



Sedulitas

PEOPLE | PASSION | PRECISION

SEDULITAS BROCHURE

**Helping you take
Exposure Science to
the next level.**

SEDULITAS can assist your company to become ISO compliant and can offer your business uniquely tailored comprehensive **Health, Safety and Environmental Management Solutions** including **Specialised Occupational Hygiene Services**.



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Sedulitas

PEOPLE | PASSION | PRECISION

SEDULITAS provides innovative, cutting edge solutions to **Workplace Hazard Sampling** using world-class Instrumentation that deliver instantaneous results, allowing you to keep employees safe in real-time.



"HEALTHY WORKERS ARE PRODUCTIVE AND HAPPY, WHICH CONTRIBUTES TO LONG TERM BUSINESS VIABILITY AND SUSTAINABILITY."

-PJ (Jakes) Jacobs
Sedulitas Managing Director

**LET US HELP YOU KEEP YOUR WORKERS HEALTHY
AND YOUR WORKPLACE PRODUCTIVE.**

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SILICA ANALYSIS

SPECTRUM TWO - FTIR

5

SPECTRUM TWO

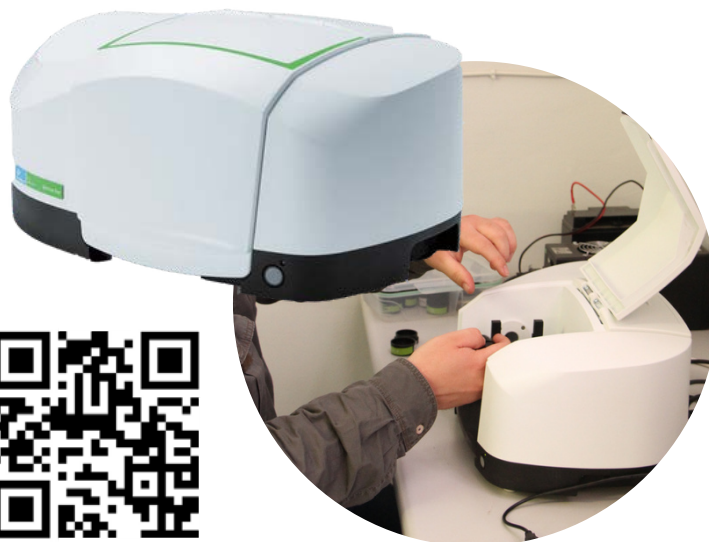
Silica analysis at your own workplace:

- Save valuable time
- Save costs
- Provide exposure data to action exposure reduction the day it occurs
- Can be used by anyone with basic training and a basic understanding of silica analysis
- Sedulitas can provide training and commission on-site as per client requirements!

The Spectrum Two breaks new ground in operational simplicity, combining superb performance with low maintenance design. NOISH Fast



Silica analysis at your place of work!



For the first time, true laboratory performance IR for everyday analysis is now possible, for everyone, everywhere. PerkinElmer recognizes that every analysis application is different. The results received from the Spectrum two can be exported and be imported to the NIOSH FAST Software. **The FAST Software:** Field Analysis of Silica Tool is an easy to use tool to calculate the RCS mass and concentration from each sample analyzed by the FT-IR.

AIRBORNE POLLUTANTS - PERSONAL

FOR FAST NEAR REAL-TIME QUANTIFICATION OF SILICA, THE SPECTRUM TWO IS UNEQUALLED.

TRADITIONAL SAMPLING

Pumps

Personal sampling pumps that are intrinsically safe, reliable, and fitted with flow control which keeps the pumps calibrated to OSHA specifications.

The **Escort ELF®** sampling pump has a patented laminar flow mechanism — a one-of-a-kind system engineered to maintain a steady flow rate within $\pm 2.5\%$, even when altitude, temperature, battery voltage or sample loads change.



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SAMPLING MEDIA

We offer a full range of sample media including MCE, PVC and Silver Membrane filters and vapour sampling tubes etc.



CASSETTES AND CYCLONES

All sample cassettes and premium quality BGI cyclones available to ensure repeatability, reliability, and accuracy of results



REAL TIME SAMPLING

DustCount

The DustCount combines the advantages of personal real-time dust monitoring with a built-in filter cassette for sample composition analysis and HSE 4.0 networking for effective efficient dust monitoring. The 9000 supports interchangeable impactors for PM 2.5, PM 4, and PM 10.

It can be used in combination with the **FTIR** to provide near real-time silica exposure results.

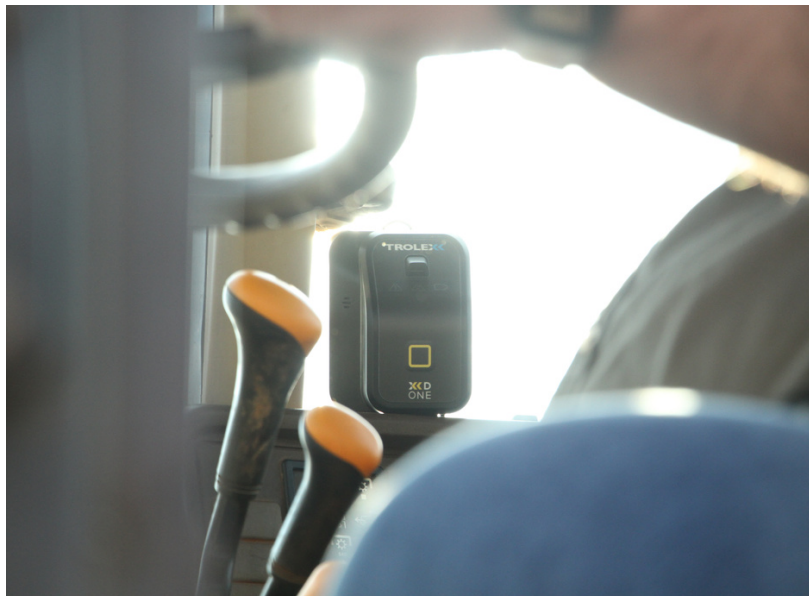


Trolex XD One

With real time data it's easy to make decisions on the measures to be taken, to understand personal exposure levels and even have real time exposure warning. We are giving the power back to the people to make their own decisions about protecting themselves and each other.

XD ONE

The Trolex XD One was designed to give real-time, user-friendly data and warnings to those who are at risk. Our aim is to educate, save lives and increase awareness.



AIRBORNE POLLUTANTS – ENVIRONMENTAL

REAL-TIME SAMPLING

8

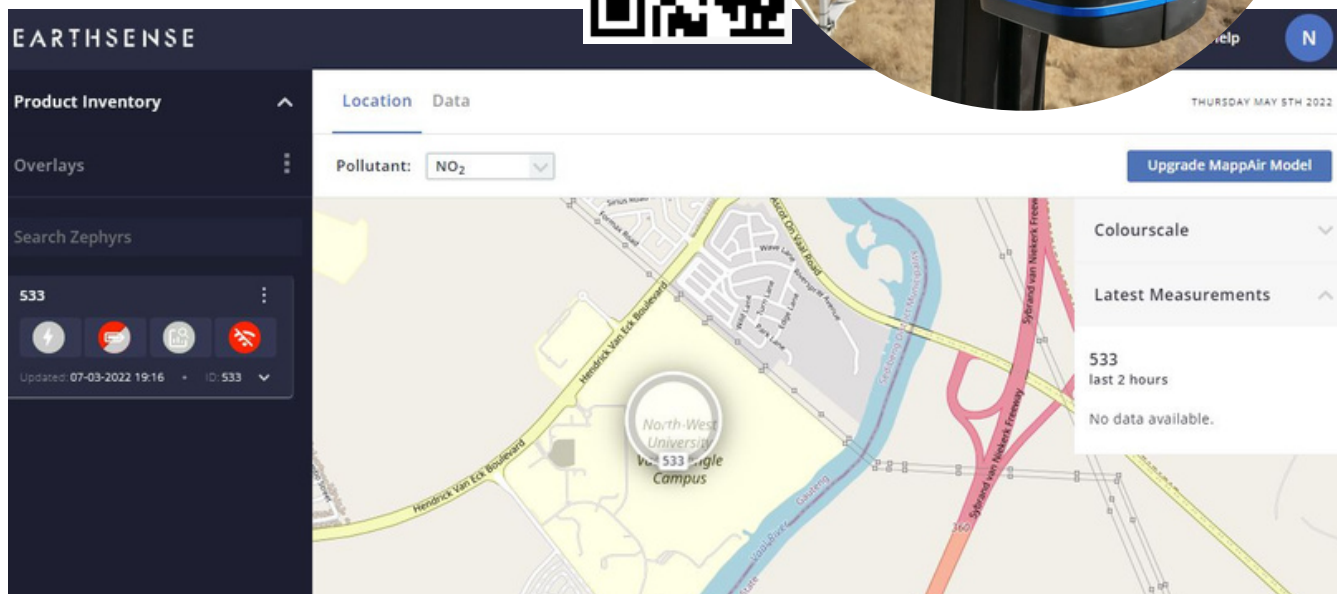
Zephyr

Zephyr® sensors provide detailed air quality measurements in real-time to help identify pollution hotspots at localised levels such as busy road junctions. Extensive networks can be easily deployed for city-wide analysis and optimisation of pollution-lowering initiatives.

How it Works

Pollutants measured

- Ozone (O3)
- Nitric Oxide (NO)
- Hydrogen Sulphide (H2S)
- Nitrogen dioxide (NO2)
- Carbon Monoxide (CO)
- Sulphure dioxide (SO2)
- PM1
- PM2.5
- PM10



MappAir is a high-resolution global model of air pollution that uses advanced modeling techniques, cloud-based data inputs including transport and weather data and applies machine learning technologies to create reliable and usable visualization of air pollution around the world.

MappAir's data accuracy is within and compliant with the limits outlined within The Air quality Directive (2008/50/EC) guidelines.



Smatsense IoT solutions provide precise real time data, enabling users to interpret and adjust to their surroundings

Sensees.Environment

Real Time Energy Usage Tracking

Sensees.Energy is a custom industry platform enabling companies to track 3-phase electric energy consumption of distant devices in real time, analyse data, detect anomalies, optimize energy usage and cut costs.



Sensees.Environment

Plug&play Indoor Air Quality Monitoring

CO2 levels, particles (PM1.0, PM2.5, PM10), humidity, temperature and other air quality parameters in indoor spaces can have a negative affect on cognitive abilities and help the spread of respiratory system infections.

My Sensees is a comprehensive air quality monitoring system, continuously tracking key air quality parameters, interpreting data and alerting the user when certain parameters reach critical levels.



Sensees.Energy

Real Time Energy Usage Tracking

Sensees.Energy is a custom industry platform enabling companies to track 3-phase electric energy consumption of distant devices in real time, analyse data, detect anomalies, optimize energy usage and cut costs.



ALERT PRO 1000

Asbestos is a category one human carcinogen, responsible for 1 in 3 occupational cancers. Asbestos remains a very much a current threat despite its ban in many countries. Used prolifically around the world in over 3500 products, asbestos is most dangerous when damaged, disturbed or degraded and its toxic fibres released into the air where inhalation or ingestion can lead to several serious, often fatal diseases, such as mesothelioma, asbestosis, and other cancers.



The **ALERT PRO** range of warning devices can help prevent prolonged unintentional exposure by providing a **real-time** alert and downloadable data when asbestos containing materials have been disturbed and fibres released.

The **ALERT PRO 1000** is the world's first early warning device for airborne asbestos fibers. This device can help prevent prolonged unintentional exposure by providing a real-time alerts and downloadable data when asbestos containing materials have been disturbed and fibres released. It continuously assesses the airborne environment providing a real-time alarm if asbestos containing materials are disturbed and their toxic fibres released into the air. This vital early warning enables an immediate and proactive safety response helping to prevent the risk of prolonged exposure.

How it works

ALERT's patented design analyses the airborne environment in real-time utilising both laser-light scattering technology, the paramagnetic properties of asbestos and a unique algorithm to make a statistical analysis of the asbestos detection samples in real-time to 99.98% confidence.



Fallout Dust Sampling

Dust Buckets

Sedulitas can provide both buckets and the servicing of these buckets to assist with the monitoring of dust fallout.



Ambient Particulate Air Sampling

BGI by Mesa Labs

BGI samplers use BGI pioneering technology to meet and exceed the requirements for ambient particulate sampling dictated by the U.S Environmental Protection Agency. This includes the design of reliable PM10, PM2.5 and PM1 Inlets, volumetric sample flow rate control, data logging and software for report and data processing.



Ambient particulate samplers deposit ambient particulate matter onto pre-weighed filters for later gravimetric or speciation analysis in a laboratory (TSP, PM10, PM2.5 or PM10-2.5).



PQ 200

PQ 100

OmniFT

FLOW PUMP CALIBRATORS

Calibration of flow pumps using a primary standard calibrator is essential to ensure reliability of results. Three series of calibrators are offered:



Defender Series:

Fast, 1% of reading calibrations of personal sampling pumps, the Defender 510 and Defender 520 provide the flexibility needed to enable you to do your work – defending lives.



FlexCal Series:

The FlexCal offers flow ranges up to 50 LPM with a standardized accuracy of 0.5%, is small, easy to carry and ready for even the most demanding of applications. When you use Mesa Labs' FlexCal, you are guaranteed high accuracy with high confidence without the use of soap bubbles, timers, or heavy provers.



DryCal Metrology Series:

The metrology series is specifically built for laboratory and industrial process applications.

CHEMICALS RISK MANAGEMENT SYSTEMS

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ChemRADE is an affordable, web-based software solution that allows companies manage information about hazardous substances.



Additionally, **ChemRADE** facilitates a straightforward assessment of health risks resulting from the exposure of workers employees to substances in the workplace. ChemRADE helps with:

1. Setting up a Register of Hazardous Substances (with the automatic determination of Occupational Exposure Limits)
2. Inventory of workplaces and activities where hazardous substances are used
3. Assessing the health risks of exposure with use of validated mathematical models
4. Drafting a plan of action (POA) for required management measures
5. Organising all relevant information from inventories, measurements and aspects requiring improvement
6. Preparing workplace instruction cards and reports for internal or external use

Product overview (33 products, 33 in use)								All products	
Show 25 entries		Filter by keyword:							
Product name	Alternative name	Product code	Physical state (20°C)	Hazard category	CMR	In use			
3M™ Stainless Steel Cleaner & Polish	Metal Polish, Cleans and polishes stainless steel, chrome, alu minum and laminated plastic surfaces	SAP-004	Liquid	C		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Acetic acid	Acetic acid, glacial / alcohol of vinegar / carboxylic acid C2	SAP-005	Liquid	C		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Acetone	2-Propanone, AC17717 series	SAP-006	Liquid	C		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Acetylene	Ethyne; Ethine; Narcylen; C2H2; Acetylen; UN 1001; Vinylene	SAP-017	Gaseous	A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Benzene	Material 1098293	SAP-018	Liquid	E	C M	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Brake Cleaner (AE)	Kroon Oil Brake Cleaner	SAP-024	Liquid	A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Cyclohexane	Material 1015388	SAP-008	Liquid	A		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Deblock Ice	MoS2-based rust remover	SAP-009	Liquid	C		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

THERMAL ENVIRONMENT

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REAL-TIME SAMPLING

HeatShield

Real-time WBGT Monitor

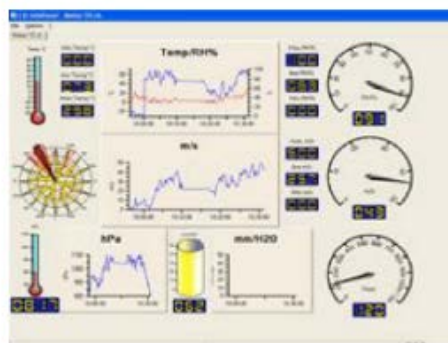
Heat Shield is a compact unit that includes sensors to measure the WBGT indoor & outdoor indices, Heat Index and Humidex. The device can also be deployed and configured for real-time thermal sampling.



Heat Shield can be connected to an anemometer: in this case it is able to acquire all the quantities necessary for the GIDAS TEA program to calculate other indices for thermal comfort (PMV-PPD, TO, ISO7730), thermal stress (PHS, ISO7933) and cold stress (IREQ, Dlim, ISO11079).

GIDAS TEA allows in-depth analysis, simulations, and reporting.

Included with Heat Shield is the HS Manager program that allows you to download data, perform analyses and evaluate the operator's limits in the environments according to the variables defined in the ISO 7243 standard.



VIBRATION METERS

REAL-TIME SAMPLING

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LARSON DAVIS

The **HVM200** is a small rugged vibration meter with built in Wi-Fi that can be used to measure hand-arm, whole body and general vibration. It includes the metrics and frequency weightings needed to measure human vibration. This 3 channel meter meets the requirements of ISO 8041:2005 and it is designed to measure per ISO 2631-1, 2 & 5 and ISO 5349.

This makes the HVM200 an ideal choice for an instrument used to demonstrate compliance with human vibration requirements and regulations worldwide.



FEATURES

- Control and View Data From LD Atlas™ Mobile App
- Removable Micro SD Memory Card
- USB 2.0 and Wi-Fi
- Replaceable Lithium Battery
- ISO 8041:2005 Compliant
- Three Measurement Channels

APPLICATIONS

- Hand-arm Vibration Measurement to ISO 5349
- Whole-Body Vibration Measurement to ISO 2631
- General Vibration Measurement



POPULAR SENSORS

- SEN020
- SEN026
- SEN027
- SEN040F
- SEN041F



1/1 AND 1/3 OCTAVE FILTERS (OPTIONAL)

Determine the frequency content of measured vibration levels by configuring the HVM200 with the optional IEC 61260 class 1 compliant 1/1 and 1/3 octave filters.

VIBRATION METERS

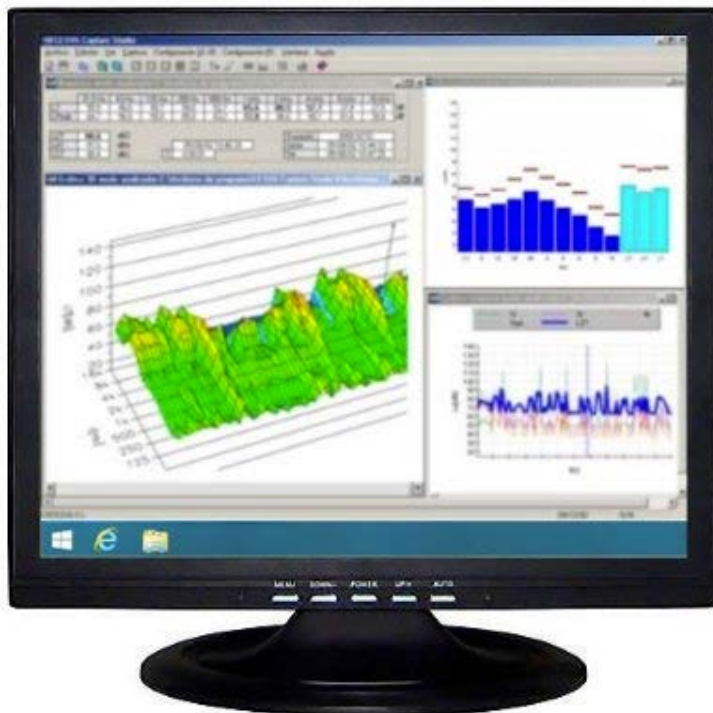
REAL-TIME SAMPLING

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CESVA - VC431 **Triaxial Vibrometer**

The **VC431** is a triaxial vibrometer (in accordance with the regulation ISO 8041) and the ideal instrument for vibration measurements in-line with Directive 2002/44/EC on risks arising from the exposure of workers to mechanical vibration as well as evaluate the effect of vibration on the structure of buildings and terrain (UNE 22-381-93).

With the **CESVA Capture Studio software** (included) the measurements carried out with the VC431 can be downloaded (USB) and the results analysed quickly and simply.



CESVA Capture Studio

CAPTURE Studio provides you with a convenient, easy-to-use environment for obtaining digital data acquired by the instrument.

CAPTURE Studio has been designed as a work environment for the new range of CESVA products. Software available for Cesva sound level meters, vibrometers and dosimeters.

VIBRATION MONITOR

17

Reactec R-Link

The R-Link watch has been developed to assess and manage hand arm vibration (HAV) risks more easily and effectively.

The R-Link® smart watch is new generation of workplace wearable technology which is designed to help workers monitor the risk of exposure to vibration.

R-Link informs the wearer of their exposure levels by calculating and displaying their HSE HAV risk assessment exposure points in real-time. Sound and vibration alerts inform the wearer if their personalised exposure thresholds have been exceeded.





Workplace noise measurements don't have to be hard. The wireless **Spartan Noise Dosimeter Model 730** offers faster, easier measurements via reliable hardware and the user friendly LD Atlas™ app.

FEATURES

- Spartan Noise Dosimeters are configured with built-in charging pods in a robust trove case and are available in 1-, 3-, 5-, and 10-pods
- Completely wireless operation, charging, and data download powered by Bluetooth
- LD Atlas offers test setup, monitoring, data review, and reporting via mobile device
- Accurate data collection with built-in bump and motion detection
- Versatile, free G4 LD Utility Software delivers in-depth functionality post-test

Larson Davis offers a complete line of Noise Dosimeters designed to make worker noise measurements quick and easy. The Spartan Series of Wireless Noise Dosimeters offers both standard and intrinsically safe units to meet the needs of your application.

Dosimeters

High performance dosimeters that are capable of spectrum analysis, datalogging and are ideal for the measurement of noise according to OSHA, MSHA, NIOSH, ACGIH, DoD, EU Directive 2003/10/CE etc

Noise dosimeters measure and store sound pressure levels (SPL) and, by integrating measurements over time, provide a cumulative noise-exposure reading for a given period, such as an 8-hour workday.



MINUENDO SMART ALERT EARPLUGS

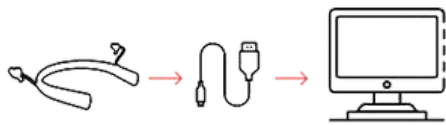
Occupational noise-induced hearing loss is the most common occupational disease in the world. But it is 100% preventable.

Smart Alert earplugs and data-driven guidance on noise exposure promotes safer behaviour in industrial and construction markets.



HOW DOES IT WORK?

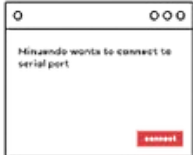
Step One: Connect earplugs



Connect your earplugs to your computer using a USB cable



Step Two: Select earplugs



Find and select your earplugs in the popup list. Click "Connect" - When the device is ready to be synced, the button below will activate, click it to start the upload process

Step Three: Sync data

Device data has been successfully synced

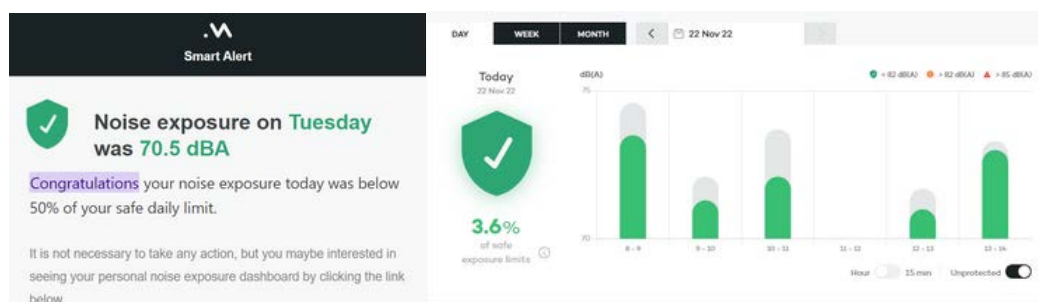
Step Four: Update device

Your device is up to date

It is now safe to disconnect your device.

Step Five:

View your noise exposure for the day.



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SoundTrack® LxT Workplace Noise Sound Level Meter Occupational Noise Sampling and Analysis | Model LxT

The **SoundTrack® LxT** Sound Level Meter was developed to meet the unique needs of those involved in workplace noise exposure assessment and plant noise surveys. It is fully compliant with IEC and ANSI standards for Class 1 or Class 2 sound level meters. In addition, LXT files are fully compatible with the ISO 9612:2009 measurement strategies for task or job-based measurements.

With its sleek ergonomic design to its exceptional exposure data presentations, the SoundTrack LxT is the perfect tool for gathering, analyzing, and presenting detailed noise environment data quickly, easily and concisely. New and better ways to organize your sampling methodology and annotate noise survey data save incredible amounts of time and provide better results - all at a price that won't consume your entire instrumentation budget.

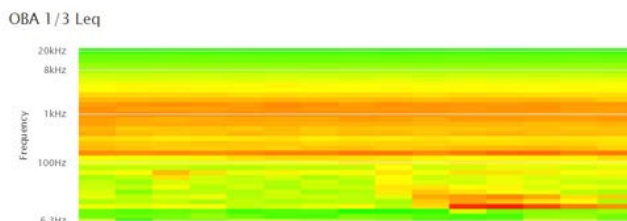


HIGHLIGHTS

- Simple one-handed operation
- 30 hours operation using AA lithium batteries
- Large, bright, high-contrast LCD Screen
- 1/1 and 1/3 Octave digital filters
- Extremely Rugged - compact and lightweight
- Available in Class 1 or Class 2

APPLICATIONS

- Workplace Noise Monitoring
- Site Survey Noise Measurements
- Construction Noise
- Short/Medium Term Noise Consulting Projects



831C						
File Live View Manager Account/Schedule						
Refresh Delete All Download All Sort by Add General Open on Download Export to xls						
Name	Start Time	Size	Run Time	Project	Metric	Download
20200909.L30	2020-09-09 13:44	1.08 MB	00:01:07		41 dB	0%
20200909.L30	2020-09-09 08:00	1.11 MB	04:48:58		47 dB	0%
20200909.L30	2020-09-09 00:00	3.16 MB	13:26:55	Meters	42 dB	100%
20200909.L30	2020-09-09 13:51	1.86 MB	00:00:57	Meters	39 dB	100%
20200909.L30	2020-09-09 13:52	1.08 MB	00:00:29		38 dB	0%
20200909.L30	2020-09-09 15:40	1.09 MB	04:14:28		30 dB	0%



SoundAdvisor™ Sound Level Meter **Noise Measurement and Analysis | Model 831C**



The **SoundAdvisor Sound Level Meter Model 831C** is designed to make noise measurement easy. Due to its color display, connectivity, extensive software features and small form factor the SoundAdvisor is an ideal choice for handheld operation. Attended measurements are simplified, with the ability to control and monitor data via any PC or mobile device with a standard web interface. Designed with the acoustic professional in mind, the SoundAdvisor offers an elegant solution for complex needs in an easy to use system.



APPLICATIONS

- Environmental noise assessment
- Noise reduction validation
- Product quality control
- Spectral noise analysis
- FFT analysis and tone assessment
- In-situ sound power measurements
- Code enforcement





Environmental Noise and Building Acoustics Sound Level Meter

Class 1 Sound Measurements | Model 831

This versatile instrument, with high definition display, performs the functions of several instruments. It puts the combined features of a precision Class 1 sound level meter, environmental noise analyzer, personal noise dosimeter, and a real-time frequency analyzer in the palm of your hand. The Larson Davis Model 831 is designed for simple single handed operation, yet is fully featured, smart and versatile with an ever expanding firmware platform.



HIGHLIGHTS

- IEC 61672-1:2013, ANSI S1.4, ANSI S1.43 Class 1 integrating sound level meter
- Voice Annotation
- ANY LEVEL Display
- User programmable run modes
- Six user selectable statistics (Ln)
- Threshold exceedance data
- Community Noise Calculations (Lden, CNEL)
- GPS Global Positioning Support
- Back Erase Functionality
- Normalized Spectrum
- User-selectable screen layout and lockable setup protection
- Remote access and field upgradable
- Wide variety of non-proprietary powering options including - 4XAA internal batteries, AC, USB and external batteries

APPLICATIONS

- Class 1 sound measurements to the latest international standards
- Environmental noise assessment and monitoring
- Reverberation time measurement and building acoustics
- Tonality
- Occupational noise evaluation
- HPD selection
- Noise reduction validation
- In-Situ sound power measurements
- Real-time analysis of sound in 1/1 and 1/3-octave bands

AREA SAMPLING

Integrating Sound level meters class 1 with audio recording expandable to spectrum analyser for third octave bands as well as class 2 audiometers available from CESVA and Larson Davis.

Capable of audio recording for environmental sampling.



ENVIRONMENTAL SAMPLING

The TA120 sensor combines the precision of a Class 1 sound level meter, maximum protection of an outdoor kit and full connectivity with CESVA NoisePlatform and open source platforms.

NoisePlatform is an on-line platform that displays and dynamically analyses, in real time, the noise measured by a network of sensors that can monitor an entire area affected by noise-generating activities.



**MONITORS CAN BE NETWORKED TO PROVIDE
LARGE AREA NOISE MONITORING**

The SoundAdvisor Environmental Noise Monitoring Systems provide Permanent, Long-term or Portable, short-term noise monitoring solutions and the Solar power options make remote noise monitoring possible.



Precision Sound Level Calibrator

CAL200

The Larson Davis CAL200 Sound Level Calibrator is a battery-operated precision microphone calibrator used for the calibration of sound level meters and other sound measurement equipment. It can provide an output level of either 94.0 or 114.0 dB (switch-selectable) at a frequency of 1 kHz.

HIGHLIGHTS

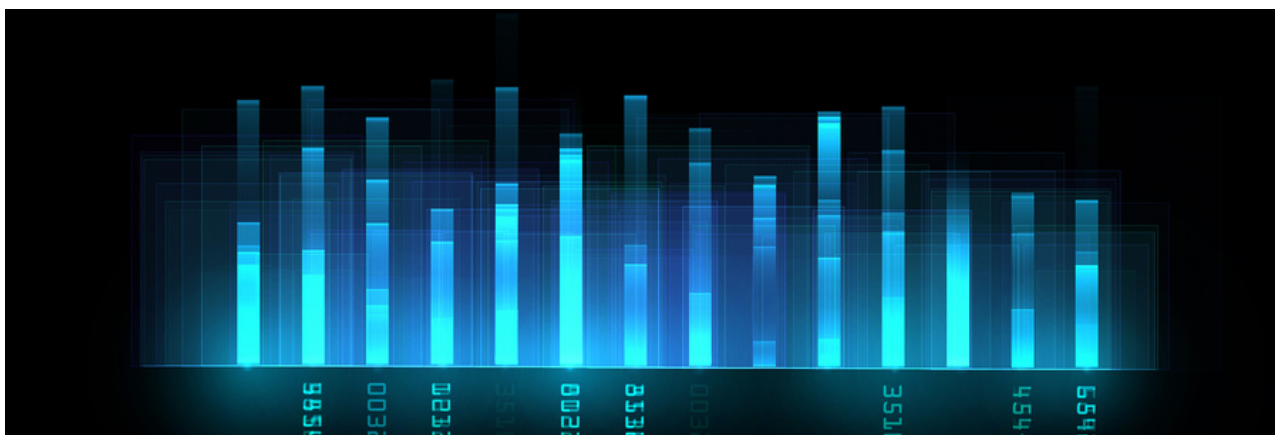
- Output level: 94 or 114 dB
- Output frequency: 1 kHz
- 1/2" microphone opening
- ANSI S1.40, IEC 60942:2017 & IEC 60942:2003 Class 1 compliant
- Internal battery

APPLICATIONS

- Field calibration or laboratory

CALIBRATE

- Sound level meters
- Noise dosimeters
- Noise monitoring station



CESVA - CB006

Portable, user friendly calibrator, ideal for checking class 1 and class 2 dosimeters and sound level meters on the measurement site, or in the laboratory.

The CB006 represents a cost effective yet accurate means of checking, before and after the measurement.

May be used with any microphone suitable for closed coupler checking and of ½" diameter and complies with norm IEC 60942:2003 class 1.



ELECTROMAGNETIC FIELDS

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The **SMP2** - EMF equipment is designed to measure people's EMF exposure in accordance with ICNIRP, IEC, EN, IEEE, European Directive 2013/35/EU, FCC, Safety Code 6 (2015), and other standards.

This comes in a wide variety of probes for different EMF-frequencies.

Our **EMF Equipment** offered, provide a unique combination of spectrum analysis, broadband and static field measurements in a single device.

Can measure all common sources of EMF:

- Microwaves
- Welding
- Electricity
- Wifi
- Telecommunications

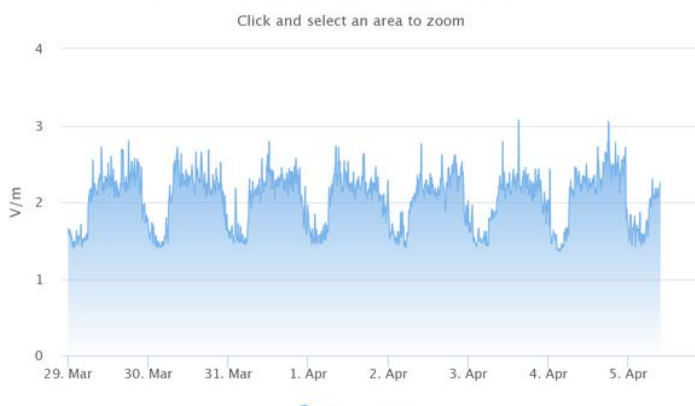


The **WaveMon** is a personal monitor for the continuous monitoring of workers' EMF exposure.

Three types are available:

1. **WaveMon RF-8** : Monitors E-Field up to 8 GHz
2. **WaveMon RF 60** : Monitors E-Field up to 60 GHz
3. **WaveMon LF 400** : monitors H-Field from 10 Hz to 400 kHz

The **MonitEM** provides continuous monitoring of exposure to electromagnetic fields (non-ionising radiation, NIR) generated by telecommunication facilities or other sources of radiation.





RAD7

The DURRIDGE **RAD7** is a truly versatile radon and thoron detector used by research scientists and professionals worldwide. Its mature and yet still state-of-the-art design match or exceed those of the most expensive radon measurement devices in the world. At the same time, it incorporates a number of exclusive features that are found in no other radon detector, regardless of price. Incredibly, the RAD7 is affordable.

The RAD7 is a sophisticated measuring instrument widely used in laboratories and research work around the globe. It is used by professional radon testers, mitigators and home inspectors, as well as by research scientists studying groundwater, mines, deserts, the ocean and volcanoes at extreme temperature. A rugged carrying case encloses the instrument, ensuring reliability in the field.



Precision and Performance

- Fastest response and recovery times of any electronic monitor/sniffer on the market.
- Measures EPA action level of 4 pCi/L in under two hours.
- Recovers from radon highs in minutes - not hours.
- Spectrum printout verifies correct operation of instrument in field.

Convenience and Ease of Use

- All-in-one complete, compact, portable unit in rugged carrying case.
- The instrument directs you step by step, so you can do what you want to do.
- Programmed set-ups for often-used tests.
- Audible radon and thoron counts lets you hear the hot spots.



ILLUMINATION

LUXMETERS

28

Luxmeters with photometers for measuring illuminance, are equipped with a photoelectric detector and with a silicon photodiode coupled with a filter to modify its response and to get it as closed as possible of the reference function $V(\lambda)$ defined in the CIE (International Commission on Illumination).

These are hand-held autonomous instruments, fully automatic designed for measuring illuminance.

With memory storage, it allows the storage of datasets for processing on a computer.

SOURCES AND EXAMPLES



FLUORESCENT TUBE WITH THREE BANDS



HIGH PRESSURE MERCURY LAMP



SODIUM VAPOUR LAMP



METAL HALIDE LAMP WITH THREE ADDITIVES
AND RARE-EARTH METAL HALIDE LAMP



WHITE LED : NEUTRAL COLOUR



HALOGEN QUARTZ LAMP / TUNGSTEN
(STANDARD SOURCE)



Kimo LX200

Various UV measurement sensors and applications are available.

- UV from the sun
- UV from man-made sources
- UV for disinfectant purposes



A smartphone (Android) based UV-Index radiometer with graphic display for hazard assessment of natural UV radiation in workplaces according to ISO 17166 standard (UV-Index).

The UVI and UVC includes a UV index sensor with PTB traceable calibration, a calibration certificate, and a smartphone.



RADIATION DETECTORS

30

Digital Radiation Detectors by S.E. International, Inc

The radiation detectors can easily detect Alpha, Beta, Gamma, X-Ray in a single unit. LCD display with back light, multiple units of measurement to choose from, timed counts, and programmable alerts are but a few of the features available.

Each of their nuclear radiation detectors come with a ruggedized overlay to protect the instrument from drops and scratches. Stand, USB cable, lanyard, and batteries are included in the box.



MONITOR 200

The Monitor 200 measures alpha, beta, gamma, and x-rays. Its digital display shows readings in your choice of CPM, CPS, $\mu\text{Sv/hr}$, mR/hr, or in accumulated counts. It has a digital, easy to read backlit display, a red count light, and a beeper that sounds with each count detected. This radiation detector device also includes an adjustable timer and a loud, customizable alert.

AccuFIT 9000

Today's tough environment means Quantitative Fit Tests can make the difference between safe and at-risk exposures.



The new AccuFIT 9000 PRO has all the capabilities you need to accurately fit ALL mask types.

It is a simple, easy-to-use device that includes OSHA's streamlined 2019 CNC protocol. Rugged, quick to deploy, and fully featured, AccuFIT and AccuFIT PRO both provide answers you need in a format you can use and come with a 3-year warranty.



The following respirators can be tested:

- N95
- P100 & N99
- FFP1, FFP2, & FFP3
- Full- & Half-Face Elastomeric



SPECIALISED RESPIRATORY PROTECTION

32

POWERED AIR PURIFYING RESPIRATORS

RPB Z-Link

Respirators for various applications including sand/shot blasting, spray painting, welding, foundry work, and abrasive blasting.



The RPB series of respirators was designed with your comfort as a top priority. The result is a lightweight, ergonomically balanced respirator that reduces aches and strains on your neck and back.

With six points of adjustment on the RPB Comfort-Link™ head suspension, you can set your preferences, ensuring a stable, individualized fit. Optional side padding further increases comfort and stability.



RESPIRATORY PROTECTION

33

REUSABLE RESPIRATORS

GVS Respirators

The **GVS Elipse® P3 Respirator** Compact, lightweight and flexible design which adapts and fits perfectly to the face and offers a full range of vision without interfering with other eye or ear protection which users are required to wear.

Large central non-return valve means lower breathing resistance for the user and keeps moisture build-up inside the mask to a minimum. Lightweight, non-slip strap that is easily adjusted in 4 positions for improved comfort and to allow safe use even in high humidity or wet conditions. Contact us for Respirator range.



SPM414 Elipse face fit kit adaptor for AccuFIT9000 pro

The new AccuFIT 9000 PRO has all the capabilities you need to accurately fit ALL mask types. The GVS SPM414 Elipse face fit adaptor and the AccuFIT 9000 Pro can be used for quantitative fit testing.

This face fit kit adaptor is compatible with the following respirator series:

- Elipse P3, A1P3, ABE1P3, B1P3
- Integra P3, A1P3, ABE1P3, B1P3
- Elipse P100/P100 Nuisance Odour
- Integra P100/P100 Nuisance Odour





H210 N95 Disposable Respirator

The three-panel design went through countless iterations to pass the fit test on the widest range of faces.

FIT

The H210 has been coined the fit test champion passing the test on the widest range of faces. Due to its innovative 3-panel design, soft nose foam, and patent-pending clear view bar, which increases your field of view while wearing, making it easier to view what you are working on without craning your neck.

Breathability

Lighthouse Worldwide Solutions has specifically developed the H210 to be the easiest to breathe disposable respirator on the market with its 3-panel design, which maximizes the filtration surface area

Durability

The Straps the H210 are not held by staples but by patent-pending weld technology that makes the mask usable for more than one duty cycle. The Welds that meld the straps to the mask are 3 times as strong as any other N95 respirator available today.



INDOOR AIR QUALITY (IAQ)

35

Various world class, **ISO 17025 calibratable instrumentation** available for measuring IAQ parameters such as relative humidity, CO, CO₂, air velocity and air changes per hour in indoor workspaces.



Can also be configured to measure other parameters such as SO₂, H₂S, NO₂, CH₂O and others.

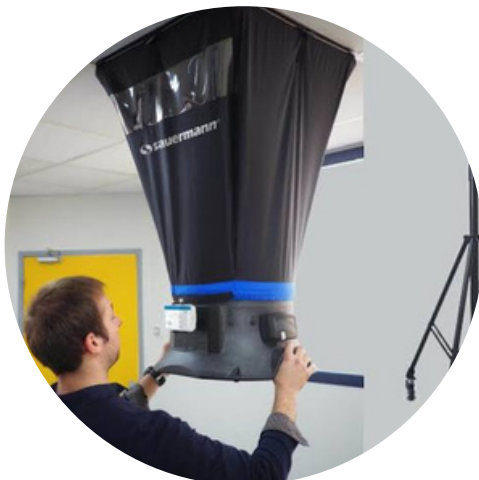
KCC 320



AMI 310



DBM 620



SI-AQ PRO



Thermo-anemometers

Both hotwire and vane anemometers are available to assist with the measurement of airflow.



Kimo LV 50

	VT 110 / VT 115	LV 130
	Hot Wire Probe	Rotating Vane Probe
AIR VELOCITY	0,15 to 30 m/s	0,3 to 35 m/s
AIRFLOW	0 to 99,999 m3/h	0 to 99,999 m3/h
TEMPERATURE	0 to +50°C	0 to +50°C

GAS DETECTORS

FG 110 & DF 110

Gas detectors with display of the concentration of measured gas in ppm, %VOL and %LEL, to detect methane, LPG and other hydrocarbons and refrigerant gas leaks.



A Gas leak detector that has been developed to provide efficient, and reliable quality performance.

Supplied with a tester to ensure unit works properly

Suitable for use:

- To detect gas leaks
- In refrigerant plants – complies with EN 14624 standard
- To check integrity of gas plants
- To monitor confined spaces

Kimo LG 1110



GfG Gas detectors

Portable Gas Detectors and Fixed Gas Detection Systems by GfG

GfG's portable gas detectors offer professional personal protection.

Microtector III G888C

The Microtector III G888C combines the requirements of a modern multi-gas detector for use in personal protection with a compact design for safe working in confined spaces and shafts.



MONITOR GASES AND VAPORS IN EX-ZONE 0

Polytector III G999M

The robust and practical multi-gas detector is equipped with a heat tone sensor for combustible gases, an infrared sensor for CO₂ and 3 electrochemical sensors for toxic gases as well as oxygen.



KME Professional Weather Station

Professional weather stations with a suite of sensors for the measurement of the seven typical parameters in meteorological applications fitted with high-quality sensors designed according to WMO.



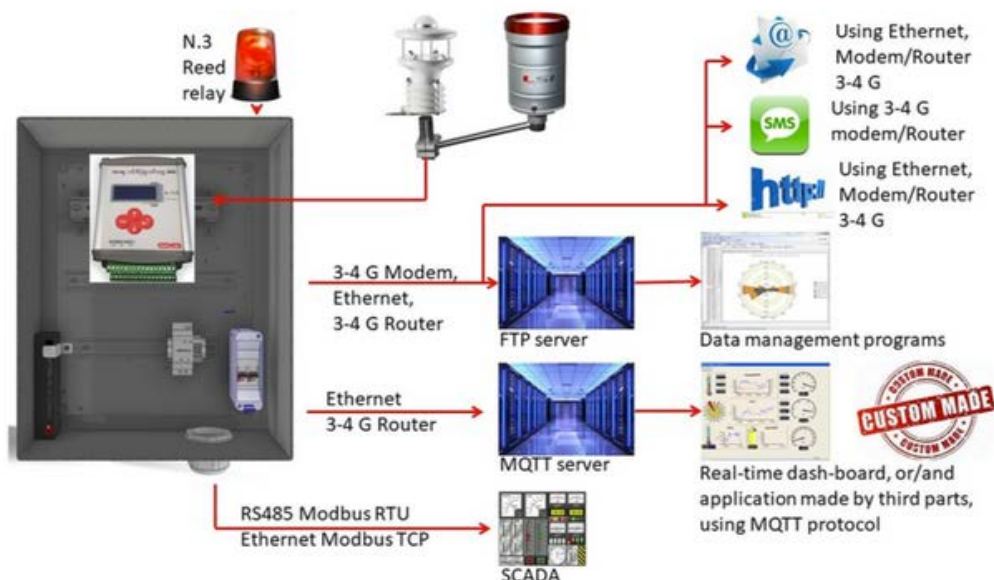
The station provides for free inputs for additional sensors and has operational limits suitable for all climatic conditions. Web-based and PC based applications for data display and management.

A Stand alone and portable solution is available.



HOW THE TECHNOLOGY MAKES YOUR DATA AVAILABLE:

KME is known for the flexibility of its signal acquisition and data processing system. PC based or Cloud based programs are available.



G.Re.T.A.

To support the management of the territory subject to breakage of earthen dams, levees or embankments, to infiltration of pollutants in the water table or to landslides risk, LSI LASTEM has designed and built G.Re.T.A. in collaboration with the Polytechnic of Milan.



This is the first georesistivity meter for the permanent monitoring of large areas of the subsoil with the ERT method.



G.Re.T.A.

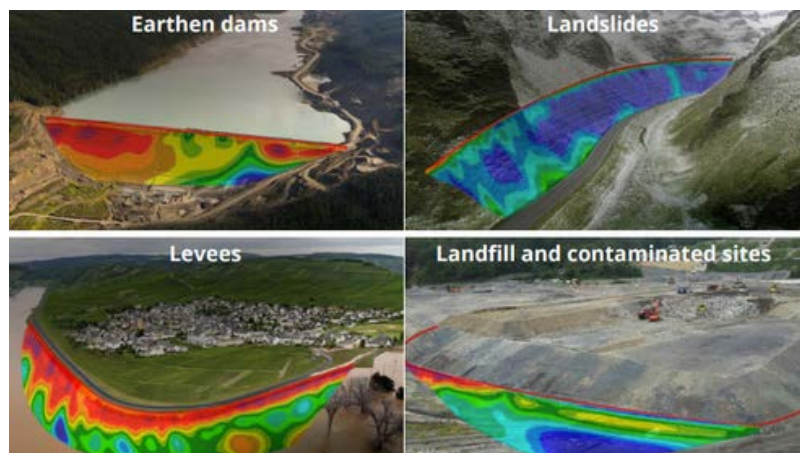
REAL-TIME TAILINGS DAM INTEGRITY MONITORING

G.Re.T.A. or Geo-resistive meter for Time-Lapse Analysis is the new monitor for fixed installations developed by LSI LASTEM s.r.l. in collaboration with the *Politecnico di Milano*.

GRETA is the most effective and innovative solution for Permanent Geoelectric Monitoring of the conditions of large sections of soil and the perfect solution for measuring the integrity of mine tailings dams to prevent the collapse of such structures, in real-time.

GRETA CAN ASSESS:

- the evolution of the water content, saturation, seepage
- the triggering of possible landslides, instabilities
- the triggering of possible fractures, cavities, voids
- the triggering of pollutants contaminations



Bespoke consulting services on ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing, including:

- Electromagnetic Emission and Exposure studies
- Hazardous chemicals substances control and management
- Commissioning of instrumentation including noise detection and measurement equipment, analytical instrumentation, and general occupational hygiene sampling equipment
- Mine environmental control measurement Environmental dust fallout studies
- Environmental pollution and impact studies
- Big data analytics and modelling – we can take your historic exposure data and create exposure profiles and other meaningful management reports to help you to better understand workplace health and hygiene risks
- Ergonomics studies using the Humantech ergonomics assessment platform



LEGIONELLA TESTING

41

An immediate, simple, on-site Legionella test that makes water systems safer.

Get accurate results in 25 minutes.

LEGIONELLA TEST KITS

Hydrosense is the world's only test that can detect *Legionella pneumophila* sero- group 1 on-site in only 25 minutes and can be performed on-site by anyone with minimal training.

The Hydrosense rapid testing method offers an alternative solution which is accurate, completely on-site and fast - in fact, it's the fastest Legionella test in the world and provides results in as little 25 minutes.



The Hydrosense test has been developed and independently validated for use in high risk areas such as, such as cooling towers, water tanks, domestic hot and cold-water systems, sinks, showers, decorative fountains, whirlpool spas and more.

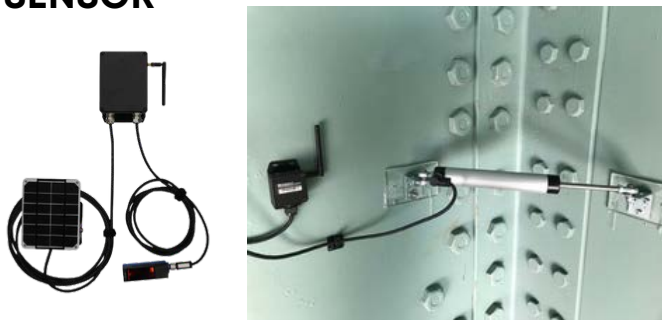




Based on its award winning ultra low power wireless sensor network technology, known as **SenSpot™**, Resensys provides a powerful platform for remote monitoring of **strain (stress)**, **vibration (acceleration)**, **displacement**, **crack activity**, **tilt**, **inclination**, **temperature**, and **humidity**. Having monitored all these important structural quantities in real time, SenSpot sensors provide reliable tools to measure overstrain, metal fatigue, formation of cracks, movement and stability of foundation, as well as monitoring vibration and performing modal analysis.

Resensys provides instruments such as:

SENSPOT WIRELESS LASER DISTANCE SENSOR



SENIMAX 3D WIRELESS GEOPHONE



SENSPOT WIRELESS 4-CHANNEL LEVEE INTEGRITY SENSOR



SENIMAX WIRELESS CAMERA





SAMPLE FILTRATION SUPPLIES

Sample preparation often requires filtration to separate suspended solids, remove impurities, microorganisms, or other chemicals that may interfere with the final analytical procedures, and to determine chemical speciation and trace elements for studies.



SOLIDS TESTING - SUPPLIES

Solids content is an essential marker for water quality - effecting the energetics of moving water and impacting aquatic organisms.



ProWeigh® and ProWeigh® Double Filters

TURBIDITY TESTING

Suspended solids, algae, organic and inorganic contaminants, and even air bubbles from treatment system affect the relative clarity of water.

The Maximum Contaminant Level is set by local regulatory authorities and measures in Nephelometric Turbidity Unit (NTU).



Oakton T-100IR Portable Infrared Turbidity Meter Kit



COD Testing VIALS

CHEMICAL OXYGEN DEMAND (COD) TESTING

Determine organic waste levels in your water sample with Chemical Oxygen Demand (COD) tests. COD is an integral part of all water quality management programs; used for measuring treatment plant efficiencies.



LABORATORY GLASSWARE:

- Beaker, Flasks
- Reaction Flasks
- Test tubes
- Laboratory Bottles
- Culture containers
- Pipettes
- Graduated Cylinder, Volumetric Flasks
- Burettes
- Mechanical Pipettes
- Tabletop dispensers
- Viscometers
- Glass Frit Filters
- Membrane Filters
- Desiccator
- Separatory funnels
- Glass Column
- AOAC(JIS)
- Condensers
- Distilling Column
- Splash, Connecting
- Receivers
- Adapters
- Stoppers
- Glass for processing

TRAINING

SEDULITAS is an approved **OHTA** Course Provider and offers Occupational Hygiene Training Modules to promote improved standards of Occupational Hygiene Practice and train Hygienists to an internationally accepted and recognised standard.

The British Occupational Hygiene Society (BOHS) is awarding and examining body for OHTA modules. The international scheme recognises three levels of qualification:

FOUNDATION LEVEL
INTERMEDIATE LEVEL
ADVANCED LEVEL

OUR COURSES

W201	Basic Principles in Occupational Hygiene <i>FOUNDATION LEVEL</i>
W501	Measurement of Hazardous Substances <i>INTERMEDIATE - CORE</i>
W502	Thermal Environment <i>INTERMEDIATE - OPTIONAL</i>
W503	Noise - Measurement and its Effects <i>INTERMEDIATE - CORE</i>
W504	Asbestos and Other Fibres <i>INTERMEDIATE - OPTIONAL</i>
W505	Control of Hazardous Substances <i>INTERMEDIATE - CORE</i>

W506

Ergonomics Essentials
INTERMEDIATE - OPTIONAL

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W507

Health Effects of Hazardous Substances
INTERMEDIATE - CORE

We present all courses **ON-LINE**, as well as at a pre-determined **VENUE**, depending on confirmed attendance.

Training is done by PJ Jacobs, a SAIOH Registered Occupational Hygienist, over 5 days.

Who should attend?

All Hygienists and all persons involved or interested in the health, safety and/or environmental management of a company.

**CONTACT OUR OFFICE TO BOOK
YOUR TRAINING COURSE**





Sedulitas

PEOPLE | PASSION | PRECISION

CONTACT US



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