



# CERTIFICATE OF ACCREDITATION

**The ANSI National Accreditation Board**

Hereby attests that

**ESPEC North America**  
**4141 Central Parkway**  
**Hudsonville, MI 49426**

Fulfills the requirements of

**ISO/IEC 17025:2017**

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 [www.anab.org](http://www.anab.org).

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 07 July 2024  
Certificate Number: AC-2061



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
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).

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### ESPEC North America

4141 Central Parkway  
Hudsonville, MI 49426  
Brian Alber 616-896-6100

### CALIBRATION

Valid to: **July 07, 2024**

Certificate Number: **AC-2061**

#### Electrical - DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Generate <sup>1</sup>	Up to 1.1 V (1.1 to 10) V (10 to 15) V	0.018 mV 0.013 mV 0.18 V	Fluke Process Calibrator
DC Current – Generate <sup>1</sup>	(4 to 22) mA	0.03 mA	Fluke Process Calibrator
Electrical Simulation of Thermocouple Systems – Source/Measure <sup>1</sup>	Type T (-200 to 0) °C (0 to 400) °C Type K (-100 to 800) °C	0.56 °C 0.46 °C 0.55 °C	Fluke Process Calibrator

#### Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Relative Humidity – Measure <sup>1</sup>	(15 to 25) °C Up to 40 %RH (40 to 97) %RH (25 to 100) °C (40 to 97) %RH	1.6 %RH 2.8 %RH 3.4 %RH	Vaisala HMP77 Temp/Humidity Indicator/Probe
Temperature Measure <sup>1</sup>	(-20 to 100) °C	0.84 °C	Vaisala HMP77 Temp/Humidity Indicator/Probe

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. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2061.



R. Douglas Leonard Jr., VP, PILR SBU

