



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**AppMet, Inc.**  
7308 Peppermill Parkway  
North Charleston, SC 29418

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: 06 December 2022

Certificate Number: AC-1358



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

**AppMet, Inc.**  
7308 Peppermill Parkway  
North Charleston, SC 29418  
Melinda Bigg 843-767-5664  
mbigg@appmet.com

### CALIBRATION

Valid to: **December 6, 2022**

Certificate Number: **AC-1358**

#### Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Voltage - Source <sup>1</sup>	Up to 330 mV 330 mV to 3.3 V (3.3 to 33) V (33 to 330) V 330 V to 1 kV	20 $\mu$ V/V + 1.1 $\mu$ V 13 $\mu$ V/V + 1.6 $\mu$ V 12 $\mu$ V/V + 21 $\mu$ V 19 $\mu$ V/V + 0.14 mV 19 $\mu$ V/V + 1.5 mV	Fluke 5520A Multifunction Calibrator
AC Voltage - Source <sup>1</sup>	(1 to 33) mV (10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz (33 to 330) mV (10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz 330 mV to 3.3 V (10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 500) kHz	0.73 mV/V + 8.9 $\mu$ V 0.13 mV/V + 6.7 $\mu$ V 0.19 mV/V + 6.6 $\mu$ V 0.98 mV/V + 6.5 $\mu$ V 3.5 mV/V + 13 $\mu$ V 8 mV/V + 51 $\mu$ V  0.23 mV/V + 46 $\mu$ V 0.14 mV/V + 11 $\mu$ V 0.15 mV/V + 11 $\mu$ V 0.34 V/V + 11 $\mu$ V 0.81 V/V + 33 $\mu$ V 2 mV/V + 72 $\mu$ V  0.21 mV/V + 0.42 mV 0.14 mV/V + 83 $\mu$ V 0.19 mV/V + 67 $\mu$ V 0.28 mV/V + 67 $\mu$ V 0.68 mV/V + 0.17 mV 2.3 mV/V + 0.61 mV	Fluke 5520A Multifunction Calibrator

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage - Source <sup>1</sup>	(3.3 to 33) V (10 to 45) Hz 45 Hz to 10 kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz (33 to 330) V 45 Hz to 1 kHz (1 to 10) kHz (10 to 20) kHz (20 to 50) kHz (50 to 100) kHz 330 V to 1.02 kV 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.24 mV/V + 4.2 mV 0.15 mV/V + 0.81 mV 0.23 mV/V + 0.83 mV 0.34 mV/V + 0.89 mV 0.88 mV/V + 1.9 mV 0.18 mV/V + 10 mV 0.19 mV/V + 9.7 mV 0.24 mV/V + 8.9 mV 0.29 mV/V + 9.4 mV 2 mV/V + 59 mV 0.3 mV/V + 22 mV 0.3 mV/V + 13 mV 0.3 mV/V + 6.6 mV	Fluke 5520A Multifunction Calibrator
DC Current - Source <sup>1</sup>	Up to 330 μA 330 μA to 3.3 mA (3.3 to 33) mA (33 to 330) mA 330 mA to 1.1 A (1.1 to 3) A (3 to 11) A (11 to 20.5) A	1.2 μA 31 μA/A to 1.2 μA 84 μA/A + 1 μA 91 μA/A + 6.9 μA 0.19 mA/A + 46 μA 0.37 mA/A + 95 μA 0.49 mA/A + 0.64 mA 0.95 mA/A + 1.6 mA	Fluke 5520A Multifunction Calibrator
AC Current - Source <sup>1</sup>	(29 to 330) μA (10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz 330 μA to 3.3 mA (10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	4.1 mA/A + 40 nA 4.3 mA/A + 0.11 μA 3.9 mA/A + 0.1 μA 4.6 mA/A + 90 nA 8.5 mA/A + 0.18 μA 2.2 mA/A + 0.69 μA 1.1 mA/A + 0.93 μA 0.8 mA/A + 1 μA 1.8 mA/A + 0.9 μA 4.9 mA/A + 0.69 μA	Fluke 5520A Multifunction Calibrator

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current - Source <sup>1</sup>	(3.3 to 33) mA		Fluke 5520A Multifunction Calibrator
	(10 to 20) Hz	1.7 mA/A + 4.1 $\mu$ A	
	(20 to 45) Hz	0.8 mA/A + 4.7 $\mu$ A	
	45 Hz to 1 kHz	0.33 mA/A + 4.1 $\mu$ A	
	(1 to 5) kHz	0.73 mA/A + 3.8 $\mu$ A	
	(5 to 10) kHz	2 mA/A + 4.1 $\mu$ A	
	(33 to 330) mA		
	(10 to 20) Hz	1.7 mA/A + 29 $\mu$ A	
	(20 to 45) Hz	0.86 mA/A + 36 $\mu$ A	
	45 Hz to 1 kHz	0.38 mA/A + 26 $\mu$ A	
	(1 to 5) kHz	1 mA/A + 52 $\mu$ A	
	(5 to 10) kHz	2 mA/A + 0.1 mA	
	330 mA to 1.1 A		
	(10 to 45) Hz	1.7 mA/A + 0.13 mA	
	45 Hz to 1 kHz	0.49 mA/A + 0.12 mA	
	(1 to 5) kHz	6 mA/A + 1 mA	
	(1.1 to 3) A		
	(45 to 65) Hz	1.8 mA/A + 0.13 mA	
(65 to 500) Hz	0.6 mA/A + 0.1 mA		
500 Hz to 1 kHz	0.58 mA + 1.6 mA		
(3 to 11) A			
(45 to 100) Hz	0.59 mA/A + 2.3 mA		
100 Hz to 1 kHz	0.99 mA/A + 2.1 mA		
(11 to 20.5) A			
(45 to 100) Hz	1.2 mA/A + 6.2 mA		
100 Hz to 1 kHz	1.5 mA/A + 5.8 mA		
Resistance - Source <sup>1</sup>	Up to 11 $\Omega$	0.1 m $\Omega$ / $\Omega$ + 1.4 m $\Omega$	Fluke 5520A Multifunction Calibrator
	(11 to 33) $\Omega$	32 $\mu\Omega$ / $\Omega$ + 1.5 m $\Omega$	
	(33 to 110) $\Omega$	29 $\mu\Omega$ / $\Omega$ + 1.4 m $\Omega$	
	(110 to 330) $\Omega$	27 $\mu\Omega$ / $\Omega$ + 2.2 m $\Omega$	
	330 $\Omega$ to 1.1 k $\Omega$	29 $\mu\Omega$ / $\Omega$ + 1.6 m $\Omega$	
	(1.1 to 3.3) k $\Omega$	30 $\mu\Omega$ / $\Omega$ + 26 m $\Omega$	
	(3.3 to 11) k $\Omega$	29 $\mu\Omega$ / $\Omega$ + 22 m $\Omega$	
	(11 to 33) k $\Omega$	30 $\mu\Omega$ / $\Omega$ + 0.18 $\Omega$	
	(33 to 110) k $\Omega$	30 $\mu\Omega$ / $\Omega$ + 0.17 $\Omega$	
	(110 to 330) k $\Omega$	30 $\mu\Omega$ / $\Omega$ + 2.1 $\Omega$	
	330 k $\Omega$ to 1.1 M $\Omega$	50 $\mu\Omega$ / $\Omega$ + 4.1 $\Omega$	



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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance - Source <sup>1</sup>	330 kΩ to 1.1 MΩ (1.1 to 3.3) MΩ (3.3 to 11) MΩ (11 to 33) MΩ (33 to 110) MΩ (110 to 330) MΩ	50 μΩ/Ω + 4.1 Ω 60 μΩ/Ω + 34 Ω 0.1 mΩ/Ω + 43 Ω 0.3 mΩ/Ω + 2.3 kΩ 0.5 mΩ/Ω + 3.7 kΩ 3.1 mΩ/Ω + 47 kΩ	Fluke 5520A Multifunction Calibrator
DC Voltage - Measure <sup>1</sup>	Up to 100 mV 100 mV to 1 V (1 to 10) V (10 to 100) V 100 V to 1 kV	8.7 μV/V + 0.33 μV 8 μV/V + 0.3 μV 8 μV/V + 0.56 μV 9.6 μV/V + 43 μV 9.4 μV/V + 0.76 μV	HP 3458A Precision Multimeter
Capacitance - Source <sup>1</sup>	190 pF to 3.3 nF (3.3 to 11) nF (11 to 110) nF (110 to 330) nF 330 nF to 1.1 μF (1.1 to 3.3) μF (3.3 to 11) μF (11 to 33) μF (33 to 110) μF (110 to 330) μF 330 μA to 1.1 mF (1.1 to 3.3) mF (3.3 to 11) mF (11 to 33) mF (33 to 110) mF	5 mF/F + 10 pF 3 mF/F + 9.4 pF 3 mF/F + 0.1 nF 2 mF/F + 0.35 nF 3 mF/F + 0.9 nF 2 mF/F + 3.4 nF 3 mF/F + 9 nF 5 mF/F + 0.5 nF 4.7 mF/F + 96 nF 4.6 mF/F + 0.3 nF 4.5 mF/F + 1.1 μF 4.5 mF/F + 3 μF 4.4 mF/F + 10 μF 7.6 mF/F + 30 μF 11 mF/F + 0.1 mF	Fluke 5520A Multifunction Calibrator
AC Voltage - Measure <sup>1</sup>	Up to 10 mV (1 to 40) Hz 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz	0.3 mV/V + 3 μV 0.2 mV/V + 1.1 μV 0.27 mV/V + 1.5 μV 0.9 mV/V + 2 μV 4.9 mV/V + 2 μV 40 mV/V + 4.8 μV	HP 3458A Precision Multimeter



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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage - Measure <sup>1</sup>	(10 to 100) mV		HP 3458A Precision Multimeter
	(1 to 40) Hz	61 $\mu$ V/V + 4.9 $\mu$ V	
	40 Hz to 1 kHz	62 $\mu$ V/V + 3.3 $\mu$ V	
	(1 to 20) kHz	0.13 mV/V + 3.3 $\mu$ V	
	(20 to 50) kHz	0.26 mV/V + 6.7 $\mu$ V	
	(50 to 100) kHz	0.77 mV/V + 5.3 $\mu$ V	
	(100 to 300) kHz	3 mV/V + 12 $\mu$ V	
	300 kHz to 1 MHz	9.8 mV/V + 23 $\mu$ V	
	(1 to 2) MHz	15 mV/V + 19 $\mu$ V	
	100 mV to 1 V		
	(1 to 40) Hz	69 $\mu$ V/V + 42 $\mu$ V	
	40 Hz to 1 kHz	67 $\mu$ V/V + 24 $\mu$ V	
	(1 to 20) kHz	0.14 mV/V + 24 $\mu$ V	
	(20 to 50) kHz	0.3 mV/V + 24 $\mu$ V	
	(50 to 100) kHz	0.8 mV/V + 24 $\mu$ V	
	(100 to 300) kHz	3 mV/V + 0.1 mV	
	300 kHz to 1 MHz	10 mV/V + 0.13 mV	
	(1 to 2) MHz	15 mV/V + 0.1 mV	
	(1 to 10) V		
	(1 to 40) Hz	0.2 mV/V + 0.46 mV	
	40 Hz to 1 kHz	96 $\mu$ V/V + 0.24 mV	
	(1 to 20) kHz	96 $\mu$ V/V + 0.24 mV	
	(20 to 50) kHz	0.29 mV/V + 0.26 mV	
	(50 to 100) kHz	0.8 mV/V + 0.2 mV	
	(100 to 300) kHz	3 mV/V + 1 mV	
	300 kHz to 1 MHz	10 mV/V + 1.4 mV	
	(1 to 2) MHz	15 mV/V + 1 mV	
	(10 to 100) V		
	(1 to 40) Hz	0.2 mV/V + 4.3 mV	
	40 Hz to 1 kHz	0.2 mV/V + 2.4 mV	
(1 to 20) kHz	0.19 mV/V + 2.5 mV		
(20 to 50) kHz	0.34 mV/V + 2.6 mV		
(50 to 100) kHz	1.2 mV/V + 2 mV		
(100 to 300) kHz	4 mV/V + 10 mV		
300 kHz to 1 MHz	15 mV/V + 11 mV		
100 V to 1 kV			
(1 to 40) Hz	0.4 mV/V + 41 mV		
40 Hz to 1 kHz	0.4 mV/V + 22 mV		
(1 to 20) kHz	0.6 mV/V + 22 mV		
(20 to 50) kHz	1.2 mV/V + 23 mV		
(50 to 100) kHz	3 mV/V + 22 mV		



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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current - Measure <sup>1</sup>	100 nA to 1 $\mu$ A (1 to 10) $\mu$ A (10 to 100) $\mu$ A 100 $\mu$ A to 1 mA (1 to 10) mA (10 to 100) mA 100 mA to 1 A	30 $\mu$ A/A + 41 nA 20 $\mu$ A/A + 0.12 nA 20 $\mu$ A/A + 0.8 nA 20 $\mu$ A/A + 5 nA 20 $\mu$ A/A + 51 nA 35 $\mu$ A/A + 0.5 $\mu$ A 0.11 mA/A + 10 $\mu$ A	HP 3458A Precision Multimeter
AC Current - Measure <sup>1</sup>	Up to 100 $\mu$ A (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 1 kHz 100 $\mu$ A to 1 mA (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 5 kHz (5 to 20) kHz (20 to 50) kHz (50 to 100) kHz (1 to 10) mA (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 5 kHz (5 to 20) kHz (20 to 50) kHz (50 to 100) kHz (10 to 100) mA (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 5 kHz (5 to 20) kHz (20 to 50) kHz (50 to 100) kHz	4 mA/A + 0.3 $\mu$ A 1.5 mA/A + 0.3 $\mu$ A 0.6 mA/A + 0.3 $\mu$ A 0.6 mA/A + 0.3 $\mu$ A 4.1 mA/A + 0.2 $\mu$ A 1.5 mA/A + 0.21 $\mu$ A 0.59 mA/A + 0.22 $\mu$ A 0.59 mA/A + 0.22 $\mu$ A 0.59 mA/A + 0.22 $\mu$ A 4 mA/A + 0.4 $\mu$ A 5.4 mA/A + 1.6 $\mu$ A 4 mA/A + 2.1 $\mu$ A 1.5 mA/A + 2.1 $\mu$ A 0.59 mA/A + 2.1 $\mu$ A 0.59 mA/A + 2.1 $\mu$ A 0.59 mA/A + 2.1 $\mu$ A 4 mA/A + 4 $\mu$ A 5.4 mA/A + 16 $\mu$ A 4.2 mA/A + 3.3 $\mu$ A 1.2 mA/A + 49 $\mu$ A 0.59 mA/A + 22 $\mu$ A 0.60 mA/A + 21 $\mu$ A 0.59 mA/A + 22 $\mu$ A 4 mA/A + 41 $\mu$ A 5.5 mA/A + 0.15 mA	HP 3458A Precision Multimeter





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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current - Measure <sup>1</sup>	100 mA to 1 A (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 5 kHz (5 to 20) kHz (20 to 50) kHz	9 mA/A + 0.2 mA 1.6 mA/A + 0.21 mA 0.78 mA/A + 0.22 mA 1 mA/A + 0.22 mA 3 mA/A + 0.21 mA 10 mA/A + 0.4 mA	HP 3458A Precision Multimeter
Resistance - Measure <sup>1</sup>	10 Ω 100 Ω 1 kΩ 10 kΩ 100 kΩ 1 MΩ 10 MΩ 100 MΩ 1 GΩ	15 μΩ/Ω + 5 μΩ 12 μΩ/Ω + 0.5 mΩ 9.9 μΩ/Ω + 1.3 mΩ 11 μΩ/Ω + 5.7 mΩ 10 μΩ/Ω + 46 mΩ 20 μΩ/Ω + 2 Ω 50 μΩ/Ω + 0.12 kΩ 0.5 mΩ/Ω + 3.8 kΩ 5 mΩ/Ω + 50 kΩ	HP 3458A Precision Multimeter
Electrical Simulation of Thermocouple Instruments <sup>1</sup>	Type E (-250 to -100) °C (-100 to -25) °C (-25 to 350) °C (350 to 650) °C (650 to 1 000) °C Type J (-210 to -100) °C (-100 to -30) °C (-30 to 150) °C (150 to 760) °C (760 to 1 200) °C Type K (-200 to -100) °C (-100 to -25) °C (-25 to 120) °C (120 to 1 000) °C (1 000 to 1 372) °C Type R (0 to 250) °C (250 to 400) °C (400 to 1 000) °C (1 000 to 1 767) °C	0.51 °C 0.18 °C 0.17 °C 0.18 °C 0.23 °C 0.28 °C 0.18 °C 0.16 °C 0.19 °C 0.25 °C 0.34 °C 0.2 °C 0.18 °C 0.28 °C 0.41 °C 0.58 °C 0.36 °C 0.34 °C 0.41 °C	Fluke 5520A Multifunction Calibrator



### Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrical Simulation of Thermocouple Instruments <sup>1</sup>	Type S (0 to 250) °C	0.48 °C	Fluke 5520A Multifunction Calibrator
	(250 to 1 000) °C	0.37 °C	
	(1 000 to 1 400) °C	0.38 °C	
	(1 400 to 1 767) °C	0.47 °C	
	Type T (-250 to -150) °C	0.64 °C	
	(-150 to 0) °C	0.26 °C	
	(0 to 120) °C	0.18 °C	
	(120 to 400) °C	0.17 °C	
Welding Power Supply <sup>1</sup> Voltage Current	(0 to 50) V (0 to 500) A	0.02 V 4.4 A	Cannon Load Bank and Multimeter

### Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Micrometers <sup>1</sup> Outside Inside	Up to 12 in (1.5 to 12) in	(79 + 13L) μin	Gage Blocks
		(136 + 8.4L) μin	
Calipers <sup>1</sup>	Up to 40 in	(1 300 + 6L) μin	Gage Blocks
Height Gages <sup>1</sup>	Up to 40 in	(90 + 10L) μin	Gage Blocks
Indicator Calibrator <sup>1</sup>	Up to 1 in	27 μin	Gage Blocks
Depth Gages <sup>1</sup>	Up to 24 in	(142 + 11L) μin	Gage Blocks
Length Standards <sup>1</sup>	Up to 28 in	(65 + 20L) μin	Gage Blocks and Analog Comparator
Cylindrical Plugs	Up to 10 in	(5.3 + 17L) μin	Gage Blocks with ID/OD Comparator
Cylindrical Rings	(0.125 to 11) in	(0.8 + 17L) μin	
Dial Indicators <sup>1</sup>	Up to 2 in	140 μin	Indicator Calibrator
Angle <sup>1</sup>	(0 to 90) °	0.013 °	10 in Sine Bar MET-SB-001
Roughness <sup>1</sup>	118 μin	5.2 μin	Roughness Standard

### Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pressure - Hydraulic <sup>1</sup>	(2 to 10 000) psig	(0.044 + 0.000 3 <i>P</i> ) psi	Deadweight Tester
Pressure - Pneumatic <sup>1</sup>	(-14.7 to 3) psig (3 to 500) psig	0.006 1 psi (0.008 8 + 0.000 18 <i>P</i> ) psi	Deadweight Tester Pressure Module
Torque - Measure <sup>1</sup>	(2.5 to 25) in lb (25 to 250) in lb (25 to 250) ft lb (250 to 600) ft lb	0.59 % of reading 0.59 % of reading 0.62 % of reading 1.6 % of reading	Torque Calibrator MET-TW-001
Torque - Source <sup>1</sup>	(2.5 to 25) lbf in (25 to 250) lbf in (25 to 250) lbf ft (250 to 600) lbf ft	0.08 % of reading 0.065 % of reading 0.066 % of reading 0.14 % of reading	6 in Torque Wheel and arm Class F Weights MET-TW-002
Force <sup>1</sup>	Up to 1 000 lb (1 001 to 10 000) lbf	0.29 lbf 18 lbf	Standard Weights, Load Cells
Gas Flow <sup>1</sup>	(1 to 100) ccm (100 to 1000) ccm (1 to 200) lpm (200 to 1 000) lpm	(0.1 + 0.015 <i>X</i> ) ccm (5 + 0.01 <i>X</i> ) ccm (0.17 + 0.013 <i>X</i> ) lpm 14 lpm	Bubble Generator, Laminar Flow Element MET-AF-001
Hydraulic Flow <sup>1</sup>	(0.2 to 5) gpm	0.87 % of reading	Stopwatch/Prover MET-LF-001
Scales <sup>1</sup>	Up to 10 lbs 6 to 60 lbs 25 to 250 lbs	(0.0005 + 0.000 3 <i>F</i> ) lbs (0.006 + 0.000 15 <i>F</i> ) lbs (0.008 + 0.000 2 <i>F</i> ) lbs	Class 7 Weights
Analytical Balance <sup>1</sup>	Up to 100 g 100 g to 1 kg	1.3 mg 28 mg	Class 1 Weights

### Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Temperature - Measure <sup>1</sup>	(-50 to 650) °C	0.04 °C	RTD, 1502 Indicator
	(650 to 1 350) °C	2.6 °C	Thermocouple, 5520A Multifunction Calibrator
Temperature – Source	(0 to 200) °C (200 to 500) °C	(0.04 + 0.000 06 <i>T</i> ) °C (0.07 + 0.000 02 <i>T</i> ) °C	RTD, 1502 Indicator Baths, Dry Well
Relative Humidity <sup>1</sup>	(20 to 100) % RH	1.2 %RH	Psychrometer

**Time and Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Stopwatch <sup>1</sup>	1 second to 30 hours	(0.05 + 0.000 01S) s	GPS, 5334B Counter MET-SW-002
Frequency	10 MHz	1.2 x 10 <sup>-12</sup> Hz	GPS Receiver

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. L = length in inches, P = pressure in psi, R = resolution of unit under test, S = time in unit of seconds, F = force in units of pounds, T = temperature in units degrees Celsius, c = flow rate in units scfm, l = flow rate in units slpm.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-1358.



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