



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**Control Systems 21**  
**713 Range End Road**  
**Dillsburg, PA 17019**

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).

R. Douglas Leonard Jr., VP, PILR SBU  
Expiry Date: 01 November 2024  
Certificate Number: L2335



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

**Control Systems 21**  
713 Range End Road  
Dillsburg, PA 17019  
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### CALIBRATION

Valid to: **November 1, 2024**

Certificate Number: **L2335**

#### Electrical – DC/Low Frequency

Parameter/Equipment <sup>1</sup>	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current Measure	(0.05 to 24) mA	0.02 mA	Process Calibrator
	(24 to 60) mA (60 to 400) mA (0.01 to 6) A (6 to 10) A	0.73 mA 5.1 mA 0.07 A 0.18 A	Multimeter
	(0.5 to 25) A (25 to 50) A (50 to 200) A (200 to 600) A	1.5 A 2 A 5.2 A 24 A	Clamp Meter
DC Current Source	(0.01 to 24) mA	0.02 mA	Process Calibrator
AC Current Measure	(0.5 to 200) A	5.2 A	Clamp Meter
Resistance Measure	(0 to 400) $\Omega$	0.2 $\Omega$	Process Calibrator
Resistance Source	(0 to 400) $\Omega$	0.2 $\Omega$	
RTD Resistance Simulation-Source Pt100 385 3W	(-50 to 300) °C	0.4 °C	
DC Voltage Measure	(0.1 to 90) mV	0.07 mV	Process Calibrator
	(90 to 600) mV (0.02 to 6) V (6 to 60) V (60 to 600) V	0.9 mV 0.01 V 0.1 V 1 V	Multimeter
DC Voltage Source	(0.1 to 90) mV (0.09 to 10) V	0.07 mV 8 mV	Process Calibrator

### Electrical – DC/Low Frequency

Parameter/Equipment <sup>1</sup>	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Thermocouple Millivolt Simulation – Source & Measure	Type J (0 to 1 200) °C	0.86 °C	Process Calibrator
	Type K (0 to 1 372) °C	0.97 °C	
	Type T (0 to 400) °C	0.98 °C	
	Type R (500 to 1 750) °C	1.9 °C	
	Type S (500 to 1 750) °C	2 °C	

### Mass and Mass Related

Parameter/Equipment <sup>1</sup>	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure Gages	(0 to 100) psi	0.15 psi	Process Calibrator with Pressure Module
	(100 to 1 000) psi	0.6 psi	Pressure Gauge

### Thermodynamic

Parameter/Equipment <sup>1</sup>	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Humidity Sensors	(20 to 70) % RH	3 % RH	Digital Temperature / Humidity Meter
Temperature Probes	0 °C	0.07 °C	Ice Bath
	(10 to 100) °C	0.11 °C	Bath and PRT with readout
Baths, Chambers, Freezers, Ovens and Furnaces	(-50 to 100) °C	0.07 °C	PRT with readout
	(-40 to 420) °C	2.1 °C	Process Calibrator/ TC Wire
	(420 to 1 100) °C	2.1 °C	
Baths, Chambers, Freezers, Ovens and Furnaces	(1 100 to 1 200) °C	2.6 °C	Process Calibrator/ TC Wire


## Time and Frequency

Parameter/Equipment <sup>1</sup>	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Timers and Stopwatches	(0.01 to 300) s	0.58 s	Precision Timer

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. L2335.



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