



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

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

This is to certify that

Technical Maintenance, Inc.
12240 SW 53rd Street, Suite 506
Fort Lauderdale, FL 33330

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

ISO/IEC 17025:2005

and national standards

ANSI/NCSL Z540-1-1994 AND
ANSI/NCSL Z540.3-2006

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-2080.07
Certificate Number


ANAB Approval

Certificate Valid To: 09/20/2018
Version No. 002 Issued: 05/25/2017



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 January 2009).



ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005, ANSI/NCSL Z540-1-1994, AND ANSI/NCSL Z540.3-2006

Technical Maintenance, Inc.

12240 SW 53rd Street, Suite 506
Fort Lauderdale, FL 33330
Scott Chamberlain Phone: 945-525-2223

CALIBRATION

Valid to: September 20, 2018

Certificate Number: AC-2080.07

Acoustics and Vibration

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Accelerometers – Acceleration (7 < 10) Hz (10 < 30) Hz (30 < 2000) Hz (2 to 10) kHz	(0.01 to 10) g	4 % of reading 3 % of reading 1.5 % of reading 4 % of reading	Accelerometer Calibrator

Dimensional

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Calipers ³	Up to 46 in	(28 + 9L) μin	Gage blocks (Grade 2)
Micrometers ³	Up to 46 in	(28 + 5L) μin	
Dial Indicators ³	Up to 44 in	(3 + 60L) μin	
Height Gages ³	Up to 46 in	(200 + 4L) μin	
Scales – Rulers ³	Up to 46 in	0.0091 in	
Feeler Gages ³	Up to 1 in	33 μin	P&W Model C
Cylindrical Gages – Inside Outside	Up to 11 in Up to 10 in	(16 + 2D) μin (9 + 2D) μin	Gage blocks, P&W universal measuring machine
Gage Blocks – Length Only	Up to 10 in	(2.5 + 2.9L) μin	Master gage blocks, P&W universal measuring machine



Dimensional

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Thread Plugs – Major Pitch Diameter	Up to 10 in Up to 10 in	46 μin 80 μin	P & W Model C, Van Keuren thread wire set, gage blocks, P & W Model C, VanKeren thread wire set

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
DC Voltage – Generate ³	Up to 330 mV 330 mV to 3.3 V (3.3 to 33) V (33 to 330) V (330 to 1 000) V	24 $\mu\text{V/V} + 1 \mu\text{V}$ 14 $\mu\text{V/V} + 2 \mu\text{V}$ 14 $\mu\text{V/V} + 20 \mu\text{V}$ 22 $\mu\text{V/V} + 150 \mu\text{V}$ 22 $\mu\text{V/V} + 1.5 \text{ mV}$	Fluke 5522A
DC Voltage – Measure ³	Up to 100 mV 100 mV to 1V (1 to 10) V (10 to 100) V (100 to 1 000) V	12 $\mu\text{V/V} + 0.3 \mu\text{V}$ 11 $\mu\text{V/V} + 0.3 \mu\text{V}$ 11 $\mu\text{V/V} + 0.5 \mu\text{V}$ 13 $\mu\text{V/V} + 30 \mu\text{V}$ 12 $\mu\text{V/V} + 100 \mu\text{V}$	HP 3458A
DC Voltage – Measure ³	(1 to 40) kV	2.3%	Fluke 80k-40
DC Current – Generate ³	Up to 330 μA 330 μA to 3.3 mA (3.3 to 330) mA 330 mA to 1.1 A (1.1 to 3.0) A (3.0 to 11) A (11 to 20.5) A	0.017 % + 20 nA 0.012 % + 50 nA 0.012 % + 2.5 μA 0.023 % + 40 μA 0.045 % + 40 μA 0.059 % + 500 μA 0.13 % + 0.75 mA	Fluke 5522A
DC Current – Generate ³ Clamps Only 10 – Turn Coil	3.2 to 32 A 32 to 105 A 105 to 200 A	0.16% + 1.2 ma 0.16% + 9.4 ma 0.16% + 45 ma	Fluke 9100-200 Coils
DC Current – Generate ³ Clamps Only 50 – Turn Coil	16 to 160 A 160 to 525 A 525 to 1000 A	0.16% + 5.9 ma 0.16% + 47 ma 0.16% + 225 ma	
DC Current – Measure ³	Up to 100 nA 100 nA to 100 μA 100 μA to 10 mA (10 to 100) mA 100 mA to 1 A	24 $\mu\text{A/A} + 0.04 \text{ nA}$ 23 $\mu\text{A/A} + 0.8 \text{ nA}$ 23 $\mu\text{A/A} + 50 \text{ nA}$ 41 $\mu\text{A/A} + 0.5 \mu\text{A}$ 0.013 % + 10 μA	HP 3458A
DC Current – Measure ³	(1 to 50) A	0.29 %	Empro shunts

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Resistance – Generate ³	Up to 11 Ω (11 to 33) Ω (33 to 110) Ω (110 to 330) Ω 330 Ω to 1.1 kΩ (1.1 to 3.3) kΩ (3.3 to 11) kΩ (11 to 33) kΩ (33 to 110) kΩ (110 to 330) kΩ 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 330 MΩ to 1.1 GΩ	47 μΩ/Ω + 0.01 Ω 42 μΩ/Ω + 0.015 Ω 34 μΩ/Ω + 0.015 Ω 32 μΩ/Ω + 0.02 Ω 33 μΩ/Ω + 0.02 Ω 33 μΩ/Ω + 0.2 Ω 33 μΩ/Ω + 0.1 Ω 33 μΩ/Ω + 1 Ω 33 μΩ/Ω + 1 Ω 37 μΩ/Ω + 10 Ω 37 μΩ/Ω + 10 Ω 70 μΩ/Ω + 150 Ω 0.015 % + 0.25 kΩ 0.029 % + 2.5 kΩ 0.06 % + 3 kΩ 0.35 % + 0.1 MΩ 1.7 % + 0.5 MΩ	Fluke 5522A
Resistance – Measure ³	Up to 10 Ω (10 to 100) Ω 100 Ω to 100 kΩ 100 kΩ to 1 MΩ (1 to 10) MΩ (10 to 100) MΩ 100 MΩ to 1 GΩ	28 μΩ/Ω + 50 μΩ 18 μΩ/Ω + 0.5 mΩ 16 μΩ/Ω + 5 mΩ 26 μΩ/Ω + 2 Ω 68 μΩ/Ω + 100 Ω 0.59 % + 1 kΩ 0.6 % + 10 kΩ	HP 3458A
Capacitance – Generate ³ (0.19 to 3.3) nF (3.3 to 329.999) nF (0.33 to 3.3) μF (3.3 to 11) μF (11 to 33) μF (33 to 110) μF (110 to 330) μF (0.33 to 1.1) mF (1.1 to 3.3) mF (3.3 to 11) mF (11 to 33) mF (33 to 110) mF	10 Hz to 10 kHz 10 Hz to 1 kHz (10 to 600) Hz (10 to 150) Hz (10 to 120) Hz (10 to 80) Hz (10 to 50) Hz (10 to 20) Hz (6 to 10) Hz (2 to 10) Hz (0.6 to 10) Hz (0.2 to 10) Hz	1.9 % + 0.01 nF 0.44 % + 0.3 nF 0.48 % + 3 nF 0.48 % + 10 nF 0.50 % + 30 nF 0.67 % + 100 nF 0.76 % + 300 nF 0.72 % + 1 μF 0.73 % + 3 μF 0.71 % + 10 μF 1.1 % + 30 μF 1.5 % + 100 μF	Fluke 5522A

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
AC Voltage – Generate ³	(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 (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	1.1 mV/V + 6 μV 0.53 mV/V + 6 μV 0.55 mV/V + 6 μV 1.3 mV/V + 6 μV 4.1 mV/V + 12 μV 9.3 mV/V + 50 μV 0.39 mV/V + 8 μV 0.17 mV/V + 8 μV 0.19 mV/V + 8 μV 0.41 mV/V + 8 μV 0.93 mV/V + 32 μV 2.3 mV/V + 70 μV 0.38 mV/V + 50 μV 0.18 mV/V + 25 μV 0.22 mV/V + 50 μV 0.35 mV/V + 50 μV 0.81 mV/V + 130 μV 2.8 mV/V + 600 μV 0.43 mV/V + 650 μV 0.22 mV/V + 200 μV 0.31 mV/V + 600 μV 0.46 mV/V + 600 μV 1.1 mV/V + 1.6 mV	Fluke 5522A
AC Voltage – Generate ³	(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 to 1020) V 45 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.85 mV/V + 2 mV 0.86 mV/V + 6 mV 0.87 mV/V + 6 mV 0.89 mV/V + 6 mV 2.5 mV/V + 50 mV 8.2 mV/V + 10 mV 8.2 mV/V + 10 mV 8.2 mV/V + 10 mV	Fluke 5522A



Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
AC Voltage – Measure ³	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 10 mV to 100 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 300 kHz to 1 MHz (1 to 2) MHz (0.100 to 1) V (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 300 kHz to 1 MHz (1 to 2) MHz (1 to 10) V (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 300 kHz to 1 MHz (1 to 2) MHz (10 to 100) V (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 300 kHz to 1 MHz (1 to 2) MHz (100 to 700) V (1 to 40) Hz 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz	0.044 % + 3 μV 0.026 % + 1.1 μV 0.044 % + 1.1 μV 0.11 % + 1.1 μV 0.5 % + 1.1 μV 4 % + 2 μV 0.019 % + 4 μV 0.019 % + 2 μV 0.027 % + 2 μV 0.045 % + 2 μV 0.09 % + 2 μV 0.31 % + 0.01 mV 1 % + 0.01 mV 1.5 % + 0.01 mV 0.019 % + 0.04 mV 0.019 % + 0.02 mV 0.027 % + 0.02 mV 0.045 % + 0.02 mV 0.09 % + 0.02 mV 0.31 % + 0.1 mV 1 % + 0.1 mV 1.5 % + 0.1 mV 0.019 % + 0.4 mV 0.019 % + 0.2 mV 0.027 % + 0.2 mV 0.045 % + 0.2 mV 0.09 % + 0.2 mV 0.31 % + 1 mV 1 % + 1 mV 1.5 % + 1 mV 0.026 % + 2 μV 0.041 % + 2 μV 0.038 % + 2 μV 0.048 % + 2 μV 0.13 % + 2 μV V 0.4 % + 0.01 V 1.5 % + 0.01 V 0.05 % + 0.04 V 0.05 % + 0.02 V 0.07 % + 0.02 V 0.13 % + 0.02 V 0.3 % + 0.02 V	HP 3458A
AC Voltage – Measure ³	(1 to 28) kV 60 Hz	5.8 %	HP 34401A / Fluke 80k-40



Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
AC Current – Generate ³ 40 Hz to 1 kHz	(29 to 330) μ A 330 μ A to 3.3 mA (3.3 to 33) mA (33 mA to 330) mA 330 mA to 1.1 A (1.1 to 3) A (3 to 11) A (11 to 20.5) A	0.21 % + 0.1 μ A 0.13 % + 0.15 μ A 0.08 % + 2 μ A 0.08 % + 20 μ A 0.08 % + 100 μ A 0.09 % + 1 mA 0.13 % + 2 mA 0.13 % + 5 mA	Fluke 5522A
AC Current – Measure ³	Up to 100 μ A (10 to 20) Hz (20 to 45) Hz 45 Hz to 1 kHz 100 μ A 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 100 mA to 1 A (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 5 Hz (5 to 20) kHz (20 to 50) kHz	0.47 % + 0.03 pA 0.18 % + 0.03 pA 0.08 % + 0.03 pA 0.47 % + 20 μ A 0.18 % + 20 μ A 0.09 % + 20 μ A 0.04 % + 20 μ A 0.08 % + 20 μ A 0.47 % + 40 μ A 0.64 % + 150 μ A 0.62 % + 0.2 mA 0.25 % + 0.2 mA 0.13 % + 0.2 mA 0.16 % + 0.2 mA 0.46 % + 0.2 mA 1.5 % + 0.4 mA	HP 3458A
AC Current – Measure ³	1 A to 50 A 10 Hz to 20 kHz	0.32 %	Empro shunts
Oscilloscopes ³ – Vertical Deflection 1 kHz square wave into a 50 Ω load 1 kHz square wave into a 1 M Ω load Flatness Leveled Sine Wave 5 mV to 5.5 V ref @ 50 kHz BANDWIDTH Rise Time Time Interval	1 mV to 6.6 V _{pk-pk} 1 mV to 130 V _{pk-pk} 50 kHz to 100 MHz (100 to 300) MHz (300 to 600) MHz (600 to 1 100) MHz <300 ps 1 ns to 100 ms 100 ms to 5 s	0.9 % + 40 μ V 0.37 % + 40 μ V 2.6 % + 0.1 mV 2.8 % + 0.1 mV 5 % + 0.1 mV 6.2 % + 0.1 mV + 20 ps / -117 ps 3.1 μ s/s (32 + 1 000t) μ s/s	Fluke 5522A/SC1100

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Electrical Calibration of Thermocouple Indicators ³ –	Type E (-250 to -100) °C (-100 to 650) °C (650 to 1 000) °C	0.58 °C 0.2 °C 0.25 °C	Fluke 5522A
	Type J (-210 to -100) °C (-100 to 760) °C (760 to 1 200) °C	0.33 °C 0.23 °C 0.29 °C	
Electrical Calibration of Thermocouple Indicators ³ –	Type K (-200 to -100) °C (-100 to 120) °C (12C to 1 000) °C (1 000 to 1 372) °C	0.4 °C 0.23 °C 0.32 °C 0.47 °C	Fluke 5522A
	Type N (-200 to -100) °C (-100 to 410) °C (410 to 1 300) °C	0.47 °C 0.26 °C 0.32 °C	
	Type R (0 to 250) °C (250 to 1 000) °C (1 000 to 1 760) °C	0.66 °C 0.41 °C 0.47 °C	
	Type T (-250 to -150) °C (-150 to 0) °C (0 to 400) °C	0.74 °C 0.3 °C 0.22 °C	
Electrical Calibration of RTD Indicators ³ –	Pt 385,100 Ω (-200 °C to -80) °C (-80 °C to 0) °C (0 °C to 100) °C (100 °C to 300) °C (300 °C to 400) °C (400 °C to 630) °C (630 °C to 800) °C	0.58 °C 0.058 °C 0.081 °C 0.1 °C 0.12 °C 0.14 °C 0.27 °C	Fluke 5522A
	Pt 3926,100 Ω (-200 to -80) °C (-80 to 0) °C (0 to 100) °C (100 to 300) °C (300 to 400) °C (400 to 630) °C	0.07 °C 0.12 °C 0.081 °C 0.1 °C 0.12 °C 0.14 °C	
	Pt 3916,100 Ω (-200 to -190) °C (-190 to -80) °C (-80 to -0) °C (0 to 100) °C (100 to 260) °C (260 to 300) °C (300 to 400) °C (400 to 600) °C (600 to 630) °C	0.29 °C 0.047 °C 0.058 °C 0.07 °C 0.081 °C 0.093 °C 0.1 °C 0.12 °C 0.27 °C	

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
	Pt 385,200 Ω (-200 to -80) °C (-80 to 0) °C (0 to 100) °C (100 to 260) °C (260 to 300) °C (300 to 400) °C (400 to 600) °C (600 to 630) °C	0.047 °C 0.047 °C 0.047 °C 0.058 °C 0.14 °C 0.15 °C 0.16 °C 0.19 °C	
Electrical Calibration of RTD Indicators ³	Pt 385,500 Ω (-200 to -80) °C (-80 to 0) °C (0 to 100) °C (100 to 260) °C (260 to 300) °C (300 to 400) °C (400 to 600) °C (600 to 630) °C	0.048 °C 0.059 °C 0.059 °C 0.07 °C 0.093 °C 0.093 °C 0.11 °C 0.13 °C	Fluke 5522A
	Pt 385,1000 Ω (-200 to -80) °C (-80 to 0) °C (0 to 100) °C (100 to 260) °C (260 to 300) °C (300 to 400) °C (400 to 600) °C (600 to 630) °C	0.07 °C 0.037 °C 0.048 °C 0.059 °C 0.07 °C 0.082 °C 0.082 °C 0.27 °C	
	PtNi 385, 120 Ω (Ni120) (-80 to 0) °C (0 to 100) °C (100 to 260) °C	0.093 °C 0.093 °C 0.16 °C	
	Cu 427, 10 Ω [3] 100 °C to 260) °C	0.35 °C	

Electrical – RF/Microwave

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
RF Attenuation ³ –Measure (2.5 to 1 300) MHz	(0 to -10) dB (-11 to -20) dB (-21 to -30) dB (-31 to -40) dB (-41 to -50) dB (-51 to -60) dB (-61 to -70) dB (-71 to -80) dB (-81 to -90) dB (-91 to -100) dB (-101 to -110) dB (-111 to -120) dB	0.023 dB 0.033 dB 0.052 dB 0.052 dB 0.057 dB 0.069 dB 0.1 dB 0.1 dB 0.11 dB 0.12 dB 0.13 dB 0.27 dB	HP 8902A, HP 11722A

Electrical – RF/Microwave

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
RF Attenuation ³ –Measure (1.3 to 26.5) GHz	(0 to -10) dB (-11 to -20) dB (-21 to -30) dB (-31 to -40) dB (-41 to -50) dB (-51 to -60) dB (-61 to -70) dB (-71 to -80) dB (-81 to -90) dB (-91 to -100) dB	0.031 dB 0.031 dB 0.032 dB 0.034 dB 0.037 dB 0.04 dB 0.081 dB 0.13 dB 0.14 dB 0.16 dB	HP 8902A, HP 11792A
Amplitude Modulation ³ – Measure 150 kHz to 10 MHz (10 to 1300) MHz (1.3 to 26.5) GHz	(5 to 99) %Depth	5.3 %Depth % + 1 digit 4.1 %Depth + 1 digit 4.7 %Depth + 1 digit	HP 8902A
Frequency Modulation ³ – Measure (≤ 400 kHz)	250 kHz to 10 MHz 10 MHz to 26.5 GHz	3.3 % + 1 digit 2.6 % + 1 digit	HP 8902A
Phase Modulation ³ – Measure 200 Hz to 10 kHz	150 kHz to 10 MHz 10 MHz to 26.5 GHz	5.7 % + 1 digit 4.8 % + 1 digit	HP 8902A Opt 50
RF Power ³ – Measure	(-20 to 30) dBm 100 kHz to 2.6 GHz (0.1 to 26.5) GHz	3.6% 4.6 %	HP 8902A/HP 11722A 11792A
Power Meters ³	3 μW to 100 mW	0.32 %	HP 11683A
Distortion – Measure	20 Hz to 20 kHz (20 to 100) kHz	1.2 dB 2.3 dB	HP 8903B
Phase Angle	(1 to 65) Hz (65 to 500) Hz 500 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (10 to 30) kHz	0.14 % 0.3 % 0.61 % 2.9 % 5.8% 12%	Fluke 5522A

Mechanical

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Scales & Balances ³	(0.01 to 0.5) g (0.5 to 10) g (10 to 100) g	0.012 mg + 0.6R 0.058 mg + 0.6R 0.29 mg + 0.6R	Class 1 weights
	Up to 100 lb (100 to 200) lb (200 to 400) lb	6.2 g + 0.6R 9.3 g + 0.6R 26 g + 0.6R	Class F weights
Torque ³ – Measure	(10 to 100) ozf-in 50 lbf-in to 250 lbf-ft (250 to 1 000) lbf-ft	0.69 % 0.46 % 0.63 %	CDI 1001-0-DDT CDI 5000-ST CDI 2000-13-02

Mechanical

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Pressure ³	(0.2 to 50.5) psi (50 to 1 000) psi	0.0022 % 0.013 %	Ruska 2468A
	(-15 to 100) psi (100 to 500) psi (500 to 1 000) psi (1000 to 10 000) psi	0.09 psi 0.32 psi 0.79 psi 0.094 psi	Fluke 741B w/700PD6, 700G08, 700P08, 700P31
Force ³ –Tension and Compression	Up to 100 gf Up to 300 lbf	0.01 grams 0.086 %	Class 1 weights Class 7 weights

Thermodynamics

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Temperature ³ – Measure	(-25 to 350) °C	0.21 °C	Hart 1502 with 5622 PRT
Temperature ³ –Measuring Equipment	(-25 to 140) °C	0.23 °C	Hart 1502 with 5622 PRT and dry block
IR Temperature ³ –	(35 to 199) °C	0.75 °C	Hart 9130
Relative Humidity ³ – Measuring Equipment	11 % RH 33 % RH 75 % RH 97 % RH	1.2 % RH 1.1 % RH 1.3 % RH 2.8 % RH	Standard salts
Relative Humidity ³ – Measure	Up to 90% RH (90 to 97) % RH	1.8 % RH 2.8 % RH	Vaisalla HM141/HMP46

Time and Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Frequency – Measure	10 MHz 10 Hz to 26.5 GHz	6.1 parts in 10 ¹² 5.2 parts in 10 ¹⁰	HP 58503 A/B GPS /EIP548
Frequency ³ – Measuring Equipment	Up to 250 kHz 250 kHz to 3 GHz (3 to 26.5) GHz	8.2 parts in 10 ⁸ 6.6 parts in 10 ⁸ 2.9 parts in 10 ⁷	HP 3325A Opt 1 HP E4436B HP 8673G
Frequency ³ – Measure	10 Hz to 26.5 GHz	5.2 parts in 10 ⁶	EIP 548

Notes:

1. Calibration and Measurement Capabilities (Expanded Uncertainties) are based on approximately a 95% confidence interval, using a coverage of k=2.
2. This laboratory also offers field calibration services.
3. L = length in inches, D = diameter in inches
4. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2080.07.


 Vice President