



# CERTIFICATE OF ACCREDITATION

## ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**Super Systems, Inc.**  
**7205 Edington Drive**  
**Cincinnati, OH 45249**

has been assessed by ANAB  
and meets the requirements of international standard

**ISO/IEC 17025:2005**

while demonstrating technical competence in the field of

**CALIBRATION**

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations to which this accreditation applies.

AC-1186  
Certificate Number

  
ANAB Approval

Certificate Valid: 07/13/2018-08/30/2019  
Version No. 005 Issued: 07/13/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. 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 17025:2005

**Super Systems, Inc.**

7205 Edington Drive  
Cincinnati, OH 45249

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**CALIBRATION**

Valid to: August 30, 2019

Certificate Number: AC-1186

**Thermodynamic**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Humidity Solutions, Dew Point Analyzers	(11.3, 75.3) %RH @ 23 °C	1.4 %RH 0.4 °C	Environmental Chamber, Vaisala, Direct Method
Dew Point Analyzers	(11.3, 75.3) %RH @ 23 °C	3.1 %RH 1.2 °C	Calibrated Humidity Salt Solutions, Vaisala Indirect Method

**Chemical Quantities**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
NDIR Gas Analyzer <sup>1</sup>	CO: (0 to 30) % CO <sub>2</sub> : (0 to 2) % CH <sub>4</sub> : (0 to 15) % H <sub>2</sub> : (0 to 40) % N <sub>2</sub> : (0) %	1.1 %	Certified Standard Gas Mixture

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Source	(0 to 100) mV 100 mV to 1 V (1 to 10) V (10 to 100) V	0.001 5 mV 0.049 mV 0.48 mV 4.9 mV	Martel Model 3001 Precision Calibrator



Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage – Measure	(0 to 10) V (10 to 100) V	0.9 mV 8.4 mV	Martel Model 3001 Precision Calibrator
DC Current – Source	(0 to 100) mA	0.01 mA	
DC Current – Measure	(0 to 50) mA	0.008 mA	
Electrical Simulation of Thermocouple Devices	Type B (600 to 800) °C	0.56 °C	Martel Model 3001 Precision Calibrator
	(800 to 1 550) °C	0.49 °C	
	(1 550 to 1 820) °C	0.55 °C	
	Type C (0 to 150) °C	0.41 °C	
	(150 to 650) °C	0.37 °C	
	(650 to 1 000) °C	0.42 °C	
	(1 000 to 1 800) °C	0.62 °C	
	(1 800 to 2 316) °C	1 °C	
	Type E (-270 to -100) °C	0.61 °C	
	(-100 to -25) °C	0.27 °C	
	(-25 to 650) °C	0.26 °C	
	(650 to 1 000) °C	0.3 °C	
	Type J (-210 to -100) °C	0.37 °C	
	(-100 to -30) °C	0.3 °C	
	(-30 to 760) °C	0.28 °C	
	(760 to 1 200) °C	0.33 °C	
	Type K (-270 to -100) °C	0.43 °C	
	(-100 to -25) °C	0.32 °C	
	(-25 to 120) °C	0.26 °C	
	(120 to 1 000) °C	0.36 °C	
(1 000 to 1 372) °C	0.5 °C		
Type N (-270 to -100) °C	0.5 °C		
(-100 to -25) °C	0.34 °C		
(-25 to 410) °C	0.3 °C		
(410 to 1 300) °C	0.37 °C		



Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Devices	Type R		Martel Model 3001 Precision Calibrator
	(-50 to 250) °C	0.72 °C	
	(250 to 400) °C	0.48 °C	
	(400 to 1 000) °C	0.46 °C	
	(1 000 to 1 767) °C	0.53 °C	
	Type S		
	(-50 to 250) °C	0.7 °C	
	(250 to 1 000) °C	0.49 °C	
	(1 000 to 1 400) °C	0.5 °C	
	(1 400 to 1 767) °C	0.59 °C	
Type T			
(-270 to -150) °C	0.75 °C		
(-150 to 0) °C	0.34 °C		
(0 to 400) °C	0.26 °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.

  
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 Vice President

