

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc., has assessed the Laboratory of:

***Caltech, Inc.
103 Adanta Circle Clinton County Industrial Park
Albany, KY 42602***

(Hereinafter called the Organization) and hereby declares that Organization 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 (as outlined by the joint ISO-FLAC-IAF Communiqué dated January 2009):

***Laboratory and Field Calibration of Electrical, Thermodynamic,
Mechanical and Dimensional Instrumentation
(As detailed in the supplement)***

Such testing and/or calibration services shall only be offered at or from the address given above. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

The validity of this certificate is mandated through ongoing surveillance.

Tracy Szerszsen
President/Operations Manager

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
26555 Evergreen, Suite 1325
Southfield, Michigan 48076

Initial Accreditation Date:

June 17, 2003

Issue Date:

March 19, 2009

Expiration Date:

March 18, 2011

Accreditation No.:

59234

Certificate No.:

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Page No.:

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Certificate of Accreditation: Supplement

Caltech, Inc.
103 Adanta Circle
Clinton County Industrial Park
Albany, KY 42602

Accreditation is granted to this facility to perform the following calibrations:

CALIBRATION FIELD	MEASURED QUANTITY, INSTRUMENT OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	BEST MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)
Dimensional	Micrometers	0 cm to 30.48 cm (0 in to 12 in)	0.94 μ m (37 μ in)
		30.48 cm to 90.96 cm (12 in to 24 in)	1.016 μ m (40 μ in)
		90.96 cm to 91.44 cm (24 in to 36 in)	1.092 μ m (43 μ in)
	Calipers	Up to 90.96 cm (24 in)	6.38 μ m (251 μ in)
		90.96 cm to 101.6 cm (24 in to 40 in)	8.92 μ m (351 μ in)
	Cylindrical Pins/Plugs	Up to 20.32 cm (8 in)	0.39 μ m (15 μ in)
	Ring Gages (Plain)	0.152 4 cm to 20.32 cm (0.06 in to 8 in)	0.39 μ m (15 μ in)
	Ring Gages (Threaded)	Up to 20.32 cm (8 in)	0.39 μ m (15 μ in)
	Thread Plugs (PD/MD)	Up to 20.32 cm (8 in)	1.30 μ m (51 μ in)
	Indicators (Dial/Digital)	Up to 2.54 cm (1 in)	1.81 μ m (71 μ in)
		2.54 cm to 5.08 cm (1 in to 2 in)	1.27 μ m (50 μ in)
	Indicators, Test	Up to 2.54 cm (1 in)	0.72 μ m (28 μ in)
	Height Gages	Up to 101.6 cm (40 in)	12.96 μ m (510 μ in)
	Steel Rules	Up to 101.6 cm (40 in)	0.18 mm (0.007 in)
	Squares	Up to 91.44 cm (36 in)	0.59 μ m (23 μ in)
	Straight Edges	Up to 91.44 cm (36 in)	0.59 μ m (23 μ in)
	Parallels	Up to 91.44 cm (36 in)	1.45 μ m (57 μ in)
	Right Angles, Universal	Up to 91.44 cm (36 in)	1.45 μ m (57 μ in)
	Amplifiers with Probes	Up to 10.16 cm (4 in)	0.23 μ m (9 μ in)
	Gage Blocks	Up to 10.16 cm (4 in)	0.11 μ m (4 μ in)
		10.16 cm to 20.32 cm (4 in to 8 in)	0.31 μ m (12 μ in)
		20.32 cm to 90.96 cm (8 in to 24 in)	0.39 μ m (15 μ in)
	Protractors	0° to 90°	22 sec
	Levels	0° to 360°	23 μ in
	Angle Blocks	0" to 45"	5.8 arc sec
	Sine Bars/Plates	Parallelism 0 cm to 1.27 cm (0 in to 0.5 in)	0.56 μ m (22 μ in)
		Angle 0° to 45°	5.8 arc sec
	Bore Gages (2 point)	Up to 25.4 cm (10 in)	1.33 μ m (52 μ in)

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Dimensional (Continued)	Radius Gages	Up to 30.48 cm (12 in)	0.051 mm (0.002 in)
	Measuring Tapes	Up to 101.6 cm (40 in)	0.18 cm (0.007 in)
	Π Tapes		
	V Blocks	Up to 101.6 cm (40 in)	1.45 μm (57 μin)
	Surface Plates	Up to 1 525 mm (60 in)	0.54 μm (21 μin)
	Optical Comparators	Optical Length to 101.6 cm (40 in)	0.051 mm (0.002 in)
		Digital Indicator to 101.6 cm (40 in)	6.38 μm (251 μin)
		Angle 0° to 90°	22 sec
		Magnification 10 x to 100 x	8.99 μm (354 μin)
	3-D Point Coordinates	X Axis to 121.92 cm (48 in) Y Axis to 203.2 cm (80 in) Z Axis to 101.6 cm (40 in)	2.86 μm (112.5 μin) 2.86 μm (112.5 μin) 2.86 μm (112.5 μin)
2-D Measurements	Up to 203.2 cm (80 in)	2.86 μm (112.5 μin)	
Mechanical	Torque (Measure)	5.649 N m to 813.491 N m (0.5 in-lb to 600 ft-lb)	0.6% of reading
	Torque (Generation)	56.492 N m to 5 649.241 N m (5 in-lb to 500 in-lb)	0.041% initial value
		5 649.241 N m to 6 779.09 N m (500 in-lb to 600 ft-lb)	0.041% initial value
	Force	Up to 45.359 kg (100 lb)	1.94 g
	Vacuum	Atm to 91.432 kPa (27 inHg)	0.028% of Reading
	Pressure (Pneumatic)	Up to 2 068.427 kPa (300 psig)	0.051% of Reading
	Pressure (Hydraulic)	Up to 68 947.573 kPa (10 000 psig)	0.11% of Reading
	Durometers Types A, B, C and D	0 Units to 100 Units	1.0 Unit
	Tachometer (Optical)	0 RPM to 99 999 RPM	0.002 5% initial value
	Tachometer (Mechanical)	0 RPM to 600 RPM	0.003 5% initial value
	Hardness Tester (Rockwell) A, B, C and 15N	0 HU to 100 HU Per ASTM E18	1.0 HU
	Air Flow	0 LPM to 50 LPM	0.51% of Reading
	60° Gloss (Source)	Semi-Gloss 0 GU to 100 GU	1.2 GU
		High-Gloss 0 GU to 100 GU	1.2 GU

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Mass	Analytical Balances	1 mg to 5 kg	5.73 mg
	Scales (Bench or Floor)	Up to 226.796 kg (500 lb)	9.7 g
		226.796 kg to 2 267.962 kg (500 lb to 5 000 lb)	9.7 g
Thermodynamic	Thermocouple (Type B) Electrical Simulation	600°C to 800°C	0.44°C
		800°C to 1 000°C	0.34°C
		1 000°C to 1 550°C	0.30°C
		1 550°C to 1 820°C	0.33°C
	Thermocouple (Type C) Electrical Simulation	0°C to 150°C	0.30°C
		150°C to 650°C	0.26°C
		650°C to 1 000°C	0.31°C
		1 000°C to 1 800°C	0.50°C
	Thermocouple (Type E) Electrical Simulation	1 800°C to 2 316°C	0.84°C
		-250°C to -100°C	0.50°C
		-100°C to -25°C	0.16°C
		-25°C to 350°C	0.14°C
		350°C to 650°C	0.16°C
	Thermocouple (Type J) Electrical Simulation	650°C to 1 000°C	0.21°C
		-210°C to -100°C	0.27°C
		-100°C to -30°C	0.16°C
		-30°C to 150°C	0.14°C
		150°C to 760°C	0.17°C
	Thermocouple (Type K) Electrical Simulation	760°C to 1 200°C	0.23°C
		-200°C to -100°C	0.33°C
		-100°C to -25°C	0.18°C
		-25°C to 120°C	0.16°C
		120°C to 1 000°C	0.26°C
	Thermocouple (Type L) Electrical Simulation	1 000°C to 1 372°C	0.40°C
-200°C to -100°C		0.37°C	
-100°C to 800°C		0.26°C	
		800°C to 900°C	0.17°C

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Thermodynamic (Continued)	Thermocouple (Type N) Electrical Simulation	-200°C to -100°C	0.40°C
		-100°C to -25°C	0.22°C
		-25°C to 120°C	0.19°C
		120°C to 410°C	0.18°C
		410°C to 1 300°C	0.27°C
	Thermocouple (Type R) Electrical Simulation	0°C to 250°C	0.57°C
		250°C to 400°C	0.37°C
		400°C to 1 000°C	0.33°C
		1 000°C to 1 767°C	0.40°C
	Thermocouple (Type S) Electrical Simulation	0°C to 250°C	0.47°C
		250°C to 400°C	0.36°C
		400°C to 1 000°C	0.37°C
		1 000°C to 1 767°C	0.46°C
	Thermocouple (Type T) Electrical Simulation	-250°C to -150°C	0.63°C
		-150°C to 0°C	0.24°C
		0°C to 120°C	0.16°C
		120°C to 400°C	0.14°C
	Thermocouple (Type U) Electrical Simulation	-200°C to 0°C	0.56°C
		0°C to 600°C	0.27°C
	RTD (Pt 385) 100 Ω Electrical Simulation	-200°C to -80 °C	0.05°C
		-80°C to 0°C	0.05°C
		0°C to 100°C	0.07°C
		100°C to 300°C	0.09°C
		300°C to 400°C	0.10°C
		400°C to 630°C	0.12°C
		630°C to 800°C	0.23°C
	RTD (Pt 3926) 100 Ω Electrical Simulation	-200°C to -80 °C	0.05°C
-80°C to 0°C		0.05°C	
0°C to 100°C		0.07°C	
100°C to 300°C		0.09°C	
300°C to 400°C		0.10°C	
400°C to 630°C		0.12°C	

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Thermodynamic (Continued)	RTD (Pt 3916) 100 Ω Electrical Simulation	-200°C to -190 °C	0.25°C
		-190°C to -80°C	0.04°C
		-80°C to 0°C	0.05°C
		0°C to 100°C	0.06°C
		100°C to 260°C	0.07°C
		260°C to 300°C	0.09°C
		300°C to 400°C	0.10°C
		400°C to 600°C	0.12°C
	600°C to 630°C	0.23°C	
	RTD (Pt 385) 200 Ω Electrical Simulation	-200°C to -80 °C	0.04°C
		-80°C to 0°C	0.04°C
		0°C to 100°C	0.04°C
		100°C to 260°C	0.05°C
		260°C to 300°C	0.12°C
		300°C to 400°C	0.13°C
		400°C to 600°C	0.14°C
		600°C to 630°C	0.16°C
	RTD (Pt 385) 500 Ω Electrical Simulation	-200°C to -80 °C	0.04°C
		-80°C to 0°C	0.05°C
		0°C to 100°C	0.05°C
		100°C to 260°C	0.06°C
		260°C to 300°C	0.08°C
		300°C to 400°C	0.08°C
		400°C to 600°C	0.09°C
		600°C to 630°C	0.11°C
	RTD (Pt 385) 1000 Ω Electrical Simulation	-190°C to -80 °C	0.03°C
		-80°C to 0°C	0.03°C
		0°C to 100°C	0.04°C
		100°C to 260°C	0.05°C
		260°C to 300°C	0.06°C
		300°C to 400°C	0.07°C
		400°C to 600°C	0.07°C
600°C to 630°C		0.23°C	

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Thermodynamic (Continued)	RTD (Ni 385) 120 Ω Electrical Simulation	-80°C to 0°C	0.08°C
		0°C to 100°C	0.08°C
		100°C to 260°C	0.14°C
	RTD (Cu 427) 10 Ω	-100°C to 260°C	0.30°C
	Temperature (Measure)	-200°C to 600 °C	0.013°C
	Temperature (Source)	90°C to 300 °C	1.06°C
		0°C Icepoint Reference	0.013°C
	Infrared Thermometers	Ambient to 300°C	1.23°C
	Humidity	10% RH to 90% RH	2.0% RH
	Electrical DC/Low Frequency	DC Voltage (Source)	0 mV to 330 mV
330 mV to 3.3 V			0.005% of rdg + 5 μ V
3.3 V to 33 V			0.005% of rdg + 50 μ V
33 V to 330 V			0.0055% of rdg + 500 μ V
330 V to 1 000 V			0.005 5%of rdg + 1 500 μ V
DC Current (Source)		0 mA to 3.3 mA	0.013% of rdg + 0.05 μ A
		3.3 mA to 33 mA	0.01% of rdg + 0.25 μ A
		33 mA to 330 mA	0.01% of rdg + 3.3 μ A
		330 mA to 2.2 A	0.03% of rdg + 44 μ A
		2.2 A to 11 A	0.06% of rdg + 330 μ A
Resistance (Source)		0 Ω to 11 Ω	0.012% of rdg + 0.008 Ω
		11 Ω to 33 Ω	0.012% of rdg + 0.015 Ω
		33 Ω to 110 Ω	0.009% of rdg + 0.015 Ω
		110 Ω to 330 Ω	0.009% of rdg + 0.015 Ω
		330 Ω to 1.1 k Ω	0.009% of rdg + 0.06 Ω
		1.1 k Ω to 3.3 k Ω	0.009% of rdg + 0.06 Ω
		3.3 k Ω to 11 k Ω	0.009% of rdg + 0.6 Ω
		11 k Ω to 33 k Ω	0.009% of rdg + 0.6 Ω
		33 k Ω to 110 k Ω	0.011% of rdg + 6 Ω
		110 k Ω to 330 k Ω	0.012% of rdg + 6 Ω
		330 k Ω to 1.1 M Ω	0.015% of rdg + 55 Ω
1.1 M Ω to 3.3 M Ω		0.015% of rdg + 55 Ω	
3.3 M Ω to 11 M Ω		0.06% of rdg + 55 Ω	

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Electrical DC/Low Frequency (Continued)	Resistance (Source) (Continued)	11 M Ω to 33 M Ω	0.1% of rdg+550 Ω
		33 M Ω to 110 M Ω	0.5% of rdg + 5 500 Ω
		110 M Ω to 330 M Ω	0.5% of rdg + 16 500 Ω
		330 M Ω to 100 G Ω	1% of rdg
	AC Voltage (Source) True RMS 1 mV to 33 mV	10 Hz to 45 Hz	0.35% of rdg + 20 μ V
		45 Hz to 10 kHz	0.15% of rdg + 20 μ V
		10 kHz to 20 kHz	0.20% of rdg + 20 μ V
		20 kHz to 50 kHz	0.25% of rdg + 20 μ V
		50 kHz to 100 kHz	0.35% of rdg + 20 μ V
		100 kHz to 500 kHz	1% of rdg + 60 μ V
	AC Voltage (Source) True RMS 33 mV to 330 mV	10 Hz to 45 Hz	0.25% of rdg + 50 μ V
		45 Hz to 10 kHz	0.05% of rdg + 20 μ V
		10 kHz to 20 kHz	0.1% of rdg + 20 μ V
		20 kHz to 50 kHz	0.16% of rdg + 40 μ V
		50 kHz to 100 kHz	0.24% of rdg + 170 μ V
		100 kHz to 500 kHz	0.7% of rdg + 330 μ V
	AC Voltage (Source) True RMS 0.33 V to 3.3 V	10 Hz to 45 Hz	0.15% of rdg + 250 μ V
		45 Hz to 10 kHz	0.03% of rdg + 60 μ V
		10 kHz to 20 kHz	0.08% of rdg + 60 μ V
		20 kHz to 50 kHz	0.14% of rdg + 300 μ V
		50 kHz to 100 kHz	0.24% of rdg + 1 700 μ V
		100 kHz to 500 kHz	0.5% of rdg + 3 300 μ V
	AC Voltage (Source) True RMS 3.3 V to 33 V	10 Hz to 45 Hz	0.15% of rdg + 2 500 μ V
		45 Hz to 10 kHz	0.04% of rdg + 600 μ V
10 kHz to 20 kHz		0.08% of rdg + 2 600 μ V	
20 kHz to 50 kHz		0.19% of rdg + 5 000 μ V	
50 kHz to 100 kHz		0.24% of rdg + 17 000 μ V	
AC Voltage (Source) True RMS 3.3 V to 33 V	10 Hz to 45 Hz	0.05% of rdg + 80 mV	
	45 Hz to 10 kHz	0.20% of rdg + 100 mV	
	10 kHz to 20 kHz	0.20% of rdg + 500 mV	

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Electrical DC/Low Frequency (Continued)	AC Voltage (Source) True RMS 33 V to 330 V	45 Hz to 1 kHz	0.05% of rdg + 6.6 mV
		1 kHz to 5 kHz	0.08% of rdg + 15 mV
		5 kHz to 10 kHz	0.09% of rdg + 33 mV
	AC Voltage (Source) True RMS 330 V to 1000 V	45 Hz to 1 kHz	0.05% of rdg + 80 mV
		1 kHz to 5 kHz	0.20% of rdg + 100 mV
		5 kHz to 10 kHz	0.20% of rdg + 500 mV
	AC Current (Source) 29 μ A to 330 μ A	10 Hz to 20 Hz	0.25% of rdg + 0.15 μ A
		20 Hz to 45 Hz	0.125% of rdg + 0.15 μ A
		45 Hz to 1 kHz	0.125% of rdg + 0.15 μ A
		1 kHz to 5 kHz	0.4% of rdg + 0.15 μ A
		5 kHz to 10 kHz	1.25% of rdg + 0.15 μ A
	AC Current (Source) 0.33 mA to 3.3 mA	10 Hz to 20 Hz	0.2% of rdg + 0.3 μ A
		20 Hz to 45 Hz	0.1% of rdg + 0.3 μ A
		45 Hz to 1 kHz	0.1% of rdg + 0.3 μ A
		1 kHz to 5 kHz	0.2% of rdg + 0.3 μ A
		5 kHz to 10 kHz	0.6% of rdg + 0.3 μ A
	AC Current (Source) 3.3 mA to 33 mA	10 Hz to 20 Hz	0.2% of rdg + 3 μ A
		20 Hz to 45 Hz	0.1% of rdg + 3 μ A
		45 Hz to 1 kHz	0.09% of rdg + 3 μ A
		1 kHz to 5 kHz	0.2% of rdg + 3 μ A
5 kHz to 10 kHz		0.6% of rdg + 3 μ A	
AC Current (Source) 33 mA to 330 mA	10 Hz to 20 Hz	0.2% of rdg + 30 μ A	
	20 Hz to 45 Hz	0.1% of rdg + 30 μ A	
	45 Hz to 1 kHz	0.09% of rdg + 30 μ A	
	1 kHz to 5 kHz	0.2% of rdg + 30 μ A	
	5 kHz to 10 kHz	0.6% of rdg + 30 μ A	
AC Current (Source) 0.33 A to 2.2 A	10 Hz to 20 Hz	0.2% of rdg + 300 μ A	
	45 Hz to 1 kHz	0.1% of rdg + 300 μ A	
	1 kHz to 5 kHz	0.75% of rdg + 300 μ A	
AC Current (Source) 2.2 A to 11 A	45 Hz to 65 Hz	0.06% of rdg + 2 000 μ A	
	65 Hz to 500 Hz	0.1% of rdg + 2 000 μ A	
	500 Hz to 1 kHz	0.33% of rdg + 2 000 μ A	

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Electrical DC/Low Frequency (Continued)	AC Current (Source) 11 A to 110 A	45 Hz to 440 Hz	0.6% of rdg + 0.5 A
	AC Current (Source) 110 A to 550 A	45 Hz to 65 Hz	0.6% of rdg + 0.7 A
	Capacitance (Source) 50 Hz to 1000 Hz	0.19 nF to 0.4 nF	0.5% of rdg + 0.01 nF
		0.4 nF to 1.1 nF	0.5% of rdg + 0.01 nF
		1.1 nF to 3.3 nF	0.5% of rdg + 0.01 nF
		3.3 nF to 11 nF	0.5% of rdg + 0.01 nF
		11 nF to 33 nF	0.25% of rdg + 0.1 nF
		33 nF to 110 nF	0.25% of rdg + 0.1 nF
		110 nF to 330 nF	0.25% of rdg + 0.3 nF
		0.33 μ F to 1.1 μ F	0.25% of rdg + 1 nF
	Capacitance (Source) 50 Hz to 400 Hz	1.1 μ F to 3.3 μ F	0.35% of rdg + 3 nF
		3.3 μ F to 11 μ F	0.35% of rdg + 10 nF
		11 μ F to 33 μ F	0.4% of rdg + 30 nF
		33 μ F to 110 μ F	0.5% of rdg + 100 nF
		110 μ F to 330 μ F	0.7% of rdg + 300 nF
	Phase Angle (Source) 0° to 180°	0.33 mF to 1.1 mF	1% of rdg + 300 nF
		10 Hz to 65 Hz	0.15° of rdg
		65 Hz to 500 Hz	0.9° of rdg
		500 Hz to 1 kHz	2.0° of rdg
		1 kHz to 5 kHz	6.0° of rdg
	DC Power (Source) 33 mV to 1020 V	5 kHz to 10 kHz	10.0° of rdg
		3.3 mA to 9 mA	0.04% of rdg
		9 mA to 33 mA	0.03% of rdg
		33 mA to 90 mA	0.04% of rdg
		90 mA to 330 mA	0.03% of rdg
		0.33 A to 0.9 A	0.08% of rdg
		0.9 A to 2.2 A	0.06% of rdg
		2.2 A to 4.5 A	0.12% of rdg
	4.5 A to 11 A	0.09% of rdg	

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Electrical DC/Low Frequency (Continued)	DC Voltage (Measure)	0 mV to 100 mV	0.005 0% of rdg + 0.003 5% of range
		0.1 V to 1 V	0.004 0% of rdg + 0.000 7% of range
		1 V to 10 V	0.003 5% of rdg + 0.000 5% of range
		10 V to 100 V	0.004 5% of rdg + 0.000 6% of range
		100 V to 1 000 V	0.004 5% of rdg + 0.001 0% of range
		1 kV to 5 kV	1.05% of rdg
	DC Current (Measure)	0 mA to 10 mA	0.05% of rdg + 0.02% of range
		10 mA to 100 mA	0.05% of rdg + 0.005% of range
		0.1 A to 1 A	0.1% of rdg + 0.01% of range
		1 A to 3 A	0.12% of rdg + 0.02% of range
		3 A to 10 A	0.2% of rdg + 1 digit
	Resistance (Measure)	0 Ω to 100 Ω	0.01% of rdg + 0.004% of range
		0.1 k Ω to 1 k Ω	0.01% of rdg + 0.001% of range
		1 k Ω to 10 k Ω	0.01% of rdg + 0.001% of range
		10 k Ω to 100 k Ω	0.01% of rdg + 0.001% of range
		100 k Ω to 1 M Ω	0.01% of rdg + 0.001% of range
		1 M Ω to 10 M Ω	0.04% of rdg + 0.001% of range
	AC Voltage (Measure)	0 Ω to 100 Ω	0.01% of rdg + 0.004% of range
		0.1 k Ω to 1 k Ω	0.01% of rdg + 0.001% of range
		1 k Ω to 10 k Ω	0.01% of rdg + 0.001% of range
		10 k Ω to 100 k Ω	0.01% of rdg + 0.001% of range
		100 k Ω to 1 M Ω	0.01% of rdg + 0.001% of range
		1 M Ω to 10 M Ω	0.04% of rdg + 0.001% of range
		10 M Ω to 100 M Ω	0.8% of rdg + 0.01% of range
	AC Voltage (Measure) 0 mV to 100 mV	3 Hz to 5 Hz	1.0% of rdg + 0.03% of range
		5 Hz to 10 Hz	0.35% of rdg + 0.03% of range
		10 kHz to 20 kHz	0.06% of rdg + 0.03% of range
20 kHz to 50 kHz		0.12% of rdg + 0.05% of range	
50 kHz to 100 kHz		0.6% of rdg + 0.08% of range	
100 kHz to 300 kHz		4.0% of rdg + 0.5% of range	

Certificate of Accreditation: Supplement

Caltech, Inc.
103 Adanta Circle
Clinton County Industrial Park
Albany, KY 42602

Accreditation is granted to this facility to perform the following calibrations:

CALIBRATION FIELD	MEASURED QUANTITY, INSTRUMENT OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	BEST MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)
Electrical DC/Low Frequency (Continued)	AC Voltage (Measure) 750 V to 1 000 V	50 Hz to 100 Hz	0.7% of rdg + 2 digits
	AC Current (Measure) 0 A to 1 A	3 Hz to 5 Hz	1.0% of rdg + 0.04% of range
		5 Hz to 10 Hz	0.3% of rdg + 0.04% of range
		10 Hz to 5 kHz	0.1% of rdg + 0.04% of range
	AC Current (Measure) 1 A to 3 A	3 Hz to 5 Hz	1.0% of rdg + 0.04% of range
		5 Hz to 10 Hz	0.3% of rdg + 0.04% of range
		10 Hz to 5 kHz	0.1% of rdg + 0.04% of range
	AC Current (Measure) 50 Hz to 10 kHz	3 A to 4 A	1.0% of rdg + 2 digits
		4 A to 10 A	1.0% of rdg + 2 digits
	Time/Frequency	Frequency (Measure)	Up to 1.2 GHz
1.2 GHz to 18 GHz			1×10^{-11} GHz
Frequency (Source)		Up to 10 kHz	0.002 5% iv
		10 kHz to 990 MHz @ 10 MHz	0.000 2% 3×10^{-9} MHz
Time Internal		Up to 24 h	3×10^{-9} h
Chemical	pH/ORP	4, 7 and 10 pH	0.02 pH Units
	Conductivity	0 μ mh to 10 000 μ mh	1.0% of rdg