

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.



CONTACT US

WWW.SEDULITAS.CO.ZA







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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SPECTRUM TWO - FTIR

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 OHSA 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 ±2.5%, even when altitude, temperature, battery voltage or sample loads change.

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.





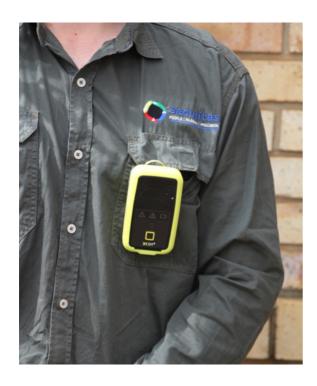


XD1+

PERSONAL DUST MONITOR

XD1+ is a simple, straightforward and highly accurate dust monitor with just a single button; simply switch it on, secure it in place and off you go. With real-time dust monitoring, XD1+ changes the way we fight respiratory disease in the workplace.





XD1+ gives you instant alarms for fully customisable STEL and TWA measurements for dust sizes of PM1, PM2.5, PM4.25 and PM10. With our accurate and real-time dust monitoring you can take back control to prioritise worker safety, make effective business decisions and save lives.



LIVE WARNINGS.

STEL and TWA alarming mode *Data logging active



CONTINUOUS.

Discrete data logging mode *Data logging active



VISUALISATION.

Mode with **BreatheLITE** and **BreatheMOBILE***Data logging active

NANOPARTICLE DETECTORS

NANEOS

Measure ultrafine nanoparticles & aerosols down to 10 nanometers

PARTECTOR 2

Multi-metric nanoparticle detector.

Measure particle number, LDSA, surface area, particle mass or mean particle size with high time resolution to make a detailed analysis of an aerosol of interest.





TEM SAMPLER

Miniature nanoparticle detector to measure LDSA and to collect particles on a TEM grid.

Scanning electron microscopes allow the analysis of individual particles or particle conglomerates and their structure. The partectorTEM can not only measure the ultrafine particles, but also deposit them on a sample holder at the push of a button, which can then be analyzed in a scanning electron microscope.

ULTRAFINE OEM PARTICLE SENSORS

OEM sensors can be used to be built in proprietary systems.

If you have e.g. a laboratory setup with your own flow, power supply and data aquisition, you can implement a custom sensor into your system.

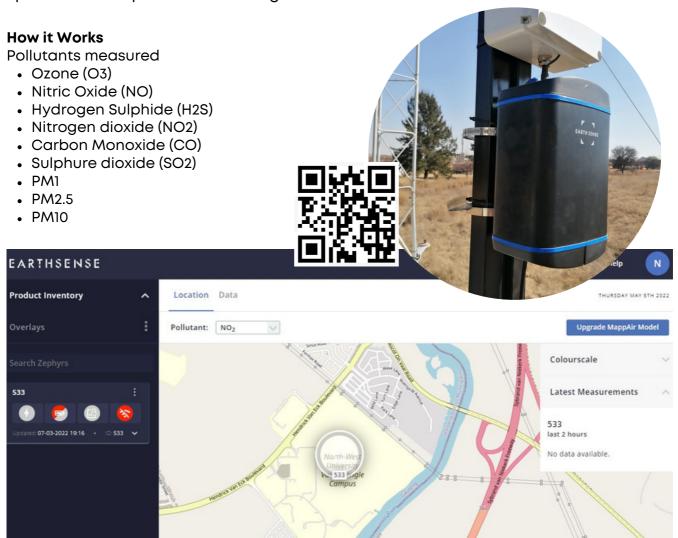


AIRBORNE POLLUTANTS - ENVIRONMENTAL

REAL-TIME SAMPLING

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.



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.







HIGH PERFORMANCE AIR SAMPLING PUMPS

Airbox Sampling pumps are leading the way in asbestos air sampling. Airbox Sampling products are establishing the industry standard in asbestos air testing.

DATAFLOW

The only pump for companies serious about delivering compliant asbestos testing, going beyond most global regulatory requirements.

The Airbox Dataflow gives you, your customers and your teams complete assurance in the quality of your asbestos air sample tests.

- Fully adjustable flow rate (5–12 litres / min)
- Integrated flow sensor for automated flow compensation within +/- 0.01%
- Downloadable test results/data (flow rate, time stamp)
- Live flow rate capability through Bluetooth gives real time data outside the testing area
- Flow Range: Adjustable 5 -12 litres / min with 0.8 micron cellulose filter
- Flow Stability: +/- 0.1%
- Battery Pack: 12.8V Lifepo4 Pack 12Ah Lithium
- Charge Time: 6 8 Hours Max
- Duration: 12+Hours @ 8 litres/min

VARIFLOW

This award winning pump delivers high performance against low maintenance costs

- Adjustable flow rate (5 17 litres / min)
- 2-year warranty and fixed price servicing
- Robust build quality, easy to use, clean and transport
- Flow Range: Adjustable 5 -17 litres / min
- Battery Pack: Lead Acid 12V 9Ah Recharge
- Charge Time: 6 8 Hours Max
- Duration: 2+ Hours @ 16 L/min, 8+ Hours @ 8 L/min





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, distrubed or degraded and its toxic fibres released into the air where inhalation or ingestion can lead to several serius, often fetal 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 unitentional exposure by providing a rea-time alerts and downloadable data when asbestos containing materials have been distributed 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 te asbestos detection samples in real-time to 99.98% conficence.

ALERT PRO Connected & ALERT CONNECT Portal

ALERT CONNECT is Alert Technology's custombuilt cloud platform linking to and visualising in real-time the data and GPS location of the ALERT PRO CONNECTED (PRO2000) devices associated to the user's account. It can also create personalized reports.



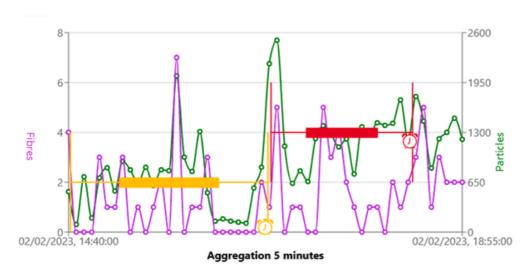


TIME & DATE STAMPED DATA

CONNECT portal visualizes data from the ALERT PRO Connected units.

Time-stamped airborne fibre (purple) and particles (green) levels are captured in 10 second intervals across an active sampling session which are displayed in realtime on the unit and also on CONNECT (allowing for transmission of data).

View the information in graphical or tabulated formats and choose your preferred time aggregate to display the data in as much granularity as required.



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).



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.





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



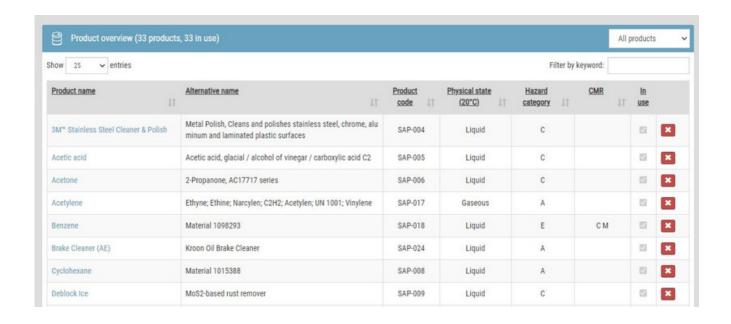
CHEMICALS RISK MANAGEMENT SYSTEMS



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



THERMAL ENVIRONMENT

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.





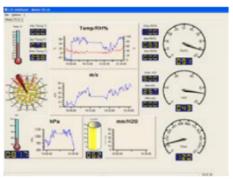
Heat Shield can be connected to an anemometer: in this case it is able to acquire all the quantities necessary for the GIDAS TEA program to calculate other indices for thermal comfort (PMV-PPD, TO, ISO7730), thermal stress (PHS, ISO7933) and cold stress (IREQ, Dlim, ISO11079).

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

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





HOW TO USE THE HVM200

Click link below:

https://www.youtube.com/watch?v=s_anwvaGGw0

VIBRATION METERS

REAL-TIME SAMPLING

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.

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.





HOW TO USE THE R-LINK

Click link below:

https://www.youtube.com/watch?v=s_anwvaGGw0



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VIBRATION DATALOGERS



PLACID PVSEW Mk.2

The PVSEW Mk.2 is a new model in the VSE series of smart vibration dataloggers. It can record accelerations, vibrations, velocities and inclinations. It includes a 3- axis MEMS accelerometer, an accurate date/time clock and a non-volatile 128 Mb recording memory.

Depending on the settings it can record acceleration or velocity signals and/or RMS levels for months. Its very small size allows it to be attached to, or embedded within, the monitored equipment.





PLACID PNSRTW Mk.3

PNSRTW Mk.3 is the third generation of PLACID Instrument's WiFi™ enabled smart integrating sound-level meters/dataloggers. It includes a digital MEMS microphone, an accurate date/time clock, a non-volatile 128 Mb recording memory and wireless connectivity.

Running on battery, it can record sound pressure levels and report them through WiFi™ for a week. Connected to an external USB charger it can record and report for months. Its very small size allows it to be attached to or embedded within the monitored equipment.



LARSON DAVIS

A PCB DIVISION

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.

Safe hearing. No loss.

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.

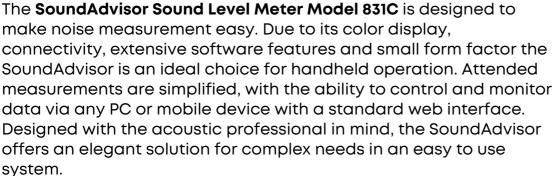
Step Five:

View your noise exposure for the day.





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







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



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Spartan[™] Sound Level Meter Solutions for Occupational Noise Assessment | Series 821

Spartan Sound Level Meters Series 821IH from Larson Davis, designed for Occupational Health and Safety professionals, offers all the tools needed for workplace noise and noise exposure measurements, including built-in workplace noise dose metrics and selectable time and frequency weightings.

APPLICATIONS

- Walkaround Industrial Noise Measurements
- Job-based Noise Measurements
- Site Surveys
- Plant Sound Maps
- Noise Dose Measurements







SoundExpert® Sound Level Meter Product Noise Evaluation and Environmental Noise | Series 821ENV

Want a sound level meter that works like your phone? The SoundExpert® Model 821ENV does just that with a large touch display viewable in any condition. Whether making handheld noise measurements or measuring environmental noise for several weeks, the SoundExpert Model 821ENV is an excellent choice for ease of use and low-power operation.

APPLICATIONS

- · Environmental noise
- · City noise
- · Environmental impact studies
- · Construction noise
- Monitoring noisy venues







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, Longterm 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

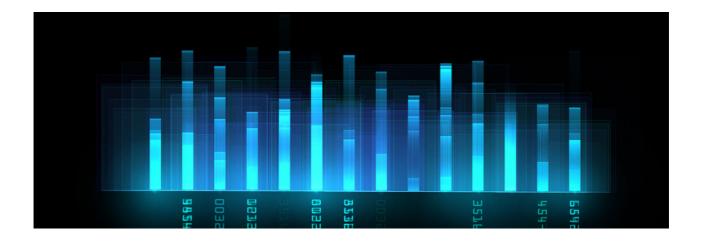
APPLICATIONS

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.









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ELECTROMAGNETIC FIELDS

SMP3 - Field Strength Meter for EMF exposure

The only device that offers genuine 3-in-1 functionalities: broadband measurements (DC to 60 GHz), frequency spectrum analysis (DC to 10 MHz) and static field measurements.

The SMP3 field meter provides the most advanced features and technology on the market, designed for users who need high-quality measurements, ease of use and good reporting tools

SMP3 FIRST WITTER WITTE



Different Probes:









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

Three types are availble:

- 1. **WaveMon RF-8**: Monotors E-Field up to 8 GHz
- 2. WaveMon RF 60 : Monotors 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



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







SODIUM VAPOUR LAMP



HIGH PRESSURE MERCURY LAMP



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

HALOGEN QUARTZ LAMP / TUNGSTEN (STANDARD SOURCE)







Kimo LX200

KIMO LAZUC

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.





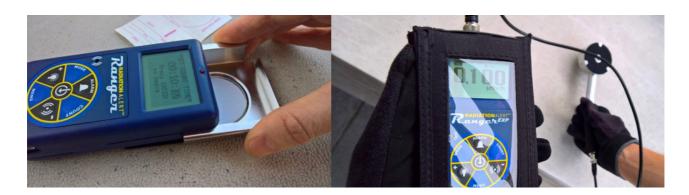


Digital Radiation Detectors by S.E. International, Inc

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, µSv/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.





SPECIALISED RESPIRATORY PROTECTION

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.







www.sedulitas.co.za info@sedulitas.co.za

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 adapter 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.



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.





DBM 620



SI-AQ PRO



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Thermo-anemometers

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





Kimo LV 50

AIR VELOCITY
AIRFLOW
TEMPERATURE

VT 110 / VT 115	LV 130
Hot Wire Probe	Rotating Vane Probe
0,15 to 30 m/s	0,3 to 35 m/s
0 to 99,999 m3/h	0 to 99,999 m3/h
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



www.sedulitas.co.za info@sedulitas.co.za



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.





Portable Gas Analysers

Gas Data's range of GFM portable gas analysers are the ideal choice for professionals on the move. Their ruggedised housing, ergonomic shape, light weight, and long battery life make our GFM handheld gas analysers a reliable and trusted solution for day-to-day field operation.

Inspectra MAX

The INSPECTRA® MAX is a natural gas leak portable analyzer with laser spectroscopy. This NEW highly sensitive detector offers all the advantages of optical detection in a highly compact and portable device, giving you precise and reliable findings when detecting methane leaks.





Gazoscan

Ultralight, compact, highly sensitive and easily detects at 100 meters (330 feet) away, making the Gazoscan the ultimate tool for natural gas leak inspection of residential buildings and properties, gas leak inspection of natural gas pipelines, and methane leak inspection of gas containers.

The Gazoscan device applies to any situation where operating close to the inspection zone is not possible.

GFM 406

The GFM406 is an ATEX certified gas analyser, designed for a variety of applications. It is fully configurable to each client's requirements, making it a uniquely versatile instrument.

It can be configured with infra-red channels for CH4 and CO2 analysis, with an optional LEL expansion and up to four electrochemical cells to measure any combination of O2, CO, H2S or H2. With the option of N2 balance calculation, customers can choose up to 7 gas channels.





Fixed Gas Analysers

Click! systems are the flagship range of fixed gas analysers, designed for a vast array of applications, including the most demanding and hazardous industrial setups. Advanced technology and modular design ensure the best possible operational efficiency and, in turn, low total cost of ownership.

Click! Light

This system will analyse up to 5 gases (including a balance calculation), across variety of ranges and supports up to 2 sampling points.

Gas readings can be easily accessed via physical hardware media (in CSV format) or using optional telemetry (via any web browser). The Click! Light system can be configured to sample up to 4 times per hour. A variety of system alarm outputs can be included to offer better process control.





Click! Flexi

The key differentiator of this product is its flexibility. It is designed to offer total configurability throughout its lifetime, accepting retroactive upgrades as your plant evolves.

Flexi accommodates all standard features of the Click! range. Being built around our proprietary Click! Sensor Modules allows the system to be serviced rapidly, annually and with minimal plant down-time.

Click! Ex

Click! Ex is capable of analysing up to 4 different gases across variety of ranges from a single sample point. Its automated operation allows the data to be available via plant's SCADA or our Data Portal over customer's network.

Its small footprint makes it possible to integrate easily into environment with limited space availability, such as CHP engine containers.



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.



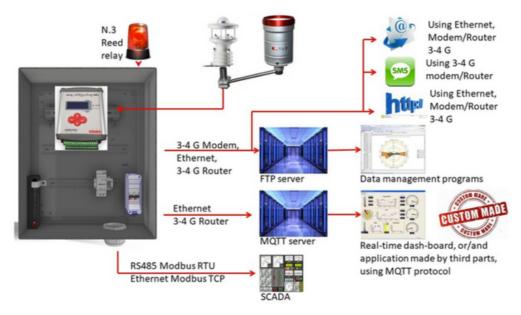
The station provides for free inputs for additional sensors and has operational limits suitable for all climatic conditions. Web-based and PC based applications for data display and management.

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.

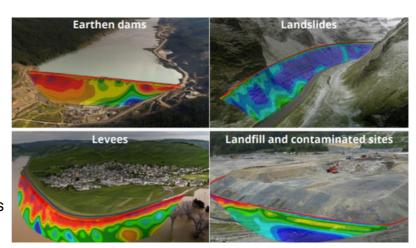
REAL-TIME TAILINGS DAM INTEGRITY MONITORING

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



CONSULTING & BIG DATA ANALYTICS 47

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



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

LABORATORY EQUIPMENT



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

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.

COD Testing VIALS













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
- Desicaotr
- · Separatory funnels
- Glass Column
- AOAC(JIS)
- Condensers
- Distiling 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 FOUNDATION LEVEL
W501	Measurement of Hazardous Substances INTERMEDIATE - CORE
W502	Thermal Environment INTERMEDIATE - OPTIONAL
W503	Noise - Measurement and its Effects INTERMEDIATE - CORE
W504	Asbestos and Other Fibres INTERMEDIATE - OPTIONAL
W505	Control of Hazardous Substances INTERMEDIATE - CORE

Ergonomics Essentials
INTERMEDIATE - OPTIONAL

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







CONTACT US



Find Us

27 St. Andrews Way, Mzingazi Golf Estate, Meer En See, Richards Bay, 3901



Find Us

87 Malva St, Baillie Park, Potchefstroom, 2531



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