



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

DIVERSIFIED TECHNICAL SYSTEMS, INC.
1720 Apollo Court
Seal Beach CA 90740
Dana Tice Phone: 562 493 0158 x 146

CALIBRATION

Valid To: July 31, 2018

Certificate Number: 4021.01

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

I. Electrical – DC/Low Frequency

Parameter/Equipment	Range	CMC ^{2,3,4} (±)	Comments
DC Voltage – Measure	Up to 1.2 mV (1.2 to 12) mV (12 to 120) mV (0.12 to 1.2) V (1.2 to 12) V (12 to 120) V	0.018 % + 0.12 μV 0.009 % + 1.1 μV 0.005 % + 11 μV 0.005 % + 110 μV 0.0035 % + 120 μV 0.004 % + 600 μV	Agilent 34420A
Resistance – Measure, 4W	Up to 1.2 Ω (1.2 to 12) Ω	0.008 % + 2.3 μΩ 0.007 % + 23 μΩ	Agilent 34420A
AC Voltage Flatness – Generate	Up to 200 kHz	1.3 %	Agilent 33220A

Parameter/Range	Frequency	CMC ²	Comments
AC Voltage – Measure (20 to 50) KHz	Up to 120 mV	0.06 mV	Agilent 34410A

II. Mechanical

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
Acceleration Sensitivity – 2g Roll (mV/g)	1 g	0.13 %	NIST Standard acceleration due to gravity and NOAA surface gravity prediction
Angular Rate Sensitivity (mV per °/s)	Up to 5 V Up to 18 000 °/s	0.01 %	DTS rate table Agilent 34410A

III. Time and Frequency

Parameter/Equipment	Range	CMC ² (±)	Comments
Frequency – Measure	100 Hz to 300 kHz	90 parts in 10 ⁶ Hz	Agilent 34410A
Frequency – Measuring Equipment	(1 to 1000) Hz	23 parts in 10 ⁶ Hz	Agilent 33220A

¹ This laboratory offers commercial 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 The stated measured values are determined using the indicated instrument (see Comments). This capability is suitable for the calibration of the devices intended to measure or generate the measured value in the ranges indicated. CMC are expressed as either a specific value that covers the full range or as a fraction/percentage of the reading plus a fixed floor specification.

⁴ In the statement of CMC, percentage refers to percent of reading.



Accredited Laboratory

A2LA has accredited

DIVERSIFIED TECHNICAL SYSTEMS, INC.

Seal Beach, CA

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/NCSL 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 29th day of April 2016.



A handwritten signature in blue ink, appearing to read "James C. Bunt".

Senior Director of Quality and Communications
For the Accreditation Council
Certificate Number 4021.01
Valid to July 31, 2018

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