

# CERTIFICATE OF ACCREDITATION

# The ANSI National Accreditation Board

Hereby attests that

Alpha Sensors, Inc. a TE Connectivity Company
125 S. Tremont Street, Suite 100
Oceanside, CA 92054
(and satellite site as shown on scope)

Fulfills the requirements of

**ISO/IEC 17025:2017** 

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

In the field of

# **CALIBRATION**

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at <a href="www.anab.org">www.anab.org</a>.

SD

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 09 November 2022 Certificate Number: AC-2093





## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND ANSI/NCSL Z540-1-1994 (R2002)

### Alpha Sensors, Inc. a TE Connectivity Company

125 S. Tremont Street, Suite 100 Oceanside, CA 92054 Felipe Chaires 949-424-8113

Felipe.chaires@te.com www.alphatechnics.com

#### **CALIBRATION**

Valid to: November 9, 2022 Certificate Number: AC-2093

#### **Electrical – DC/Low Frequency**

Version 005 Issued: September 18, 2020

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance	$0 \Omega$ to $2 k\Omega$	8.2 $\mu\Omega/\Omega$ of reading + 0.52 mΩ	Digital Multi-Meter
Resistance	(2 to 20) kΩ	8.2 $\mu\Omega/\Omega$ of reading + 5.2 mΩ	Digital Multi-Meter
Resistance	(20 to 200) kΩ	$8.2~\mu\Omega/\Omega$ of reading $+~100~m\Omega$	Digital Multi-Meter

#### Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature-Source	(-20.15 to 150.15) °C	0.006 °C	Standard Platinum Resistance Thermometer, triple point of water cell, copper averaging block, and a Digital Multi-Meter.





### Services performed at satellite location

Callejon De Servicio No. 61 Col. El Encanto C.P. 21440, Tecate B.C., Mexico

#### **Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance <sup>1</sup>	$0 \Omega$ to $1 k\Omega$	20 μ $\Omega$ / $\Omega$ of reading + 3.4 m $\Omega$	Digital Multi-Meter
Resistance <sup>1</sup>	(1 to 10) kΩ	$20 \mu\Omega/\Omega$ of reading + 34 m $\Omega$	Digital Multi-Meter
Resistance <sup>1</sup>	(10 to 101) kΩ	$20 \mu\Omega/\Omega$ of reading + 340 m $\Omega$	Digital Multi-Meter

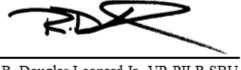
#### **Thermodynamic**

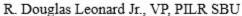
Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature-Source <sup>1</sup>	(-20.10 to 150.10) °C	0.01 °C	Temperature Secondary Standard Thermometer

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (*k*=2), corresponding to a confidence level of approximately 95%.

#### Notes:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2093.





Version 005 Issued: September 18, 2020

