

Direct vs Indirect NO₂ Measurement

Do it directly with the new Serinus® 60 gas analyser





Serinus® 60

Because the world needs direct NO₂ measurement like never before.

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 NO_2 , 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 NO_2 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 NO_2 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 NO $_{_2}$ 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 NO₂ 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 NO₂ air pollution."

"NO₂ 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.

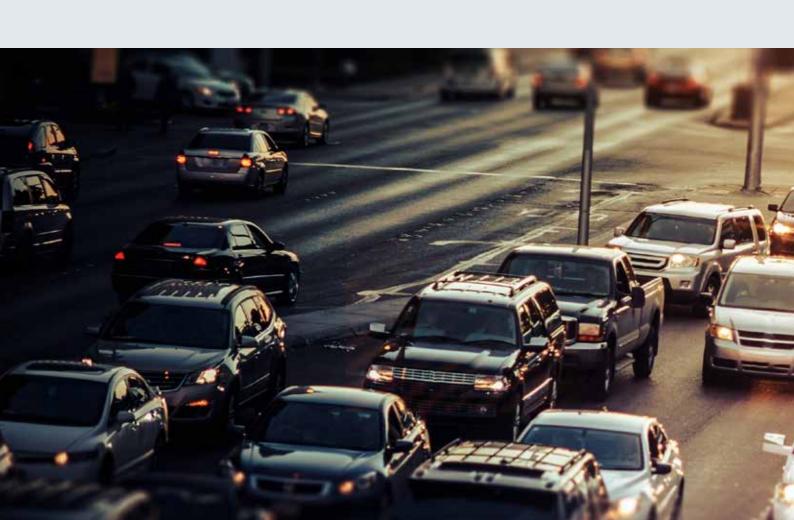
The new Serinus® 60 is no different. It has been designed from the outset with the user in mind: intuitive to use, simple to configure and offering in-the-field accuracy and reliability.

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

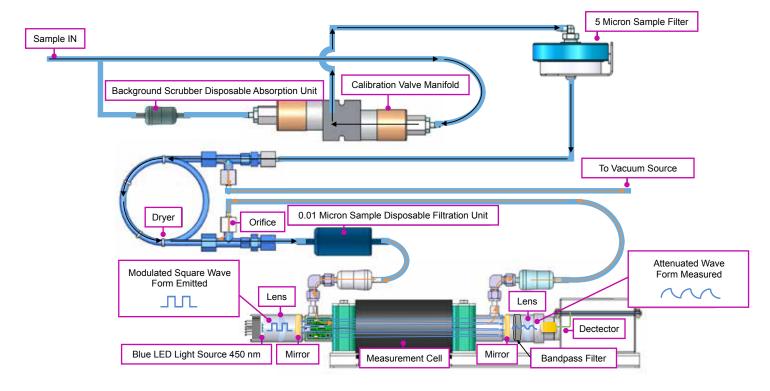
By delivering direct measurement, in an affordable and usable package, Serinus® 60 is a huge step forward in addressing $\mathrm{NO_2}$ pollution in an increasingly urbanised world.

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 ECOTECH

Today, 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.

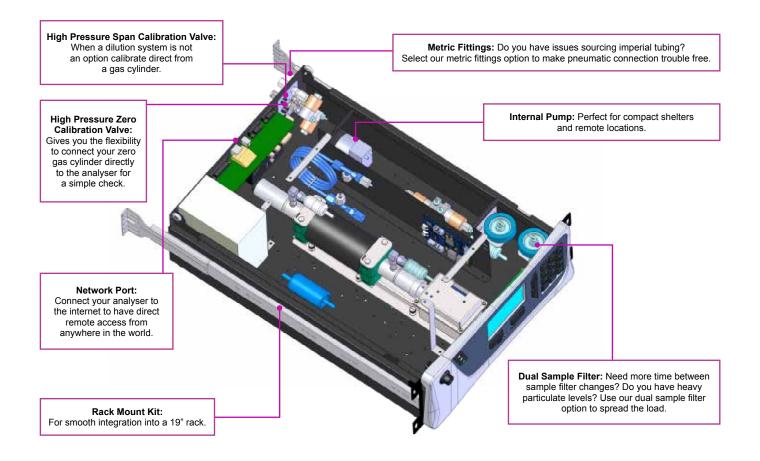
As concern over NO₂ levels rises, we have stepped up to find a more precise and accurate method for monitoring. Designed, manufactured and supported by the proven experts at ECOTECH, Serinus® 60 is the answer.

A GLOBAL LEADER IN ENVIRONMENTAL MONITORING SINCE THE 1970S

- 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





ABOUT ECOTECH: Problem solved

Problem solving is in our DNA. For over 40 years ECOTECH has pioneered innovative solutions in environmental monitoring for air, water, gas, blast, particulate and dust. Headquartered in Australia, we now operate in more than 80 countries, manage over 440 real-time environmental monitoring sites and are certified to internationally recognised quality standards. ECOTECH is part of the ACOEM Group.

ABOUT ACOEM: Reduce your environmental impact In today's fast-moving world, the environment is increasingly impacted. The ACOEM Group is committed to sustainable development and helping companies and public authorities limit their environmental impact. Across the world, ACOEM's 670 employees innovate in the measurement, analysis and control of all environmental parameters through the 01dB, ECOTECH, ONEPROD, FIXTURLASER, MEAX and METRAVIB brands. For more information visit acoemgroup.com



ACOEM Group

ECOTECH Pty Ltd (Global Head Office)

1492 Ferntree Gully Road Knoxfield VIC 3180 Melbourne Australia

+61 3 9730 7800 email@ecotech.com

ecotech.com

