

Indoor Air Quality Monitoring Guide







INDOOR AIR QUALITY MONITORING MADE EASY

Australia's leading provider of indoor air quality monitoring solutions and equipment

www.aesolutions.com.au

INDOOR AIR QUALITY

Many work environments require individuals to spend significant time indoors, making indoor air quality (IAQ) crucial for long-term health and comfort. Unlike outdoor air, indoor air is continuously recycled, leading to the accumulation of pollutants. AES provides IAQ monitors capable of detecting common air pollutants, including down to parts per billion (ppb) levels. AES offers a complete range of IAQ monitors and air pollution meters that measure temperature, humidity, outdoor air calculations, carbon dioxide, carbon monoxide, and airborne particles, ensuring a healthier indoor environment.

Survey/Handheld Instruments

DirectSense II

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

Measuring:

- Temperature
- Humidity
- CO₂
- CO
- VOC (PPB)
- Formaldehyde (PPB)
- Ozone

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

Can be used with phone or new AdvancedSense XM data logger.



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

Particle Counter 3016A

The PC-3016A combines particle counter and mass concentration readout in one instrument.

The device can be used as a stand-alone 6 channel Particle Counter by plugging it into a mobile computer or into a sophisticated WolfPack/AdvancedSense system for simultaneous connection with GrayWolf's DirectSense probes.



- · View / Log 6 Particle Sizes Simultaneously
- 0.3 to 0.5 μm, 0.5 to 1.0 μm, 1.0 to 2.5 μm,
 2.5 to 5.0 μm, 5.0 to 10.0 μm, 10+ μm
- View / Log as differential or cumulative
- Alternatively display µg/m3 in Concentration Mode including approximate PM2.5, PM10, TSP
- Optional Temperature / Relative Humidity Probe
- 2-Year Warranty

Q-Trak / VelociCalc

TSI's Q-TRAK™ IAQ Monitor provides quick, accurate information to assess key IAQ parameters, including CO₂, 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 CO₂,
 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.



Biological Air Sampling

BioStage Pump Kit

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.



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



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

Mycometer FAI (Fungi to Allergen index)

New rapid onsite mould and allergen air analysis

On-site and accurate quantification of both fungi and allergens in one kit, at the same time.

The technology measures the levels of both mould and total allergens in parallel. It also measures the relative level of mould in relation to total allergens (FAI value). The kit is used to determine if there is a high relative level of mould thus indicating that there is a source of mould growth, potential mould exposure and potential exposure to allergens.

- On-site analysis
- Results within one hour
- Comprehensive indoor air quality measure of both fungi and allergens simultaneously







Kanomax

High Volume Microbial Air Sampler



- Simple operation with 4.3inch touch screen
- High precision automatic flow control
- Protecting data against unauthorized access by administrative settings
- SUS316 sampling head is adopted to prevent contamination by microbial
- USB / RS-485 communication, operation by remote controller

Real-time Indoor Air Quality Monitors

Aethair

Low-cost real-time IAQ solution

Aethair IAQ monitors 9-parameters of indoor air quality including PM1, PM2.5, PM10, VOC, Formaldehyde, CO₂, Temperature, Humidity, and Pressure. Aethair IAQ accurately monitors and continuously reports on-site air quality in real-time, enabling effective remediation, informed decision-making, and even automated responses. Data can be accessed any time of day, and remotely from anywhere in the world.



- Aethair devices are delivered fully calibrated and certified
- Enterprise level security, encrypted end-to-end, from the hardware on the field all the way to the end-user.
- Uses 4G cellular communications

GrayWolfLive Platform

GrayWolfLive® secure cloud platform for remote real-time access, datalogging, and alerts. Connect straight from Wi-Fi enabled DirectSense II probes or via various GrayWolf meters, tablets, iOS or Android devices. View data as text, graphs, gauges, and/or tables.



NOISE MONITORING

Optimus Green

For environmental noise, the Optimus Green from Cirrus sound level meter is the ideal instrument Simple to use with the very highest level of performance the Optimus Green instruments can provide real-time 1:1 and 1:3 Octave Band, depending upon the version. A feature unique to the Optimus Green sound level meters is the Audio Recording during measurements. You can record the actual noise during a measurement by either pressing the Audio Start/Stop buttons or by using the triggering functions.

- Simultaneous A, C & Z Frequency Weightings
- · Simultaneous F, S & I Time Weightings
- Real-time 1:1 & 1:3 Octave Band Filters
- NR & NC values & curves on screen
- Tonal noise analysis
- Up to 28 statistical Ln % values
- Single 120dB measurement range

LIGHT MONITORING

Heavy Duty Light Meter

Heavy Duty Light meter with PC Interface - Simultaneous display of Foot Candles or Lux. Enhance accuracy by selecting one of four lighting types plus PC interface. Microprocessor assures maximum accuracy plus special functions. Super large 1.4" screen (1999 count) LCD display. ±4% accuracy is enhanced by selecting lighting type (Tungsten/Daylight, Fluorescent, Sodium, Mercury).

- Fc Range: 200.0, 2000, 5000 Fc 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
- Utilises precision photo diode and color correction filter



For more information, please scan the QR code:



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