



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.

Jason Stine, Vice President
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 ¹	(0 to 10) V	0.003 V	Fluke Process Calibrator
DC Current – Generate ¹	(4 to 22) mA	0.004 5 mA	Fluke Process Calibrator
Electrical Simulation of Thermocouple Systems – Source/Measure ¹	Type K (-100 to 800) °C Type T (-200 to 0) °C (0 to 400) °C	0.55 °C 0.78 °C 0.78 °C	Fluke Process Calibrator


Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Relative Humidity – Measure ¹	(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 ¹	(-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.



Jason Stine, Vice President

