



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

### Super Systems, Inc.

7245 Edington Drive  
Cincinnati, OH 45249

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 be 'J. Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 30 August 2025

Certificate Number: AC-1186



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

### Super Systems, Inc.

7245 Edington Drive  
Cincinnati, OH 45249

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www.supersystems.com

### CALIBRATION

Valid to: **August 30, 2025**

Certificate Number: **AC-1186**

#### Chemical Quantities

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
NDIR Gas Analyzer <sup>1</sup>	(0, 10, 20) % CO (0, 0.5, 10) % CO <sub>2</sub> (0, 5) % CH <sub>4</sub> (0, 15, 40, 75) % H <sub>2</sub> 100 % N <sub>2</sub>	1.1 % Concentration 1.1 % Concentration 1.1 % Concentration 1.1 % Concentration 1.1 % Concentration	Certified Standard Gas Mixtures

#### Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Source	(0 to 75) mV T/C out (0 to 100) mV > 100 mV to 1 V (> 1 to 10) V (> 10 to 100) V	0.006 9 mV 0.007 7 mV 0.052 mV 0.51 mV 5.2 mV	Martel Model 3001 Precision Calibrator
DC Voltage – Measure	(0 to 75) mV T/C in (0 to 10) V (> 10 to 100) V	0.006 8 mV 0.9 mV 8.2 mV	Martel Model 3001 Precision Calibrator
DC Current – Source	(0 to 100) mA	0.009 mA	Martel Model 3001 Precision Calibrator
DC Current – Measure	(0 to 50) mA	0.008 mA	Martel Model 3001 Precision Calibrator
Electrical Simulation of Thermocouple Devices	Type B (600 to 800) °C (> 800 to 1 550) °C (> 1 550 to 1 820) °C	0.64 °C 0.54 °C 0.59 °C	Martel Model 3001 Precision Calibrator

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Devices	Type C		Martel Model 3001 Precision Calibrator
	(0 to 150) °C	0.43 °C	
	(> 150 to 650) °C	0.37 °C	
	(> 650 to 1 000) °C	0.44 °C	
	(> 1 000 to 1 800) °C	0.7 °C	
	(> 1 800 to 2 316) °C	1.2 °C	
	Type E		
	(-270 to -100) °C	0.7 °C	
	(> -100 to -25) °C	0.45 °C	
	(> -25 to 650) °C	0.23 °C	
	(> 650 to 1 000) °C	0.3 °C	
	Type J		
	(-210 to -100) °C	0.4 °C	
	(> -100 to -30) °C	0.35 °C	
	(> -30 to 760) °C	0.25 °C	
	(> 760 to 1 200) °C	0.33 °C	
	Type K		
	(-270 to -100) °C	0.47 °C	
	(> -100 to -25) °C	0.37 °C	
	(> -25 to 120) °C	0.24 °C	
	(> 120 to 1 000) °C	0.37 °C	
	(> 1 000 to 1 372) °C	0.56 °C	
	Type N		
	(-270 to -100) °C	0.57 °C	
(> -100 to -25) °C	0.43 °C		
(> -25 to 410) °C	0.28 °C		
(> 410 to 1 300) °C	0.39 °C		
Type R			
(-50 to 250) °C	0.81 °C		
(> 250 to 400) °C	0.5 °C		
(> 400 to 1 000) °C	0.47 °C		
(> 1 000 to 1 767) °C	0.57 °C		
Type S			
(-50 to 250) °C	0.76 °C		
(> 250 to 1 000) °C	0.51 °C		
(> 1 000 to 1 400) °C	0.52 °C		
(> 1 400 to 1 767) °C	0.65 °C		

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Devices	Type T (-270 to -150) °C (> -150 to 0) °C (> 0 to 400) °C	0.89 °C 0.35 °C 0.23 °C	Martel Model 3001 Precision Calibrator


**Thermodynamic**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Relative Humidity Measuring Devices	(10 to 90) %RH (> 90 to 95) %RH	1.4 %RH 2.1 %RH	Direct comparison to Vaisala Unit, Environmental Chamber
Temperature Measuring Devices	(10 to 50) °C	0.4 °C	Direct comparison to Vaisala Unit, Environmental Chamber
Dew Point Measuring Devices (10 to 50) °C			
10 %RH	(-20.3 to 10.1) °C	1.7 °C	Direct comparison to Vaisala Unit, Environmental Chamber
11.3 %RH	(-18.9 to 12) °C	1.5 °C	
13.6 %RH	(-16.7 to 14.8) °C	1.3 °C	
33 %RH	(-5.6 to 29.3) °C	0.4 °C	
50 %RH	(0 to 36.7) °C	0.2 °C	
55 %RH	(1.4 to 38.5) °C	0.1 °C	
75.3 %RH	(5.8 to 44.4) °C	0.2 °C	
83 %RH	(7.2 to 46.3) °C	0.2 °C	
90 %RH	(8.4 to 47.9) °C	0.2 °C	
95 %RH	(9.2 to 49) °C	0.1 °C	
Dew Point Analyzers Relative Humidity at 23 °C	11.3 %RH 75.3 %RH	3.1 %RH 3.1 %RH	Indirect Comparison to Accredited Humidity Salt Solutions, Vaisala Unit
Temperature	23 °C	1.2 °C	

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. % = percent concentration unless otherwise noted.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1186.



Jason Stine, Vice President

