SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994

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CALIBRATION

Valid To: October 31, 2014 Certificate Number: 2481.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations[1]

I. Electrical – DC/Low Frequency

Parameter/Equipment	Range[3]	CMC[2] (±)	Comments
DC High Voltage Ratio, Applied Voltage (100 to 1 000 000):1	(0.1 to 150) kV	0.006 % of ratio	High voltage divider - Ohm-Labs HV-S
DC Voltage – Measure	(0.1 to 150) kV	95 µV/V	Ohm-Labs HV-S w/DC meter
Resistance – Measure			
Fixed Point	10 µΩ (9 to 110) µΩ (90 to 1100) µΩ (0.9 to 11) mΩ (9 to 110) mΩ (90 to 1100) mΩ	9 µΩ/Ω 12 µΩ/Ω 6 µΩ/Ω 5 µΩ/Ω 1.9 µΩ/Ω 1.5 µΩ/Ω	Comparison to 1000 A, current comparator bridge, Guildline 9920-1 Comparison to 100 A with Guildline 9975 & 9923 extender
Fixed Point	1 Ω (0.9 to 11) Ω (9 to 110) Ω (90 to 1100) Ω	0.3 µΩ/Ω 0.5 µΩ/Ω 0.7 µΩ/Ω 1.3 µΩ/Ω	Comparison with current comparator bridge, MI 6242B

Parameter/Equipment	Range[3]	CMC[2] (±)	Comments
Resistance (cont.) – Measure			
Fixed Point	(0.9 to 11) kΩ 10 kΩ (9 to 110) kΩ (90 to 1100) kΩ	1.1 μΩ/Ω 0.5 μΩ/Ω 3 μΩ/Ω 3 μΩ/Ω	
Fixed Point	1 MΩ (0.9 to 11) MΩ	4 μΩ/Ω 13 μΩ/Ω	
Fixed Point	10 MΩ (9 to 110) MΩ (90 to 1100) MΩ	6 μΩ/Ω 10 μΩ/Ω 15 μΩ/Ω	Comparison with guarded dual source bridge
Fixed Point	1 GΩ (0.9 to 11) GΩ (9 to 110) GΩ (90 to 1100) GΩ	12 μΩ/Ω 30 μΩ/Ω 55 μΩ/Ω 150 μΩ/ Ω	
Fixed Point	1 TΩ (0.9 to 11) TΩ	130 μΩ/ Ω 350 μΩ/ Ω	
	(9 to 110) TΩ (90 to 1100) TΩ (0.9 to 11) PΩ (9 to 110) PΩ	2 % of rdg 5 % of rdg 15 % of rdg 60 % of rdg	Guildline 6500A Teraohmmeter
DC Current – Measure	(0 to 10) mA (10 to 100) mA (100 to 1000) mA (1 to 3) A	0.06 % of rdg + 2 μA 0.06 % of rdg + 5 μA 0.13 % of rdg + 0.1 mA 0.16 % of rdg + 0.6 mA	Agilent 34401A

Parameter/Range	Frequency	CMC[2] (±)	Comments
AC Voltage, Measure, 60 Hz	(10 to 100) mV (0.1 to 1) V (1 to 10) V (10 to 100) V (100 to 500) V	0.04 % of rdg + 2 μV 0.03 % of rdg + 20 μV 0.03 % of rdg + 0.2 mV 0.03 % of rdg + 2 mV 0.05 % of rdg + 5 mV	AC voltage meter
AC Voltage, Measure, 60 Hz	(0.25 to 0.81) kV (0.81 to 8.1) kV (8.1 to 81) kV (81 to 100) kV	0.04 % of rdg + 2 mV 0.04 % of rdg + 20 mV 0.04 % of rdg + 0.2 V 0.04 % of rdg + 2 V	Inductive voltage divider and AC voltage meter

Parameter/Range	Frequency	CMC[2] (±)	Comments
AC High Voltage Ratio, Applied Voltage (100 to 100 000:1)	(0.1 to 100) kV at 60 Hz	0.10 % of ratio	Inductive voltage divider and AC voltage meters

[1] This laboratory offers commercial calibration service.

[2] Calibration and Measurement Capability (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. Calibration and Measurement Capabilities 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] Where ranges are not specified, the CMC stated is for the cardinal points only.

American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

OHM-LABS, INC.

Pittsburgh, PA

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. This laboratory also meets the requirements of ANSI/NCSLI Z540-1-1994 and any additional program requirements in the field of calibration. 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 8 January 2009*).

Presented this 3rd day of January 2013.

President & CEO
For the Accreditation Council
Certificate Number 2481.01
Valid to October 31, 2014

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