AES
sensing safety

Product & Services Guide

Specialists in real-time and connected monitoring solutions for OHS, Industrial Safety and Environmental hazards.

Hazard Monitoring Equipment
from Onsite to Insight

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www.aesolutions.com.au

Contents

Keep an eye out for these helpful icons

Purchase

Hire


Wireless


AES LIVE SITE compatible

For over 20 years, Active Environmental Solutions Australia (AES) has been a trusted supplier of occupational hazard monitoring equipment. We proudly offer a wide range of products and services to support occupational hygiene and workplace health and safety across a variety of industries.

Our equipment provides monitoring for key hazards including gas, dust, silica, heat stress, hazardous particles, noise, sound, and vibration and external exposures including air quality and noise pollution. Available for both purchase and hire, our solutions are backed by fully equipped service departments staffed by manufacturer-trained and certified technicians.

At AES, our mission is to transform the way industries manage health and safety by delivering innovative, world-class monitoring technologies that protect workers, safeguard the environment, and improve operational efficiency.

We're committed to being the go-to provider for hygiene, health and safety solutions in Australia, known for our cutting-edge products, expert technical knowledge and service, and dedication to creating safer, healthier workplaces.

For more information, visit us at aesolutions.com.au or contact us today at sales@aesolutions.com.au

AES Services

Sales

At AES, we offer a comprehensive range of industry-leading equipment designed to monitor and manage workplace hazards. From gas detection and dust monitoring to noise, vibration, heat stress, and air quality assessment, our products are trusted by occupational hygienists, safety professionals, and environmental consultants across Australia.

We partner with globally recognised manufacturers to provide high-performance, reliable instruments that help ensure regulatory compliance, protect worker health, and support safer working environments.

Hire

When workplace safety is a priority, having the right monitoring equipment is essential. At AES, we offer flexible short and long-term hire options for a wide range of hazard monitoring equipment. Whether you need instruments for a shutdown, project work, or ongoing compliance, our fully maintained and calibrated devices ensure you get accurate, reliable data, exactly when you need it.

Why Hire Instead of Purchase?

Hiring equipment offers several advantages over purchasing:

- ✓ **Cost-Effective** – Avoid large upfront investments and ongoing maintenance costs.
- ✓ **Flexibility** – Access the latest technology without long-term commitments.
- ✓ **Always Calibrated & Ready to Use** – All our equipment is regularly serviced and maintained.
- ✓ **Technical Support Included** – Our expert team is available to assist with setup and troubleshooting.
- ✓ **Ideal for Short-Term Needs** – Perfect for shutdowns, projects, and temporary compliance monitoring.

Our Hire Range

We supply specialist monitoring and sampling equipment across key workplace hazards, including:

- **Gas Detection** – Portable and fixed gas monitors for toxic and combustible gases.
- **Dust & Aerosol Monitoring** – Real-time particulate monitors and air sampling pumps.
- **Noise & Vibration Monitoring** – Personal and environmental noise dosimeters and vibration meters.
- **Heat Stress**– Heat stress and thermal monitoring assessment tools.
- **Indoor & Outdoor Air Quality** – IAQ monitors for CO_2, VOCs, and environmental pollutants.
- **Respirator Fit-Testing** – Quantitative fit-testers to ensure workers' respiratory protection is effective.
- **Water Quality Monitoring** – Instruments for testing pH, turbidity, conductivity, and other water parameters

Service and Calibration

AES have a dedicated team of manufacturer trained and certified Service Technicians. We offer extensive service capabilities across full maintenance, repairs, component replacements and calibration.

Our Technicians are highly skilled and can service and calibrate most monitoring equipment, including air sampling pumps, portable and fixed gas monitors. Technicians are officially trained to work on SKC, MSA, Honeywell, RAE Systems, BW, GES and AccuTec, Cirrus Research PLC, and always use genuine manufacturer parts in their repairs.

Our skilled and knowledgeable team are not limited to these brands so please get in touch if you own any other type so we can discuss your requirements. With service technicians based in VIC, NSW, QLD, and WA, we offer prompt and region-specific support to ensure minimal downtime for your unit.

Technical Support

At AES, we're committed to supporting our customers beyond the point of sale. Our dedicated technical support service is just another way we're helping you get the most from your investment with us.

Our Technical Support team delivers fast, precise, and hassle-free resolutions, keeping your equipment compliant, operational, and optimised with minimal downtime.

Contact the team on support@aesolutions.com.au to access;

- **Expert Support** – Manufacturer-trained specialists for accurate troubleshooting.
- **Faster Resolutions** – Quick repairs, calibration, and on-site service options.
- **No Delays, No Runarounds** – Just real solutions when you need them.

Portable

Our personal gas monitors are rugged in construction, simple to operate, have audible and visual alarms, and comply with all instrinsic safety requirements. Available with a wide range of sensor options including PID for VOCs, electrochemical sensors for toxic gases and oxygen, flammable LEL and NDIR sensors, and NDIR sensors for CO_2.

- Extensive range of sensor options
- Datalogging capability
- Man-down alarm options
- Adjustable alarm setpoints
- Easy to view display
- Remote monitoring access available

Transportable

When you need more than personal gas monitoring, transportable area monitors provide a comprehensive safety perimeter or wireless fence line. Real-time monitoring gives peace of mind that issues can be addressed quickly and effectively.

AreaRAE PLUS

- Monitors up to 7 gases
- Rugged and weatherproof
- Optional meteorological sensor for tracking toxic plumes

BW Honeywell RigRat

- Extended run time off one charge
- Wireless – no cables
- Remote monitoring options available with TouchPoint Plus Control System
- Connect multiple units for a wireless safety boundary

Fixed and Semi-Permanent

MeshGuard

MeshGuard is the leading gas detection system that is rapidly deployable in numerous industrial and remote monitoring applications.

- Self-forming wireless network; units come online automatically
- Multiple controller options for real-time wireless data collection and viewing
- Battery powered operation for up to 6 months
- Intrinsically safe
- Magnetic mounting option for very quick and easy installation

Touchpoint Plus

An easily configurable, wall mounted control system that supports up to sixteen channels of gas detection. Its intuitive user interface and modular approach enables you to take control and configure what you need for a wide range of applications.

- Quick and easy setup and use
- Intuitive touchscreen user interface
- Traffic light style status at a glance
- Ergonomic industrial design
- Suited to a wide range of industries

Sense Point XCL

Sense Point XCL combines a simple yet robust mechanical housing with a gas detector app, so you can use everyday technology to set up and maintain your gas detector. Sensepoint XCL is available as a flammable gas detector for the detection of potentially explosive gases, or as a toxic gas detector.

- Manage installation, commissioning and maintenance from the gas detector app on your smartphone
- Aesthetic design blends in to the environment
- Simple, robust housing with our easiest ever installation and maintenance
- Integral gassing port for hard-to-reach locations
- Compatible with Touchpoint Plus and other industry-standard controllers

A basic guide to Gas Detectors for confined space entry

	MicroClip XL	MicroRAE	MSA ALTAIR 4XR	MSA ALTAIR io4	MultiRAE Lite
Confined Space	✓	✓	✓	✓	✓
Wireless	✓	✓	✗	✓	✓
Built in Pump	✗	✗	✗	✗	✓
Confined Space with PID	✗	✗	✗	✗	✓
Gases	4 gas	4 gas	4 gas	4 gas	5-6 gas
Cost Guide	$	$$	$$$	$$$$	$$$$$

All units are available with confined space kit for bump testing.
Calibration gases and accessories are also available

Personal PID

ToxiRAE Pro PID

- Protect workers from the threat of volatile organic compounds (VOCs) in the workplace and observe conditions remotely from a central commandstation with this compact, wireless monitor. Reliable, rugged, and intrinsically safe, the ToxiRAE Pro PID can be easily attached to workers' uniforms.

- Wireless access to real-time instrument readings and alarm status
- Man down Alarm
- 190 built-in PID correction factors
- Continuous datalogging
- Easy to use

Fixed PID

RAEGuard 2 PID

- Continuously monitor for the threat of Volatile Organic Compounds (VOCs) in hazardous locations with the fixed RAEGuard 2 PID detector. This monitor is easy to configure and maintain in the field thanks to a modular design with easy access to PID lamp and sensor, without the need for tools.

- Fixed, field-configurable detector for VOCs measurement
- Pre-programmed correction factors for more than 200 compounds
- Digital and analog outputs
- Graphic display and LED status indicator for fault and alarm conditions
- Humidity compensation

Survey Monitors PID

Photoionization Detectors (PID) are essential tools for measuring **volatile organic compounds (VOCs)** in workplace environments. These handheld survey monitors provide real-time detection of a wide range of hazardous gases, helping occupational hygienists and safety professionals assess air quality and exposure risks.

	MiniRAE Lite+	MiniRAE 3000+	UltraRAE 3000+	ppbRAE 3000+
Ppb-level detection	✗	✗	✓ (10ppb)	✓ (1ppb)
Compound Specific	✗	✗	Benzene 200/0.010 ppm Butadiene 200/0.010 ppm	✗
11.7eV lamp	✗	✓	✓	✗
9.8eV lamp	✗	✓	✓	✓
Wireless options* (*Regions specific)	✓	✓	✓	✓
Datalogging	✓	✓	✓	✓
Reflex PID Technology™	✓	✓	✓	✓
MIL-STD-810F-compliant	✗	✓	✗	✗
Wireless	✓	✓	✓	✓

Landfill Gas Monitors

Using a landfill gas monitor forms an important part of ensuring a landfill site is safe for those that work on-site but also those who live and work in the surrounding areas. Landfill gas emissions present several hazards, including explosion risks from combustible methane gas, one of the most common gases to be found produced from a landfill site.

INSPECTRA MAX

The INSPECTRA® MAX by Gazomat is a natural gas leak portable analyser with laser spectroscopy. This 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.

- Total selectivity to methane
- Smooth and stable readings
- Methane high sensitivity, down to 0.5ppm
- Continuous display from 0ppm to 100% Vol. GAS
- Extended temperature range from -15°C to +50°C
- Zone 1, IECEx and ATEX certified, can be used safely indoors and outdoors in explosive atmospheres

MERCURY MONITORING

Mercury Monitoring

Mercury exists in many forms, from elemental (or metallic) and inorganic to organic. It is found in the air, water and soil, but some industries pose the risk of overexposure. Each of these forms differs in its degree of toxicity and in the health problems they can cause. AES can help you to avoid issues related to mercury exposure with our range of handheld mercury monitors.

J505

- Portable fluorescence spectroscopy
- Battery operation for 10+ hours, battery charges in 3 hours or less
- Detection range: 0.05 µg/m3 to 500 µg/m3

J405

- Gold film sensor technology
- 24 hour battery life
- Detection range: 0.5 µg/m3 - 999 µg/m3
- Battery powered sensor regeneration
- Auto time/date stamp

Transportable and Fixed Solutions

A fixed monitoring solution can be used to consistently understand levels of dust to identify the activities which create the greatest risk. For particulate monitoring in remote locations or where power is not available, we have options to power up your dust monitor 24-hours a day, without interruption.

AIR XD

AES can support long and short-term dust monitoring operations with a fixed set-up of the AIR XD. This unit will simultaneously monitor different PM sizes including, PM1.0, PM2.5, PM4.25 and PM10 providing results in real-time.

Fixed and remote options available:

- Battery back-up
- Solar Power
- Real-time telemetry

DustTrak™ II

The DustTrak™ DRX Aerosol Monitor can measure both mass and size fraction at the same time and provides a gravimetric sample. It is suitable for indoor and outdoor applications, industrial and occupational hygiene, baseline screening, remote monitoring and research studies.

- Simultaneously measure size-segregated mass fractionconcentrations corresponding to PM1, PM2.5, respirable, PM10 and PM Total size fractions
- STEL alarm setpoint
- Touchscreen interface
- TrakPro data analysis software
- Automatic zeroing (with optional zero module) minimizes the effect of zero drift
- Perform in-line gravimetric sampling for custom reference calibrations

AQMesh

AQMesh is a small sensor air quality monitoring system ideal for perimeter monitoring which can monitor up to 6 gases as well as PM, noise and wind speed & direction with seamless data delivery and a range of power options.

- Real-time telemetry
- NO, NO_2, O_3, CO, SO_2, H_2S, TVOC and CO_2
- PM1, PM2.5, PM10, TPC and TSP (up to 30 microns)
- Noise option
- Wind speed & direction option
- Relative humidity, pod temperature and atmospheric pressure as standard

Why Consider Hiring a Dust Monitor?

For workplaces where air quality is a critical concern, a fixed dust monitor provides continuous, real-time monitoring of airborne particulates. Hiring this type of equipment allows businesses to assess dust levels over an extended period without the need for a large upfront investment. This is particularly beneficial for:

- **Compliance & Risk Assessment**
  – Helps to assess whether your site meets occupational exposure limits and environmental regulations and validates controls.
- **Project-Based Monitoring**
  – Ideal for construction, demolition, and industrial projects where temporary monitoring is needed.
- **Workforce Protection**
  – Helps safeguard employees by identifying potential dust hazards before they become a health risk.
- **Flexible & Cost-Effective**
  – Renting enables access to the latest technology without the costs of ownership, maintenance, or calibration.

Cloud-platforms to Review Data

We offer telemetry options for dust and silica area monitors being deployed in remote areas. The data is then transmitted to a cloud-based platform allowing users to access real-time and historical data remotely. This eliminates the need for frequent site visits, improving operational efficiency while ensuring continuous monitoring.

With secure data storage and advanced analytics, businesses can track trends over a designated time period, generate reports with ease, and make informed decisions to enhance workplace safety.

Portable Respirable Real-Time Dust Monitors

	Nanozen	Hazdust IV	AM520	TM Data II	XD1+
Measurement Principle	Optical Particle Counter	Light Scattering	Light Scattering	Light Scattering	Optical Particle Counter
Concurrent Gravimetric Sampling	✓	✓	✗	✗	✗
Wireless	✓	✓	✗	✓	✓
Intrinsically Safe	✓	✗	✓	✗	✗
Software Model					

Real-time Personal Dust Monitoring

Real-time personal dust monitors offer continuous monitoring, providing instant feedback on exposure levels so that immediate preventative actions can be taken to reduce health risks. These wearable devices enhance worker safety by allowing occupational hygienists and safety managers to identify high-risk tasks and implement proactive control measures.

XD1+ Personal Dust Monitor

This cost-effective, real-time personal dust monitor clips easily to the wearer as a lightweight alarm detecting harmful increases in dust particles. Simple and straightforward operation with just a single button, the XD1+ gives you instant alarms for fully customisable STEL and TWA measurements for dust sizes.

The XD1+ has been designed to be used daily to complement traditional regulatory personal air monitoring methods to provide that extra layer of safety and continuous data logging.

- Real-time alerts
- Dimensions of only 112mm x 64mm x 25mm
- 0.1um to 10 um particulate detection
- User-configurable audio-visual alarms to provide instant warnings to workers who exceed thresholds
- Battery operated, rechargeable (16+ hour battery life)
- No pumps, filters, sampling heads, tubes, impactors, or any other consumable parts
- BLE enabled

Respirable Silica Dust Monitoring

Silica dust is generated in workplace from mechanical processes including crushing, cutting, drilling, grinding, sawing and polishing of natural stone or man-made products that contain silica.

Inhaling crystalline silica particles, which are sometimes so small you cannot see them, can lead to serious illnesses such as silicosis, lung cancer, tuberculosis, and chronic obstructive pulmonary disease (COPD).

Workplace Exposure Standards

Under the model WHS Regulations, PCBUs (person conducting a business or undertaking) have specific duties to manage the risks to health and safety when using, handling, generating and storing hazardous chemicals, including silica. PCBUs also have a duty to ensure the workplace exposure standard for crystalline silica is not exceeded and to provide health monitoring to workers.

The workplace exposure standard for respirable crystalline silica (silica dust) that must not be exceeded is 0.05mg/m3 (8 hr time weighted average).

Solutions

AES offers a variety of personal air sampling monitors and dust monitoring solutions suitable for larger or remote locations. To ensure effective hazard monitoring, a combination of personal air sampling monitors and area monitors might be necessary. The ideal approach will be determined by the distinct needs of your situation.

Real-time Silica Monitoring

The AIR XS area monitor is the only device that provides continuous and accurate monitoring of silica levels, able to detect and distinguish respirable crystalline silica (RCS) in a changing environment. It alerts you immediately when unsafe levels are detected, allowing you to take prompt preventative action. Designed to monitor existing controls, the AIR XS provides validation to processes in real-time and offers a comprehensive view of RCS levels in the workplace. With its data logging capabilities, it helps identify potential issues before they arise, ensuring a safer working environment.

Real-time silica detection with downloadable data.

- Verify preventative control measures are working
- Easy and simple to maintain
- The AIR XS uses optical refraction technology with light-scatter photometry, analysing every particle sampled and classifying them by their identifiable optical properties, providing a true reading of levels of silica dust present.

Air Sampling

During operations there is the potential for harmful dust, gases or vapours to be discharged to the atmosphere. As inhalation is usually the most significant route of entry into the body, it is important that the air workers breathe is monitored. Air quality monitors can help to alert when toxic pollutants are present and ensure that legislative limits are not exceeded.

Personal Air Sampling Pumps

Air sampling is a crucial process for assessing workplace air quality and identifying hazardous airborne contaminants that can affect worker health. Using specialised monitoring equipment, occupational hygienists can measure levels of dust, gases, vapours, and biological agents to evaluate exposure risks and ensure compliance with workplace health and safety regulations.

What Contaminants Can Be Measured?

Air sampling helps detect a wide range of airborne hazards, including:

- **Particulates (Dust, Fibres, and Fumes):** Includes respirable crystalline silica (RCS), asbestos, welding fumes, and general dust. These are common in industries such as mining, construction, and manufacturing.
- **Gases and Vapours:** Monitors exposure to toxic substances such as carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO_2), volatile organic compounds (VOCs), and other industrial emissions.
- **Biological Contaminants:** Detects airborne bacteria, fungi, and other microbiological hazards in environments such as healthcare, pharmaceutical manufacturing, and food processing.

For calibrations, options available:

- 0.5 - 5.0 L
- 0.75 - 5 L/min
- 20 - 500ml/min
- 5.0 - 30 L

We are a proud partner of SKC Inc. who were the first to bring the NIOSH sorbent tube design to the commercial market nearly 50 years ago. Today they continue to lead the industry in research and production of quality sorbent tubes, sample bags, passive samplers, coated filters, impingers, and other products designed to meet your gas and vapor sampling needs.

SKC is well-known in aerosol science for innovative size-selective samplers, quality filters, certified leak-free cassettes, and accessories. For sampling accuracy and precision in industrial hygiene and environmental applications, we have a solution.

Indoor Air Quality

Many work environments often require people to spend a large portion of their time indoors.

As a result, a worker's long-term health and comfort are largely dependent on indoor air quality (IAQ) testing. Unlike outdoor air, indoor air is recycled continuously – causing it to trap and build up pollutants. The IAQ monitors supplied by AES measure common air pollutants, in some cases as low as ppb level detection.

Our range of indoor air quality monitors and air pollution meters can be used to gauge temperature, humidity (% RH, wet-bulb, dew point, etc), outdoor air calculations, carbon dioxide, carbon monoxide and airborne particles.

DirectSense II

This WiFi and Bluetooth enabled smart probe is a cutting-edge air monitoring probe.

Measuring:

- Temperature
- Humidity
- CO_2
- CO
- VOC (PPB)
- Formaldehyde (PPB)
- Ozone

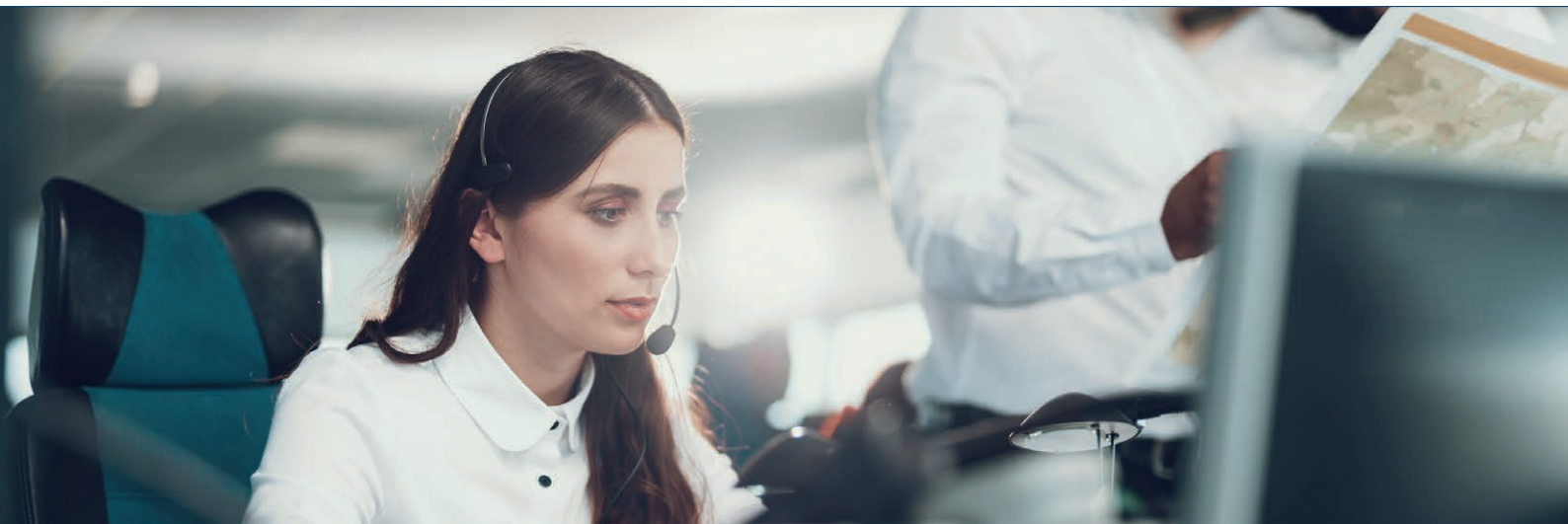
Plus other indoor air quality, green building, industrial hygiene and HVAC parameters.

- Bluetooth connection direct to iOS and Android smartphones and tablets.
- GrayWolfLive® available via WiFi enabled DirectSense II probes with secure cloud platform for remote real-time access, data-logging, and alerts.
- Plug-and-play sensors to fit your application, current and future.

Q-Trak VelociCalc

TSI's Q-TRAK™ IAQ Monitor provides quick, accurate information to assess key IAQ parameters, including CO_2, temperature, humidity, CO and VOCs. Good indoor air quality improves concentration and productivity and can also reduce lost days due to health-related absences.

- Simultaneously displays CO_2, CO, temperature and humidity measurements
- Calculates dew point, wet bulb and percent outside air
- Large graphic display
- Displays up to 5 measurements



Biological Monitoring

Biological monitoring is carried out for a variety of reasons, from ensuring that workplaces comply with regulatory standards to ensuring that workers are protected from biological hazards.

AES supplies a variety of biological monitors, including microbial air monitors, mould monitors and devices to test for the presence of bacteria in water.

Mould

Mycometer® Surface Fungi

Quantification of fungi on surfaces in less than an hour, the methodology has been developed in collaboration with mould remediation consultants and contractors and the Danish Building Research Institute, and has been proving its value for more than a decade.

Allergens

Mycometer® Air Allergen

This sampling kit is for quantification of allergens in air. The test assays are conveniently packaged in sets of 20 samples per box, complete with accessories required for both sample collection and analysis.

Biological Air Sampling

Mycometer® Air Fungi

Air Fungi is the state-of-the-art test method for onsite quantification of fungal particles in air in less than an hour. The methodology measures the level of fungal particles in terms of viable and most nonviable spores and hyphal fragments.

- On-site results in less than an hour
- Verified Technology (USEPA 2011)
- High data reproducibility

QuickTake 30

QuickTake 30 Pump (10 to 30 L/min) is designed for use with BioStage viable cascade impactor, VersaTrap spore trap cassettes, asbestos filters, or impactors.

- Long run times on one Li-Ion battery charge
- Easy to use programmable timer for unattended sampling
- Compact and portable
- Versatile sampling accessories
- High-contrast digital display

BioStage

The BioStage Single-stage Bioaerosol Impactor operates on the principle of inertial impaction and meets NIOSH Methods 0800 and 0801 specifications for sampling indoor and outdoor air for viable microorganisms, including bacteria, fungi, and actinomycetes.

- Easy to use
- Proven principle of operation
- Meet ACGIH recommendations for bioaerosol sampling
- Meet NIOSH Method 0800 and 0801 requirements
- Performance equivalent to Andersen N-6 and Aerotech 6**

Environmental Monitoring

At AES, we provide a trusted range of environmental monitoring equipment designed to help organisations track and manage air quality and noise levels in real time. Whether you're monitoring emissions from industrial operations, construction projects, or urban developments, our equipment supports informed decision-making and regulatory compliance.

AQMesh

AQMesh is a small sensor air quality monitoring system ideal for perimeter monitoring which can monitor up to 6 gases as well as PM, noise and wind speed and direction with seamless data delivery and a range of power options.
AQMesh offers CO_2 and H_2S within its range of gas options for local air pollution monitoring. The NDIR CO_2 sensor, which can be fitted within a single AQMesh pod alongside five other gases NO, NO_2, O_3, CO, SO_2 or H_2S as well as PM1 Pm2.5, PM10, temperature, pressure and humidity, has been developed to deliver a higher performance than those typically used for indoor air quality monitoring.

- Easy to install
- Robust hardware and wireless communications
- Low cost of ownership
- Real-time pollution alerts
- Range of power options including smart solar pack
- Proven track record and stability

AirSENCE

AirSENCE is a compact, high-accuracy real-time air quality monitor, providing reliable data on dust, gases, noise and weather. Easy to deploy and cost-effective, it supports industrial, urban and environmental monitoring, perfect for smart cities, construction, mining and community health applications.

- Real-time data on PM1, PM2.5, PM10, gases, noise and weather
- Low maintenance – 2-year sensor lifespan, no calibration
- Multiple connectivity options (Wi-Fi, Ethernet, Cellular, LoRaWAN)
- Compact and weatherproof (IP65 rated)
- Proven accuracy – validated against reference stations
- Scalable for single sites or large networks
- Ideal for air quality compliance, emissions monitoring and worker safety

Aethair

Aethair offers a comprehensive suite of environmental intelligence products designed for real-time air quality monitoring, data analytics, and compliance reporting. Their solutions cater to various sectors, including commercial buildings, healthcare facilities, transportation, and industrial operations.

Hardware Devices

Aethair IAQ: An indoor air quality monitor that tracks parameters such as CO_2, VOCs, particulate matter, temperature, humidity, and formaldehyde. It provides real-time data accessible remotely, aiding in maintaining healthy indoor environments.

Aethair PRO: A customisable solution for advanced environmental monitoring, suitable for both indoor and outdoor applications. It supports integration with various sensors to meet specific monitoring needs.

Thiamis: A device that facilitates the connection of third-party sensors to the Aethair platform, enabling seamless data integration and expanded monitoring capabilities.

Software and Applications

Environet: A web-based platform offering real-time environmental data monitoring, analytics, and automated compliance reporting. It features customisable dashboards, alerts, and supports data access from any device.

Aethair Dashboards: Visual displays that present real-time air quality data in an easily digestible format, enhancing transparency and occupant confidence in monitored spaces.

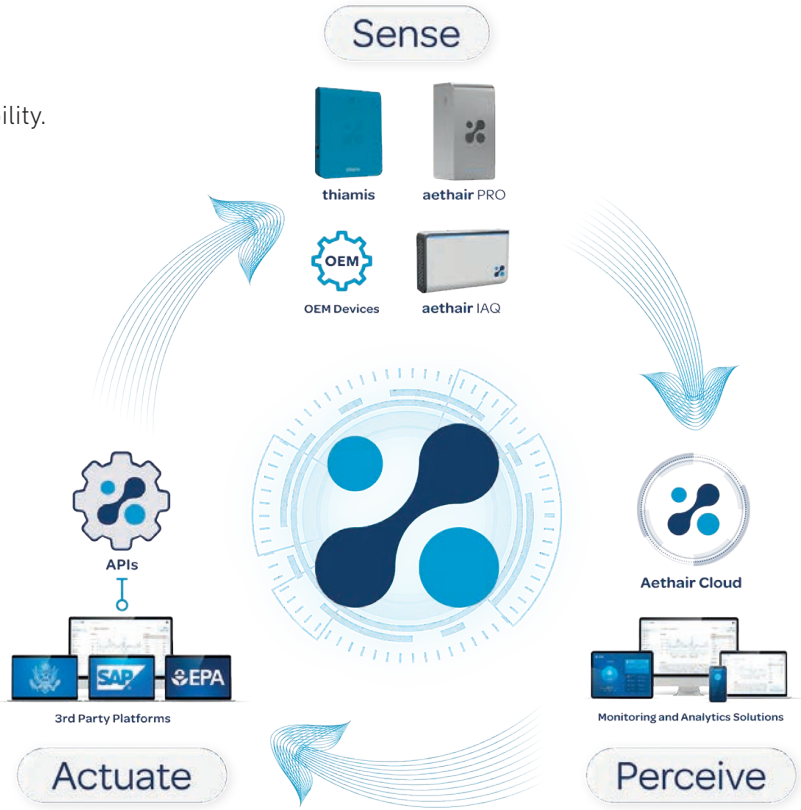
Aethair App: A mobile application providing users with on-the-go access to air quality data, intelligent alerts, and analytics, facilitating proactive environmental management.

Platform Capabilities

Aethair's platform is built on a secure, scalable cloud infrastructure that ensures data integrity and accessibility. It supports:

- Real-time monitoring
- Data analytics and visualisation
- Automated compliance reporting
- Integration with third-party sensors

These capabilities make it a versatile solution for organisations aiming to enhance environmental safety, ensure regulatory compliance, and optimise operational efficiency.



Noise Dosimetry

Noise dosimeters are used to measure the noise exposure of a person over a specific time period. Employers are required to supply their staff with noise dosimeters that will track the amount and level of noise a worker is subjected to.

High noise levels may initially cause dull hearing and ringing in the ears, whilst regular exposure may lead to loss of hearing and other adverse health effects.

Low noise levels can interfere with activities or concentration and can cause similar stress and health effects as high noise levels.

doseBadge 4 Cirrus

The doseBadge 4 is the original wireless personal noise dosimeter and is the ideal instrument for personal noise exposure measurements.

- Rugged metal case
- No cables or external microphone
- Reliable and very easy to use

doseBadge 5 Cirrus

The doseBadge5 is the next generation doseBadge noise dosimeter from Cirrus It provides all the unique features of the original doseBadge such as no controls, cables or displays, with a range of new features.

- Bluetooth connection
- Scheduled start and stop functions
- Automatic calibration detection and USB download

Sound Level Meters

Optimus Red

The Optimus Red is a purpose-built occupational sound level meter, perfect for testing the noise levels in work environments to help meet health and safety compliance levels.

- Simple to operate
- Real-time measurements
- Up to 140dB(A) and 143dB(C) Peak with a single measurement range

Optimus Green

The Optimus Green is for environmental noise measurements, including power generation and aviation noise.

- Real-time 1:1 & 1:3 Octave Band Filters
- Simultaneous A, C & Z Frequency Weightings
- Simultaneous F, S & I Time Weightings
- Single 120dB measurement range

Trojun 2 Nuisance Noise

The Trojan2 Noise Nuisance Recorder is a simple and effective solution for measuring and monitoring noise nuisance complaints.

Designed in conjunction with Local Councils, Environmental Health Officers and Housing Associations, the Trojan2 Noise Nuisance Recorder allows you to measure, monitor and record noise nuisance quickly, easily and effectively.

Available with free web application – NoiseTools, is a web-based application that gives you and your users a quick, simple way to gather information about the noise sources that they are concerned about.

Personal Noise Monitoring

Minuendo

Smart Alert is a complete solution consisting of hearing protection with noise monitoring ear plugs and a data service that provides automatic notifications and actionable guidance on noise exposure.

- Hearing protection with noise monitoring (in-ear)
- Real-time warnings
- Natural hear-through for situational awareness
- No overprotection
- Simple dashboards for HSE managers and users
- Analytics with actionable insight

Environmental Noise Monitoring

Short / Long Term Outdoor Noise Monitoring

The Cirrus Outdoor Environmental Noise Kit with remote access is a purpose designed environmental noise measurement instrument designed for use in a wide range of applications from short term noise measurements to long term noise monitoring projects.

The Cirrus outdoor noise monitoring system can be used on its own as a portable environmental noise monitor or can be combined with other instruments and sensors to form part of a larger, more comprehensive noise measurement and management system.

Quantum Outdoor/Indoor

Permanent Cloud-based Monitoring

Quantum Outdoor is a fully automated solution for environmental management that takes advantage of cloud technology to provide a comprehensive environmental monitoring system. It offers the ultimate solution for remote data access and analysis of multiple environmental conditions, including particulates and gases, vibration, and weather and wind speed by combining them all into one easy-to-use package.

- 24/7 real-time sound level monitoring
- Secure data access through the Quantum Portal anytime, and on any device (mobile, tablet, PC)
- Automated real-time alerts if a decibel trigger level is reached or exceeded, so you can stay in control and take corrective action before a non-compliance is issued

Hand-Arm Vibration (HAV)

Hand-Arm Vibration (HAV) is the most common type of vibration that a worker may be exposed to. It is caused by long term exposure to handheld tools and equipment such as sanders, chainsaws and grinders. Hand-arm vibration meters can help to prevent many of these health issues from developing.

Triax by Cirrus

The Triax™ Human Vibration Meter is a portable, easy-to-use instrument designed for accurate assessment of human exposure to hand-arm and whole-body vibration in the workplace. Built for compliance with ISO 5349 and ISO 2631 standards, the Triax helps safety professionals identify vibration risks, ensure regulatory compliance, and implement effective control measures across a wide range of industrial applications.

Triax Human Vibration Meter available in three kit options: hand-arm, whole-body, or a combined hand-arm and whole-body solution.

- Measures hand-arm and whole-body vibration exposure
- Fully compliant with ISO 5349 and ISO 2631 standards
- Lightweight, robust design for use in the field
- Large, colour display with intuitive menu navigation
- Stores and displays real-time exposure levels (A(8) and VDV)
- Rechargeable battery with extended operation time
- USB connectivity for fast data download and reporting via dBLink software
- Suitable for use with a wide range of seat and tool adaptors

Proximity Warning Systems

Proximity warning systems enhance safety by using sensors and alarms to detect the presence of people, vehicles, or obstacles in hazardous work environments. These systems are particularly valuable in high-risk industries such as construction, mining, and warehousing, where blind spots and moving equipment pose significant dangers. By providing real-time alerts to operators and workers, proximity warning systems help prevent collisions, reduce the risk of accidents, and improve situational awareness.

R-Link Hand Arm Vibration (HAV)

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.

R-Link features ground-breaking technology to simultaneously assess exposure risk using; pre-defined tool vibration magnitude and vibration magnitude sensed by the wearer at the wrist.

R-Link Proximity Warning System

The R-link smart watch has multi-function proximity warning system capability, using the latest ultra-wideband technology for fast and accurate detection, the R-Link watch will alert workers of their proximity, keeping your workforce safe from straying too close to dangerous vehicles or equipment.

Employee alerts alone are not enough. The powerful Reactec Analytics provide intelligent insights on the who, where and how often near misses occur, allowing you to prevent future incidents. Whether it be behaviours or workflow hot spots, gain the insight needed to create effective controls.

Face Fit Testing

Ensuring a proper respirator fit is essential for protecting workers from airborne hazards. At AES, we supply Quantitative Respirator Fit Testing (QNFT) solutions that meet Australian standards and provide objective, data-driven results giving occupational hygiene and safety professionals confidence that respiratory PPE is performing as intended.

We proudly offer the AccuFIT 9000 PRO a leading-edge quantitative fit tester suitable for all respirators, including half-face, full-face, and disposable filtering facepiece respirators.

AccuFIT9000 Pro

- Fit tests all tight-fitting full and half respirators
- On device screen with animations for clear an easy to follow instructions
- Simultaneous fit testing of multiple mask types without switching equipment
- Touchscreen interface and intuitive software make operation easy, even for new users
- USB and wireless connectivity for easy data transfer and reporting
- Meets global standards, including OSHA, ISO, CSA, and AS/NZS
- Lightweight and portable—ideal for both fixed and mobile testing environments

AccuFIT 9000 Pro can be calibrated and serviced in Australia, at an AES office.

Why Choose Quantitative Over Qualitative Fit Testing?

- Quantitative fit testing provides measurable, numeric results, eliminating the subjectivity and variability of qualitative (taste-based) methods.
- Ideal for high-risk environments where respiratory protection is critical.
- Delivers a consistent, standardised process in line with Australian Standard AS/NZS 1715.
- No reliance on user interpretation of taste or smell, making it suitable for all workers, including those with sensory limitations.

CONSUMABLES

- Disposable fit-testing probes
- Universal fit-testing alcohol
- Fit-testing twin tube hose
- Lighthouse Shield Pro P2 respirator (Flat Folded) Compliant to AS/NZS 1716:2012

Heat Stress Monitoring

Prolonged heat exposure can seriously impact worker health, performance, and safety particularly in physically demanding industries like construction, mining, utilities, and agriculture. Monitoring heat stress is essential to reducing the risk of heat-related illnesses and meeting workplace health and safety obligations.

At AES, we offer versatile solutions for heat stress monitoring, designed to provide accurate, real-time data for both individuals and work environments.

Wearable devices continuously track physiological and environmental data such as core temperature trends, skin temperature, sweat loss, and activity levels to provide an individualised assessment of heat stress risk.

Fixed or portable area monitors measure environmental conditions including temperature, humidity, globe temperature, and wet bulb globe temperature (WBGT). These metrics help assess the heat load in a specific work zone and guide risk control measures for workers.

Area Monitoring

Heat Shield

- The LSI Lastem Heat Shield WBGT monitor is an essential tool for the health and safety professional in their evaluation of the environment for risks relating to heat stress. Its compactness, ruggedness and ease of use, make the Heat Shield the ideal solution for everyday monitoring in both indoor and outdoor harsh working environments.

LSI Heatshield

- Measures globe temperature, wet bulb temperature, dry bulb temperature and relative humidity
- Quick, reliable and accurate assessment of indoor and outdoor WBGT index
- Built-in radio technology for simultaneous, wireless monitoring in different locations/heights
- Predicted Heat Strain (PHS) calculations

Checklist for risk-managing heat in the workplace

Risk factors to consider:

- Are ambient conditions hot?
- Are days and nights hotter than usual?
- Is it humid?
- When is work done?
- How often can workers take breaks somewhere cool?
- Is there air movement or a breeze?
- Is the work intense or long?
- Are workers physically fit and acclimatised?
- Do workers wear hot clothing (including PPE)?
- Are the workers qualified, trained and experienced?
- (If known) do workers have medical conditions?
- Is there cool drinking water or electrolyte drinks on hand?

Personal Monitoring

Equivital

Equivital leverages data sent from an intrinsically safe version of EQ02 LifeMonitor, worn on the body, to provide real-time safety, welfare and location information of workers within a facility.
This information is sent using Radio/Satcom/GSM/GPRS/WiFi and can be viewed by key personnel locally or remotely.

- Displays heat stress, safety and performance monitoring in real-time
- Includes interactive map for location tracking
- Customisable analytics and after-action review
- Track and predict heat injury
- Designed for long term wear
- ATEX/Intrinsic safety approvals

HydraTrend™

HydraTrend™ Test Strips are intended for self-monitoring of urine pH and specific gravity for hydration status monitoring. Hydration test kit results are easy to read by simply comparing the results on the test strip to the colour chart on the bottle.

- Convenient and easy to use
- Quick feedback on hydration status which can be used to adjust fluid intake
- 30-60 second results

Connected Hydration by Epicore

This smart wearable sensor is worn on the arm of workers to provide proactive alerts helping to encourage hydration based on their measured sweat loss, electrolyte loss, skin temperature and motion.
A lightweight and low-profile device that continuously measures sweat loss, sodium loss, temperature, and motion throughout the workday to offer real-time hydration suggestions, track intake, devise personalised hydration action plans and learn what's needed to refuel using a data driven mobile app.

- Small, lightweight and comfortable to wear
- Device can be used multiple times
- Certified: CLASS I, DIV 2, GROUPS A, B, C, AND D, T6; CLASS I, ZONE 2, AEX IC IIC T6 GC
- Data Storage: SOC2 Type 2
- Data Transmission: Bluetooth and via WIFI or cellular to the cloud

EMF Monitors

As many manmade sources (such as electrical wiring) can emit AC electromagnetic fields, which contain radiation, being able to measure them is important.

This is where EMF monitors come into play. They are designed to measure the EMF radiation being emitted and to alarm if the levels reach potentially dangerous proportions.

WaveMon RF-60

EMF Personal Monitor, for the continuous monitoring of workers' exposure to EMF measurements up to 60 GHz.

- Electric Field Detection, Isotropic sensors with RMS response
- Weighted response to international standards. ICNIRP 98, European Directive 2013/35/EU, FCC and Safety Code 6
- High intensity audible, visible and vibration alarms. With user definable trigger threshold

SMP2 – Electronic Field Meter

The SMP2 is an ideal EMF measurement system for analysing magnetic and electric fields in public spaces and workplaces, locally or remotely.

- 2-in-1: broadband measurements (DC to 60 GHz) and spectrum analysis (DC to 400 kHz).
- Real-time FFT-based spectrum analysis using digital processing.
- Weighted Peak Method (WPM) for automatic and real time comparison with limits.

LIGHT METERS

Light Meters

Light meters are used to measure the amount of light in various applications, including the verification of proper installation and performance of building lighting systems and in assessing the light levels required by growing plants. Exposure to too much or not enough light can also cause health problems for workers.

Extech Heavy Duty Light Meter – 407026 NIST

- Fc Range: 200.0, 2000, 5000Fc
- Lux Range: 2000, 20,000, 50,000Lux
- Basic accuracy of ±4% FS
- Large 1.4" (1999 count) LCD display
- % displays differential from reference point
- "ZERO" Re-Calibration

Water Quality Monitoring

AES supply a wide range of water quality monitors for hire. Ground water assessments are essential in the management of a sustainable environment. Samples are taken to assess the water quality and also record as data as a snapshot of level of quality during that time.

WP-88 Turbidity Meter

- The WP series enclosure is fully waterproof to IP67 rating. The connectors are rated to IP65
- Australian made
- User friendly

Solinst 122 Interface Meter

The 122 Interface Meter measures water and product level and thickness, accurately to 1.0 millimeter or 1/200 ft.

- Certified intrinsically safe, and is ATEX certified
- Lengths to 300 m or 1000 ft

MP10 Low Flow Micropurge Kit Digital Controller

Expert flow and drawdown control for low-volume purging

- Exclusive MicroPurge control mode
- Multi-mode digital control
- Full digital display

YSI Professional Plus Water Quality Meter

Handheld multiparameter meter providing extreme flexibility for the measurement of a variety of combinations for dissolved oxygen, conductivity, specific conductance, salinity, resistivity, total dissolved solids (TDS), pH, ORP, pH/ORP combination, ammonium (ammonia), nitrate, chloride and temperature. Also a very powerful lab instrument for BODs, pH and ORP.

Heron H.Oil Interface

The H.OIL oil, water interface meter is used to measure the interface level between two liquids in the same tank, vessel, well or aquifer.

Accessories

AES can supply you with bottled gas and accessories for all your instruments.

CUSTOMISED CASES

DOCKING STATIONS

SAMPLE PROBES & TUBING

CALIBRATION GASES

CONFINED SPACE KITS

These customisable cases can be used to transport your monitoring equipment easily and safely. Our waterproof hard cases are impenetrable and indestructible with a lightweight, tough resin shell and double side-mounted superior latching system.

WORLD-RENOWNED SUPPLIERS WE WORK WITH:

Honeywell

SKC

TROLEX

GRAYWOLF SENSING SOLUTIONS

Cirrus Research plc

mycometer rapid microbiology – on-site technology

EPICORE BIOSYSTEMS

Jerome®

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GAZOMAT

MSA The Safety Company

AES – Leading the way in real-time and connected monitoring solutions.

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