



**US EPA
Designated
Equivalent
Method**

Direct vs Indirect NO₂ Measurement

Do it directly with the Serinus® 60 gas analyser



acoem
ECOTECH

REDUCE YOUR ENVIRONMENTAL IMPACT



Serinus[®] 60

Because the world needs direct NO₂ measurement like never before.

ACOEM Ecotech presents the latest addition to the renowned Serinus[®] range: The Serinus[®] 60 NO₂ analyser with CAPS technology.

Cavity Attenuated Phase Shift (CAPS) allows direct measurement of nitrogen dioxide NO₂, rather than an indirect calculation from a chemiluminescence analyser. Using a modulated blue LED light source, the detector measures the phase shift attributable to the level of NO₂ in the measurement cell over an average path length of several kilometres.

No converter, no high vacuum, no ozone and no chemical reactions are required.

Never has accurate measurement of NO₂ been more important, or higher on the agenda, for environmental protection. Studies and health reports have raised awareness of the risks to human health from nitrogen dioxide, such as decreased lung function and other respiratory conditions.

The solution starts with fast, accurate data, and nothing beats measuring directly. That's why we have launched the Serinus[®] 60; an affordable NO₂ analyser that gives accurate and timely results.



FEATURES

- Measures NO₂ directly - highly selective and no cycle time (switching between NO_x and NO)
- Accurate, repeatable and rapid readings every five seconds
- Less maintenance than chemiluminescence analysers
- Low power consumption
- No converter or ozone generator.



A WORSENING GLOBAL PROBLEM NEEDS EFFECTIVE MEASURES

Nitrogen dioxide is in the forefront of concerns over air pollution in cities worldwide. Authorities have been forced to take drastic measures, such as odd-even number plate days, green taxes, car-scrapping and ride-sharing programmes in an attempt to mitigate the problem. But, as urban populations, industry, vehicle ownership and transportation increase, the underlying issue is getting worse.

For environmental protection agencies NO_2 has long been 'on the radar' as a criteria gas. Until the advent of the advanced and more affordable CAPS technology, levels were derived from indirect measurement, posing disadvantages such as precision of measurement and response when levels were dynamic.

The Serinus® 60 now makes direct, responsive and accurate measurements of this key criteria gas possible.

Importantly, it also delivers these advantages in a highly affordable package.

NEWS TRENDS AROUND THE WORLD

“Revolutionary new weapon in air pollution fight.”

“Court orders to cut NO_2 air pollution.”

“ NO_2 emissions rising...”

“Very high concentration of nitrogen dioxide continues.”

Serinus[®] 60

It's a game changer

For years now, the Serinus[®] range has been recognised internationally for **precision and usability**.

The new Serinus[®] 60 is no different.

It has been designed from the outset with the user in mind: intuitive to use, simple to configure and offering in-the-field accuracy and reliability.

These qualities count, when the risks from NO₂ are under scrutiny like never before.

By delivering direct measurement, in an affordable and usable package, the Serinus[®] 60 is a huge step forward in addressing NO₂ pollution in an increasingly urbanised world.

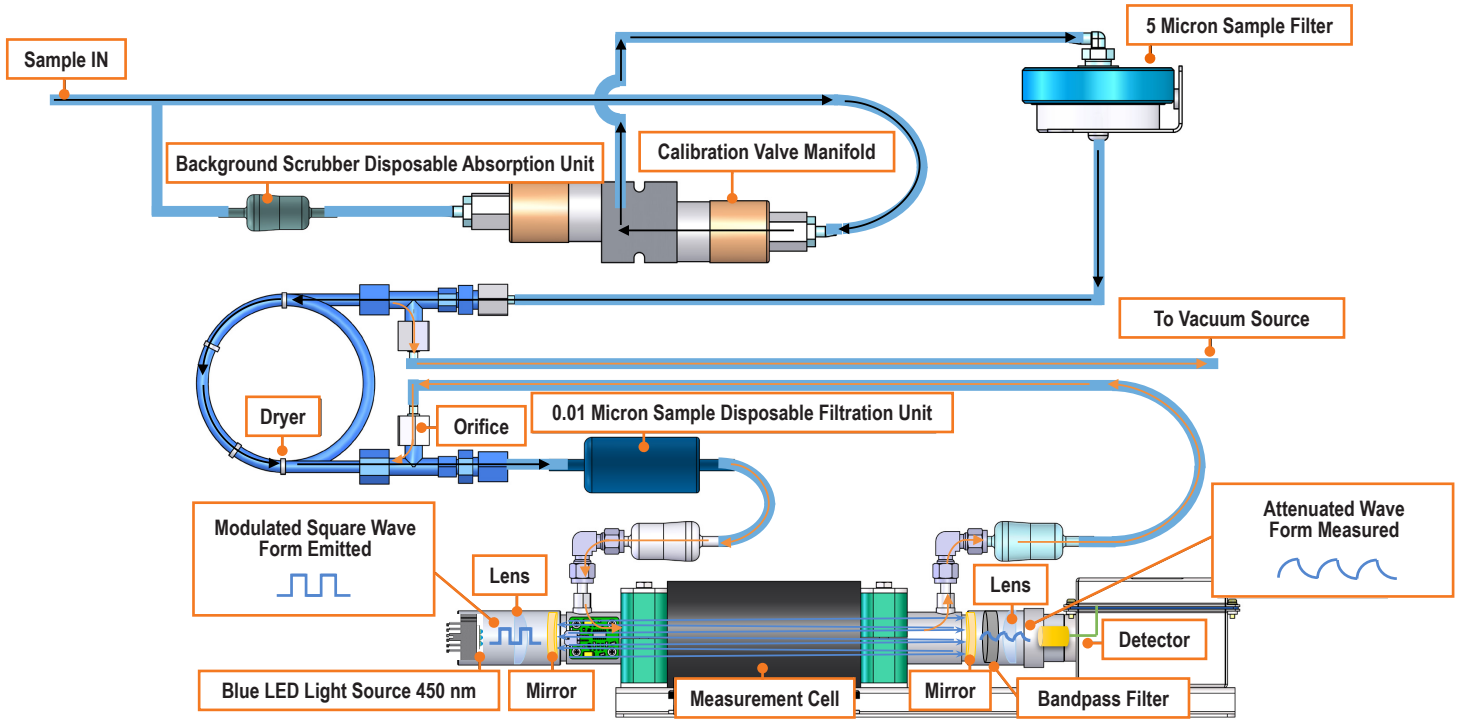
APPLICATIONS FOR PRECISE, DIRECT & RAPID MEASUREMENTS

- Traffic emissions monitoring: roadside, tunnels
- Ambient air quality monitoring
- Indoor air quality monitoring
- Mobile and fixed monitoring stations
- Industrial fence-line monitoring
- Stack emissions monitoring
- Plume monitoring
- Measurement and monitoring studies
- Medical gas monitoring
- Process control.



Serinus[®] 60

The way it works





Serinus[®] 60 comes with the backing of ACOEM Ecotech

Today, ACOEM Ecotech is a trusted partner in the protection of workforces, communities and the environment in over 80 countries.

We operate and maintain one of the largest networks of monitoring systems in the world. The quality of our products and solutions are second to none, and we're globally recognised for our expertise in technical support.

It all stems from the problem-solving mindset that's been part of our DNA since day one, and still drives us today. It goes hand-in-hand with our acute awareness of environmental issues and the need to stay ahead of changes in the natural world.

As concern over NO₂ levels rises, we have stepped up to find a more precise and accurate method for monitoring. Designed, manufactured and supported by the proven experts at Ecotech, Serinus[®] 60 is the answer.

A GLOBAL LEADER IN ENVIRONMENTAL MONITORING SINCE 1976

- Ecotech is a trusted partner for governments and industries across 80 countries
- Ecotech operates and maintains large networks of monitoring systems around the world
- Ecotech's products have proven performance for reliability and accuracy even in remote and harsh environments
- Expert technical support services across the world.



Serinus[®] 60 options

High Pressure Span Calibration Valve:

When a dilution system is not an option calibrate directly from a gas cylinder.

Metric Fittings: Do you have issues sourcing imperial tubing? Select our metric fittings option to make pneumatic connection trouble free.

High Pressure Zero Calibration Valve:

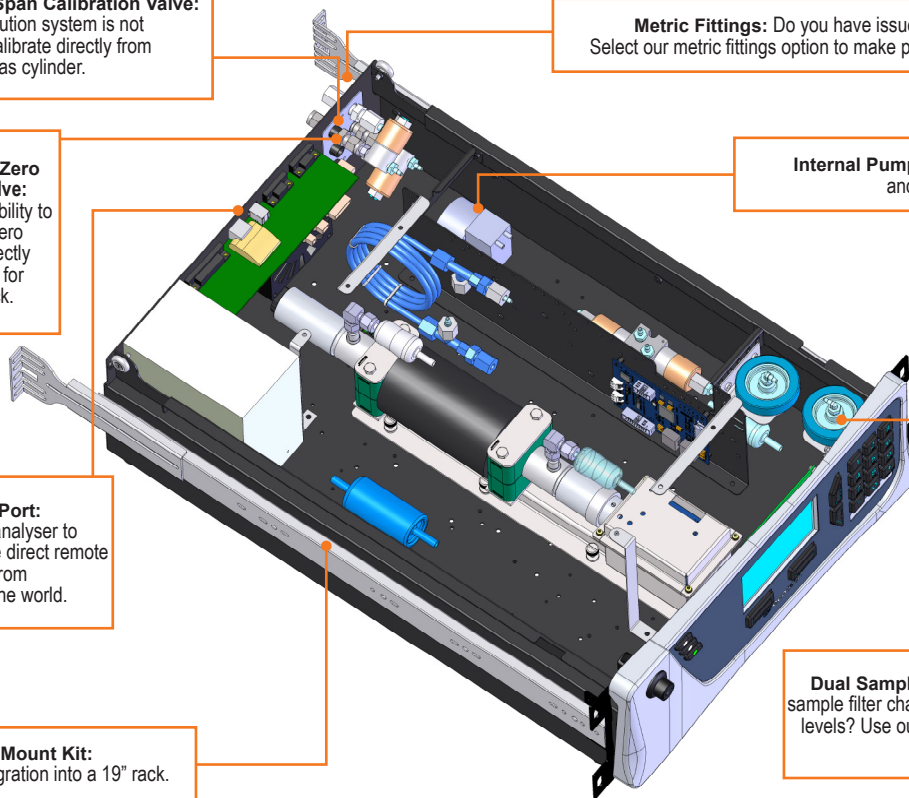
Gives you the flexibility to connect your zero gas cylinder directly to the analyser for a simple check.

Internal Pump: Perfect for compact shelters and remote locations.

Network Port: Connect your analyser to the internet to have direct remote access from anywhere in the world.

Dual Sample Filter: Need more time between sample filter changes? Do you have heavy particulate levels? Use our dual sample filter option to spread the load.

Rack Mount Kit: For smooth integration into a 19" rack.



About ACOEM: Reduce your environmental impact

The ACOEM Group is a global leader in providing sustainable solutions for the development of smart cities of the future. It is committed to helping companies and public authorities meet challenges by offering products and services that:

- Prevent and control air, noise and vibration pollution
- Increase the productivity and reliability of industrial machinery
- Contribute to the development of effective, robust & noiseless solutions
- Protect soldiers, sites and vehicles in military operations.

Across the world, ACOEM's 700+ employees innovate in the measurement, analysis and control of environmental parameters through its 01dB, ECOTECH, ONEPROD, FIXTURLASER, MEAX, VIBRALIGN, AIR MONITORS, DYNOPTICS, TUNNEL SENSORS and METRAVIB brands.

About ACOEM Ecotech:

For over 40 years, ACOEM Ecotech has pioneered innovative solutions in environmental monitoring for air, water, gas, noise, vibration, blast, meteorology, fine particulate and dust. Headquartered in Australia, and certified to internationally recognised quality standards, ACOEM Ecotech operates in more than 80 countries, managing and maintaining over 500 real-time environmental monitoring sites consisting of thousands of individual pieces of precision equipment.

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