



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

TCQA LABS PRIVATE LIMITED

SECOND FLOOR, BLOCK NO. 492, VILLAGE: UMRAYA,
TALUKA: PADRA, DISTRICT: VADODARA, GJ 391440, REPUBLIC OF INDIA

Calibration Laboratory CL-241

has met the requirements of AC204, *IAS Accreditation Criteria for Calibration Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date March 22, 2023

Expiration Date March 1, 2025



A handwritten signature in black ink, reading 'Raj Nathan'.

President

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

TCQA LABS PRIVATE LIMITED

www.tcqalabs.com

Contact Name Rutvij Shah

Contact Phone + 91 8238037590

Accredited to ISO/IEC 17025:2017

Effective Date March 22, 2023

CALIBRATION AND MEASUREMENT CAPABILITY (CMC)*

MEASURED QUANTITY or DEVICE TYPE CALIBRATED	RANGE	UNCERTAINTY ^{1,2} (±)	CALIBRATION METHOD OR PROCEDURE, STANDARD EQUIPMENT (OPTIONAL)
Mechanical			
Gas Flow meter	0 L/min to 4 L/min	0.063 L/min	Comparison method by using reference mass flow controller
Electrical – DC/LF			
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment PM	0 V to 8 V (Measure)	0.0021 V	Direct method by using 6½ digit DMM.
Chemical/Gas			
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment CH ₄	0 %v to 5 %v	0.033 %v	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.17 mA	Direct method by using 6½ digit DMM.
	0 V to 1 V (Measure)	0.005 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment Cl ₂	0 PPMv to 200 PPMv	2.4 parts in 10 ⁶ by volume	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.21 mA	Direct method by using 6½ digit DMM.
	0 V to 1 V (Measure)	0.011 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/	0 %v to 2 %v	0.039 %v	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.039 mA	Direct method by using 6½ digit DMM.
	0 V to 1 V (Measure)	0.004 V	

* If information in this CMC is presented in non-SI units, the conversion factors stated in NIST Special Publication 811 "Guide for the Use of the International System of Units (SI)" apply.

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Monitor/ Instrument/ Detector/ Equipment CO			
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment H ₂	0 %v to 4 %v	1.7 %v	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.051 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.004 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment H ₂ S	0 PPMv to 200 PPMv	1.9 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.073 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.006 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment HCl	0 PPMv to 200 PPMv	1.9 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.27 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.011 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment NH ₃	0 PPMv to 100 PPMv	1.2 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.12 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.009 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment NO	0 PPMv to 2000 PPMv	21 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.013 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.001 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment NO ₂	0 PPMv to 2000 PPMv	12 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.17 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.004 V	

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Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment O ₂	0 %v to 25 %v	0.06 %v	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.012 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.001 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment SO ₂	0 PPMv to 2000 PPMv	20 parts in 10 ⁶ by volume	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.012 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.001 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment VOC	0 PPMv to 2000 PPMv	23 parts in 10 ⁶ by volume	Direct Method by using CRM)
	4 mA to 20 mA (Measure)	0.030 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.005 V	
Automated Measuring Systems/ Continuous Emission Monitoring System/ Gas Analyzer/ Monitor/ Instrument/ Detector/ Equipment CO ₂	0 %v to 50 %v	0.5 %v	Direct Method by using CRM
	4 mA to 20 mA (Measure)	0.013 mA	Direct method by using 6-½ digit DMM.
	0 V to 1 V (Measure)	0.001 V	

¹The uncertainty covered by the Calibration and Measurement Capability (CMC) is expressed as the expanded uncertainty having a coverage probability of approximately 95 %. It is the smallest measurement uncertainty that a laboratory can achieve within its scope of accreditation when performing calibrations of a best existing device. The measurement uncertainty reported on a calibration certificate may be greater than that provided in the CMC due to the behavior of the calibration item and other factors that may contribute to the uncertainty of a specific calibration.

²When uncertainty is stated in relative terms (such as percent, a multiplier expressed as a decimal fraction or in scientific notation), it is in relation to instrument reading or instrument output, as appropriate, unless otherwise indicated.

VOC = volatile organic compounds

PM = particulate matter

%v = percent by volume

PPMv = parts in 10⁶ by volume