

# Serinus<sup>®</sup> Gas Calibrators

THE GOLD STANDARD FOR RELIABILITY AND  
ACCURACY IN AIR MONITORING



**acoem**  
CREATING ENVIRONMENTS OF POSSIBILITY



# The World Has a New Benchmark

For many years now, Acoem gas calibrators have been an international byword for precision calibration.

But we didn't stop our innovation there; our gas calibrators have continued to evolve based on customer-led feedback, and continue to be the gold standard for reliability and accuracy in air monitoring.

Acoem's range of Serinus® Gas Calibrators offers communication, programmability and usability that is second to none in ambient and emission monitoring systems.

Every facet of performance has been honed, while the new range has a modern interface that offers unprecedented ease of use, giving you confidence that you can achieve precise, accurate results.

Delivering precise and constant dilution ratios of various calibration gases, including CO, CO<sub>2</sub>, O<sub>3</sub>, NO<sub>x</sub>, NO<sub>y</sub>, NH<sub>3</sub> and SO<sub>2</sub> with easy step-by-step control, Serinus sets a new standard in gas calibration.





# Brilliantly Simple

As outstanding in practice as they are technically.  
Simple to use. Straightforward to configure to your needs.

The new Serinus interface works across the board to make any function simple, easy to navigate and therefore more likely to be flawless in execution.

- Highly flexible: gas dilution calibrations, ozone analyser precision checks, gas phase titrations and ozone transfer calibrations
- New user interface, conceived and designed using customer input, is simple to configure and intuitive to use
- Class-leading performance: accuracy, traceability, repeatability.



# Serinus® Cal 1000

## IT ALL STARTS HERE

The Serinus Cal 1000 performs gas dilution calibrations and is used in conjunction with regulatory traceable gases and a zero air generator.

The most cost effective solution, the Serinus Cal 1000 allows the most up-to-date calibrations technology to be available to all.



## FEATURES:

- Performs single & multi-point calibrations using the Serinus Calibrator's precision mass flow controllers, for the utmost confidence in the results
- Performs calibration manually through user interface or remotely via RS232, USB networks or digital inputs
- Designed & developed with wide-ranging customer input for easy, intuitive, accurate use.

# Serinus® Cal 2000

## RAISING THE BAR

Acoem's reputation is built on air quality monitoring, and is based on keeping workforces, communities, businesses and the environment safe.

We know how important measuring ground-level ozone accurately is. With all the features of its Serinus Cal 1000 stablemate, the Serinus Cal 2000 adds features essential for calibration of your NOx and O3 analysis equipment. An internal ozone generator enables regular ozone checks and Gas Phase Titrations (GPT).



## FEATURES:

- All the calibration ability & ease of use found in the Serinus Cal 1000
- Internal ozone generator produces 3 ppm to 5 ppm of ozone
- Ability to premix ozone & source gas before dilution to perform Gas Phase Titrations (GPT).





# Serinus® Cal 3000

## THE NEW GOLD STANDARD

Reliability, accuracy and precision are hallmarks of Acoem's product range. It's why Acoem's calibrators have long been trusted worldwide.

With the launch of the new Serinus range of Gas Calibrators, those hallmarks have been retained and honed, while usability takes a bold leap forward.

Epitomising this, the Serinus Cal 3000 includes an ozone photometer for the accurate creation and delivery of ozone concentrations when calibrating ozone analysers.

The photometer accurately and continuously measures the ozone concentration to control output of the internal ozone generator, providing an accurate ozone source for routine ozone calibration.



## FEATURES:

- New Serinus Cal user interface makes all functions simple & intuitive
- In-built photometer & ozone generator for use as a Level 3 ozone transfer standard
- Ozone photometer based on the reliable & proven technology used in the Serinus 10 gas analyser.



# The Serinus® Story

## DEVELOPING A NEW GENERATION IN OZONE CALIBRATION

Nothing matters more to us at Acoem than protecting workforces, communities and the environment. By helping to protect them, we help you protect your organisation's crucial reputation.

For decades, we've played a lead role in air quality monitoring. Along the way we've learnt a lot, including the absolutely essential role of gas calibration.

## GLOBAL PROBLEM. ACOEM SOLUTION

Ground level ozone is one of the pollutant gases monitored and regulated by most governments around the world. It is a component of smog, harmful to the environment and human health.

To accurately measure ozone, the gas analysers which monitor its levels need to be regularly maintained and calibrated. Problem is, ozone is reactive and unstable: it cannot be kept in a gas cylinder for any practical length of time. Therefore the ozone concentration must be generated and verified on site.

The International Bureau of Weights & Measures (BIPM) in France maintains a standard reference photometer as the world's ozone reference standard. At Acoem, we maintain the traceability of ozone calibrations to a network of reference photometers which report back to the ultimate BIPM so we can produce internationally comparable data for ozone monitoring.

That way, you know your Serinus Gas Calibrator is delivering against the gold standard.





**CONFIGURE YOUR CALIBRATOR WITH ANY OF THE FOLLOWING OPTIONS WILL ENSURE YOU ENJOY THE SAME INTUITIVE OPERATION:**

#### Source Mass Flow Controller (MFC) options

- Primary Source Mass Flow Controller:  
10 SCCM Source MFC to 2 SLPM Source MFC  
(default: 50 SCCM MFC)
- Additional Source Mass Flow Controller:  
10 SCCM Source MFC to 2 SLPM Source MFC
- Additional 4 Source Inlets.

#### Dilutant Mass Flow Controller (MFC) options

- Primary Dilutant Mass Flow Controller:  
1 SLPM Dilutant MFC to 20 SLPM Dilutant MFC  
(default: 10 SLPM Dilutant MFC)
- Additional Dilutant Mass Flow Controller:  
1 SLPM Dilutant MFC to 20 SLPM Dilutant MFC.





## About Acoem

At Acoem, we **create environments of possibility** – helping organisations find the right balance between progress and preservation – safeguarding businesses and assets, and maximising opportunities while conserving the planet's resources. We deliver unrivalled, interoperable AI-powered sensors and ecosystems that empower our customers to make enlightened decisions based on accurate information.

Together with 220 distributors, our 850+ employees work across 28 offices, 6 manufacturing facilities and 5 R&D centres in 9 countries, to provide trusted, holistic data solutions for customers worldwide.

**Acoem links possibilities with protection.**

For more information visit [acoem.com](https://acoem.com)



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