



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CLIMET INSTRUMENTS
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CALIBRATION

Valid To: October 31, 2020

Certificate Number: 5008.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Flow Calibration ³ – Microbial Sampler	(1 to 100) L/min	1.0 %	Comparison against a calibrated reference flowmeter

II. Optical Quantities

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Climet Aerosol Particle Counter ³ – Particle Detection	(0.3 to 25) pm External PHA 150 mV 200 mV 230 mV 270 mV 700 mV	 2.0 % 2.0 % 2.0 % 2.0 % 1.0 %	ISO 21501-4 Comparison is against standard particles

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Climet Aerosol Particle Counter ³ (cont) -			ISO 21501-4
Particle Detection	(0.3 to 25) pm Internal PHA		Comparison is against standard particles
	300 mV	1.0 %	
	400 mV	1.0 %	
	1 V reference	1.0 %	
50 % Count Efficiency	(0.3 to 0.5) µm	2.1 %	Comparison against a primary standard
100 % Count Efficiency	(0.5 to 0.8) µm	1.9 %	Condensation particle counter (CPC)
Resolution	(0.269 to 0.4) µm	0.52 %	Test with three distributions to challenge level of resolution
Climet Reference Counter			
Particle Detection (0.269 to 0.56) µm	300 mV	2.0 %	Comparison is against standard particles
	400 mV	2.0 %	
	460 mV	1.0 %	
	1500 mV	1.0 %	
100% Count Efficiency	(0.3 to 0.8) µm	1.9 %	Comparison against a primary standard Condensation Particle Counter (CPC)
Resolution	(0.269 to 0.4) µm	0.52 %	Test with three distributions to challenge level of resolution

¹ This laboratory offers commercial and field calibration service.

² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

³ Field calibration service is available for this calibration and this laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

⁴ In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.



Accredited Laboratory

A2LA has accredited

CLIMET INSTRUMENTS

Redlands, CA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system *(refer to joint ISO-ILAC-IAF Communiqué dated April 2017)*.



Presented this 24th day of January 2019.

A blue ink signature of the Senior Director of Accreditation Services.

Senior Director, Accreditation Services
For the Accreditation Council
Certificate Number 5008.01
Valid to October 31, 2020

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.