat map. Take your analytic capabilities even further by analyzing your recorded events, event types, and overall event activity.

Automated Reporting

Our SIMS3 reporting auto-generated report module will generate visual reports at a user-defined frequency. Users will be able to schedule weekly, monthly, or annual reports. Once generated, reports will be sent to the user, and they can be downloaded within our reports module.

Training

Scentroid provides worldwide training programs for our clients and distributors. Training can be conducted by Scentroid or your local distributor. Scentroid training tools include: online training, videos, brochure, operation manual and on-site workshops. We also offer a hands-on training program using our high-tech simulation room. Scentroid's state of the art simulation room is located at our headquarters in Toronto, Canada. You are more than welcome to visit us and meet with the people behind these products

Warranty

We are so confident of the reliability of our products, that we are glad to offer our clients a comprehensive 24 month warranty for your equipment. Additionally, warranties can be extended for the 3rd, 4th and 5th year. For more information about our extended warranties, speak to us today.

Technical Support

We are responsible for any products that exit from our manufacturing warehouse! Our support team offers different ways to help you. Choose the one most convenient for you below!

Local Support
We have developed a vast growing network of distributors and repair facilities. To find your local support please check our distributors map.

Phone Support
Our highly professional customer services are here to serve you, for any technical issue reach them easily via phone: 416.479.0078 – Ext 210

SME Support
Connecting you to the Subject Matter Experts! Our customer support is unique in that you can talk directly to the designer or programmer of each product.

Live Chat
If you feel more convenient to solve your technical issue via chat, No problem! Reach our highly professional customer services through our website-hosted Live Chat.

Email Support
For any technical issue you our engineers are happy to assist via email. For fast and efficient support, simply email our team at support@scentroid.com

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