



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Stratatek Test & Measurement Ltd.
101 Amber St. Unit 18-20
Markham, ON L3R 3B2
(and satellite location as shown on the scope)

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.

Jason Stine, Vice President

Expiry Date: 01 December 2026

Certificate Number: AC-3331



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

Stratatek Test & Measurement Ltd.

101 Amber St. Unit 18-20
Markham, ON L3R 3B2

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CALIBRATION

ISO/IEC 17025 Accreditation Granted: **11 December 2025**

Certificate Number: **AC-3331**

Certificate Expiry Date: **01 December 2026**

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current Measure ¹	10 μ A to 10 mA		Comparison to Fluke A40 AC Current Shunts with 5790A
	5 Hz to 100 kHz	81 μ A/A	
	(10 to 20) mA		
	5 Hz to 100 kHz	81 μ A/A	
	(20 to 200) mA		
	5 Hz to 100 kHz	102 μ A/A	
	200 mA to 2 A		
AC Current Measure ¹	5 Hz to 50 kHz	113 μ A/A	Comparison to Holt HCS1 20A with Fluke 5790A
	200 mA to 2 A		
	50 kHz to 100 kHz	207 μ A/A	
	(2 to 10) A		
	(10 to 60) Hz	136 μ A/A	
	(0.06 to 1) kHz	136 μ A/A	
	(1 to 100) kHz	142 μ A/A	
AC Current Measure ¹	(10 to 20) A		Comparison to Holt HCS1 100A with Fluke 5790A
	(10 to 60) Hz	157 μ A/A	
	(0.06 to 1) kHz	157 μ A/A	
	(1 to 100) kHz	197 μ A/A	
	20A to 100A		
AC Current Measure ¹	(10 to 60) Hz	187 μ A/A	
	(0.06 to 100) kHz	277 μ A/A	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current Generate ¹	10 μ A to 10 mA 5 Hz to 100 kHz	81 μ A/A	Comparison to Fluke A40 AC Current Shunts with Fluke 5700A-EP calibrator and Fluke 5725A Amplifier
	(10 to 20) mA 5 Hz to 100 kHz	81 μ A/A	
	(20 to 200) mA 5 Hz to 100 kHz	0.1 mA/A	
	200 mA to 2 A 5 Hz to 50 kHz	0.11 mA/A	
	200 mA to 2 A 50 kHz to 100 kHz	0.21 mA/A	
AC Current Generate ¹	(2 to 10) A (10 to 60) Hz	136 μ A/A	Comparison to Holt HCS1 20A with Fluke 5700A-EP calibrator and Fluke 5725A Amplifier
	(0.06 to 1) kHz	136 μ A/A	
	(1 to 10) kHz	142 μ A/A	
AC Current Generate ¹	(10 to 20) A (15 to 60) Hz	157 μ A/A	Comparison to Holt HCS1 20A with Meatest 9010+ Calibrator
	(0.06 to 1) kHz	157 μ A/A	
AC Current Generate ¹	(2A to 100) A (1 to 60) Hz	187 μ A/A	Comparison to Holt HCS1 100A with Fluke 5700A-EP Valhalla 2555A AC/DC Transconductance Amplifier
	(0.06 to 1) kHz	277 μ A/A	
DC Current Measure ¹	0.1 nA to 10 mA	8 μ A/A	Comparison to Fluke 742A Shunts, Guildline 9230A, Holt HCS1 100A, 500A Current shunt
	(10 to 20) mA	9 μ A/A	
	(20 to 100) mA	9 μ A/A	
	(100 to 500) mA	10 μ A/A	
	(0.5 to 10) A	18 μ A/A	
	(10 to 20) A	19 μ A/A	
	(20 to 30) A	21 μ A/A	
	(30 to 100) A	166 μ A/A	
	(100 to 500) A	170 μ A/A	
DC Current Generate ¹	0.1 nA to 10 mA	8 μ A/A	Comparison to Fluke 742A Shunts
	(10 to 20) mA	9 μ A/A	
	(20 to 100) mA	9 μ A/A	
	(100 to 500) mA	10 μ A/A	
DC Current Generate ¹	(0.5 to 10) A	18 μ A/A	Comparison to Fluke 5700A-EP calibrator, Guildline 9230A, Holt HCS1 100A, 500A Shunt
	(10 to 20) A	19 μ A/A	
	(20 to 30) A	21 μ A/A	
	(30 to 100) A	166 μ A/A	
	(100 to 500) A	170 μ A/A	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current Generate Clamp-On Non-Toroidal ¹	(11 to 275) A (275 to 550) A	0.41 % of generated current 0.42 % of generated current	Comparison to Fluke 5700A-EP Calibrator, Fluke 5725A Amplifier, Meatest 140-50 Coil
	(550 to 1 025) A (105 to 1 500) A	0.4 % of generated current 0.41 % of generated current	Comparison to Meatest 9010+ Calibrator with Meatest 140-50 coil
	(1 500 to 2 500) A	0.4 % of generated current	Comparison to Valhalla 2555A with Meatest 151-25 coil
AC Current Generate Clamp-On Non-Toroidal ¹	(11 to 275) A (45 to 440) Hz	0.25 % of generated current	Comparison to Fluke 5700A-EP calibrator, Fluke
AC Current Generate Clamp-On Non-Toroidal ¹	(275 to 550) A (45 to 440) Hz	0.32 % of generated current	5725A Amplifier Meatest 140-50 coil
AC Current Generate Clamp-On Non-Toroidal ¹	(550 to 1 025) A 15 Hz to 1 kHz	0.34 % of generated current	Comparison to Meatest 9010+Calibrator with Meatest 140-50 coil
AC Current Generate Clamp-On Non-Toroidal ¹	(1 500-2 500) A 15 Hz to 1 kHz	0.36 % of generated current	Comparison to Valhalla 2555A with Meatest 151-25 Coil
Effective Current Transfer Ratio ^{1,2} DC Current	10 Turn Coil 25 Turn Coil 50 Turn Coil	0.39 % of ratio 0.4 % of ratio 0.41 % of ratio	Comparison to Custom CT with Fluke 8508A
Effective Current Transfer Ratio ^{1,2} AC Current	(50 to 400) Hz 10 Turn Coil 25 Turn Coil 50 Turn Coil	0.23 % of ratio 0.25 % of ratio 0.32 % of ratio	Comparison to Custom CT with Fluke 5790A
AC Voltage Measure/Generate ¹	Up to 2.2 mV (10 to 20) Hz (20 to 40) Hz 40 Hz to 20 kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (300 to 500) kHz 500 kHz to 1 MHz	130 μ V/V + 1.3 μ V 77 μ V/V + 1.4 μ V 58 μ V/V + 1.4 μ V 86 μ V/V + 2 μ V 95 μ V/V + 2.5 μ V 242 μ V/V + 4 μ V 0.73 mV/V + 8 μ V 2.8 mV/V + 8 μ V	Comparison to Fluke 5790A with Fluke 5700A-EP Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage Measure/Generate ¹	(2.2 to 7) mV		Comparison to Fluke 5790A with Fluke 5700A-EP Calibrator
	(10 to 20) Hz	97 $\mu\text{V/V} + 1.3 \mu\text{V}$	
	(20 to 40) Hz	40 $\mu\text{V/V} + 1.4 \mu\text{V}$	
	40 Hz to 20 kHz	46 $\mu\text{V/V} + 1.3 \mu\text{V}$	
	(20 to 50) kHz	16 $\mu\text{V/V} + 2 \mu\text{V}$	
	(50 to 100) kHz	58 $\mu\text{V/V} + 2.5 \mu\text{V}$	
	(100 to 300) kHz	161 $\mu\text{V/V} + 3.9 \mu\text{V}$	
	(300 to 500) kHz	0.5 mV/V + 8 μV	
	500 kHz to 1 MHz	2 mV/V + 8 μV	
	(7 to 22) mV		
	(10 to 20) Hz	92 $\mu\text{V/V} + 1.2 \mu\text{V}$	
	(20 to 40) Hz	54 $\mu\text{V/V} + 1.2 \mu\text{V}$	
	40 Hz to 20 kHz	49 $\mu\text{V/V} + 1.3 \mu\text{V}$	
	(20 to 50) kHz	47 $\mu\text{V/V} + 2.1 \mu\text{V}$	
	(50 to 100) kHz	73 $\mu\text{V/V} + 2.6 \mu\text{V}$	
	(100 to 300) kHz	117 $\mu\text{V/V} + 4 \mu\text{V}$	
	(300 to 500) kHz	0.4 mV/V + 8 μV	
	500 kHz to 1 MHz	1.5 mV/V + 8 μV	
	(22 to 70) mV		
	(10 to 20) Hz	97 $\mu\text{V/V} + 1.6 \mu\text{V}$	
	(20 to 40) Hz	56 $\mu\text{V/V} + 1.5 \mu\text{V}$	
	40 Hz to 20 kHz	31 $\mu\text{V/V} + 2.4 \mu\text{V}$	
	(20 to 50) kHz	43 $\mu\text{V/V} + 3.3 \mu\text{V}$	
	(50 to 100) kHz	101 $\mu\text{V/V} + 3.5 \mu\text{V}$	
	(100 to 300) kHz	0.2 mV/V + 6 μV	
	(300 to 500) kHz	0.4 mV/V + 8 μV	
	500 kHz to 1 MHz	1 mV/V + 9 μV	
	(70 to 220) mV		
	(10 to 20) Hz	70 $\mu\text{V/V} + 1.7 \mu\text{V}$	
	(20 to 40) Hz	32 $\mu\text{V/V} + 1.6 \mu\text{V}$	
	40 Hz to 20 kHz	28 $\mu\text{V/V} + 1.6 \mu\text{V}$	
	(20 to 50) kHz	30 $\mu\text{V/V} + 2 \mu\text{V}$	
	(50 to 100) kHz	65 $\mu\text{V/V} + 2.7 \mu\text{V}$	
	(100 to 300) kHz	138 $\mu\text{V/V} + 4.5 \mu\text{V}$	
	(300 to 500) kHz	0.3 mV/V + 9 μV	
	500 kHz to 1 MHz	1 mV/V + 9 μV	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage Measure/Generate ¹	(220 to 700) mV		Comparison to Fluke 5790A with Fluke 5700A-EP Calibrator
	(10 to 20) Hz	66 $\mu\text{V/V}$ + 2.1 μV	
	(20 to 40) Hz	34 $\mu\text{V/V}$ + 2.4 μV	
	40 Hz to 20 kHz	25 $\mu\text{V/V}$ + 1.9 μV	
	(20 to 50) kHz	25 $\mu\text{V/V}$ + 2.3 μV	
	(50 to 100) kHz	55 $\mu\text{V/V}$ + 3.1 μV	
	(100 to 300) kHz	126 $\mu\text{V/V}$ + 5.1 μV	
	(300 to 500) kHz	0.3 mV/V + 8.5 μV	
	500 kHz to 1 MHz	1 mV/V + 9.7 μV	
	(0.7 to 2.2) V		
	(10 to 20) Hz	65 $\mu\text{V/V}$	
	(20 to 40) Hz	29 $\mu\text{V/V}$	
	40 Hz to 20 kHz	22 $\mu\text{V/V}$	
	(20 to 50) kHz	24 $\mu\text{V/V}$	
	(50 to 100) kHz	51 $\mu\text{V/V}$	
	(100 to 300) kHz	0.12 mV/V	
	(300 to 500) kHz	0.23 mV/V	
	500 kHz to 1 MHz	0.91 mV/V	
	(2.2 to 7) V		
	(10 to 20) Hz	68 $\mu\text{V/V}$	
	(20 to 40) Hz	30 $\mu\text{V/V}$	
	40 Hz to 20 kHz	23 $\mu\text{V/V}$	
	(20 to 50) kHz	27 $\mu\text{V/V}$	
	(50 to 100) kHz	64 $\mu\text{V/V}$	
	(100 to 300) kHz	0.15 mV/V	
	(300 to 500) kHz	0.38 mV/V	
	500 kHz to 1 MHz	1.2 mV/V	
	(7 to 22) V		
	(10 to 20) Hz	66 $\mu\text{V/V}$	
	(20 to 40) Hz	30 $\mu\text{V/V}$	
	40 Hz to 20 kHz	23 $\mu\text{V/V}$	
	(20 to 50) kHz	27 $\mu\text{V/V}$	
	(50 to 100) kHz	65 $\mu\text{V/V}$	
	(100 to 300) kHz	0.15 mV/V	
	(300 to 500) kHz	0.38 mV/V	
	500 kHz to 1 MHz	1.2 mV/V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage Measure/Generate ¹	(22 to 70) V (10 to 20) Hz (20 to 40) Hz 40 Hz to 20 kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (300 to 500) kHz 500 kHz to 1 MHz (70 to 220) V (10 to 20) Hz (20 to 40) Hz 40 Hz to 20 kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (300 to 500) kHz	66 μ V/V 32 μ V/V 26 μ V/V 28 μ V/V 69 μ V/V 0.15 mV/V 0.39 mV/V 1.2 mV/V 71 μ V/V 37 μ V/V 28 μ V/V 36 μ V/V 71 μ V/V 0.17 mV/V 0.48 mV/V	Comparison to Fluke 5790A with Fluke 5700A-EP Calibrator
AC Voltage Measure/Generate ¹	(220 to 700) V (10 to 20) Hz (20 to 40) Hz 40 Hz to 20 kHz (20 to 30) kHz (700 to 1 000) V (10 to 20) Hz (20 to 40) Hz 40 Hz to 20 kHz (20 to 30) kHz	65 μ V/V 37 μ V/V 28 μ V/V 111 μ V/V 67 μ V/V 41 μ V/V 31 μ V/V 113 μ V/V	Comparison to Fluke 5790A with Fluke 5700A-EP Calibrator Fluke 5725A Amplifier (>220 V generate only up to 30 kHz only)
AC Voltage Generate ¹	(1 000 to 1 100) V 40 Hz to 1 kHz (1 to 20) kHz (20 to 30) kHz	0.1 mV/V + 3 mV 0.2 mV/V 0.61 mV/V + 9 mV	Comparison to Fluke 5700A-EP Calibrator and Fluke 5725A amplifier
AC High Voltage – Measure ¹	(1 to 10) kV 60 Hz	0.4 % of reading	Comparison to JRL-KV-VB-10-1C Divider with Keysight 3458A/Opt-002
AC High Voltage – Measure ¹	(10 to 100) kV 60 Hz	0.31 % of reading	Comparison to KVD200 Divider with Keithley 2001DMM

Electrical – DC/Low Frequency

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Low Range DC Voltage - Measure ¹	(2 to 100) nV (100 to 300) nV 300nV to 1μV (1 to 3) μV	7.5 % of reading 7.5 % of reading 7.8 % of reading 7.6 % of reading	Comparison to Tegam AVM 2000
DC Voltage - Measure /Generate ¹	3 μV to 200 mV (0.2 to 2) V (2 to 20) V (20 to 200) V (200 to 1 000) V	3.3 μV/V+0.1 μV 2.7 μV/V+0.43 μV 2.7 μV/V+5 μV 4 μV/V+41 μV 4.1 μV/V+488 μV	Comparison to Fluke 8508A Multimeter with Fluke 5700A-EP
DC Voltage - Measure & Generate, Fixed Points	100 mV 1 V 10 V 100 V 1 000 V	3 μV/V 2.2 μV/V 2 μV/V 4 μV/V 2.1 μV/V	Comparison to Fluke 732B,752A,5700A-EP, Fluke 8508A
DC High Voltage Measure ¹	(1 to 10) kV	0.06 % of reading	Comparison to JRL-KV-VB-10-1C Divider with Keysight 3458A/Opt-002
DC High Voltage Measure ¹	(10 to 100) kV	0.06 % of reading	Comparison to KVD200 Divider with Keithley 2001DMM
Resistance -Source/Measure ¹	10 mΩ to 2 Ω (2 to 20) Ω (20 to 200) Ω (0.2 to 2) kΩ (2 to 20) kΩ (20 to 200) kΩ (0.2 to 2) MΩ (2 to 20) MΩ (20 to 200) MΩ (0.2 to 2) GΩ	0.002 % of reading 0.001 % of reading 0.001 % of reading 0.001 % of reading 0.001 % of reading 0.001 % of reading 0.001 % of reading 0.002 % of reading 0.011 % of reading 0.13 % of reading	Comparison to Fluke 8508A DMM (Transfer Standard) with Standard Decade Resistor
Resistance Measure ¹	Up to 2 Ω (2 to 20) Ω (20 to 200) Ω (0.2 to 2) kΩ (2 to 20) kΩ (20 to 200) kΩ (0.2 to 2) MΩ (2 to 20) MΩ (20 to 200) MΩ (0.2 to 2) GΩ	5 μΩ/Ω+ 6.2 μΩ 3 μΩ/Ω+ 16.1 μΩ 2 μΩ/Ω+ 63.4 μΩ 1 μΩ/Ω+ 0.6 mΩ 1 μΩ/Ω+ 5.8 mΩ 2 μΩ/Ω+ 59 mΩ 3 μΩ/Ω+ 1.2 Ω 5 μΩ/Ω+ 99 Ω 24 μΩ/Ω+ 10 kΩ 271 μΩ/Ω+ 1 MΩ	Comparison to Fluke 8508A Normal Mode

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Resistance Measure	(2 to 20) M Ω (20 to 200) M Ω (0.2 to 2) G Ω (2 to 20) G Ω	5 $\mu\Omega/\Omega$ + 17 Ω 9 $\mu\Omega/\Omega$ + 1 k Ω 34 $\mu\Omega/\Omega$ + 98 k Ω 252 $\mu\Omega/\Omega$ + 10 M Ω	Comparison to Fluke 8508A High Voltage Mode
Resistance Generate ^{1,3} (Fixed Resistor)	100 $\mu\Omega$ 1 m Ω 10 m Ω 100 m Ω 1 Ω 10 Ω 100 Ω 1 k Ω 10 k Ω 100 k Ω 1 M Ω 10 M Ω 100 M Ω 1 G Ω	141 $\mu\Omega/\Omega$ 29 $\mu\Omega/\Omega$ 38 $\mu\Omega/\Omega$ 14 $\mu\Omega/\Omega$ 8 $\mu\Omega/\Omega$ 8 $\mu\Omega/\Omega$ 6 $\mu\Omega/\Omega$ 7 $\mu\Omega/\Omega$ 4 $\mu\Omega/\Omega$ 6 $\mu\Omega/\Omega$ 18 $\mu\Omega/\Omega$ 24 $\mu\Omega/\Omega$ 39 $\mu\Omega/\Omega$ 24 $\mu\Omega/\Omega$	Comparison to Leeds & Northrup 4334 Leeds & Northrup 4223-B Leeds & Northrup 4222-B Guildline 9230A-30-0.1 Fluke 742A-1 Fluke 742A-10 Fluke 742A-100 Fluke 742A-1k Fluke 742A-10k Fluke 742A-100k Fluke 742A-1M Fluke 742A-100M Guildline 9334A-100M Guildline 9334A-1G
High Voltage Resistors ^{1,3}	500 k Ω 1 M Ω 20 M Ω 100 M Ω 1 G Ω 10 G Ω	0.5 % of reading 0.5 % of reading 0.5 % of reading 0.5 % of reading 0.5 % of reading 0.5 % of reading	Comparison to 3Rlab Resistors (up to 15 kV)
Voltage Ratio Generate ^{1,2}	(0.8 to 2 220)	0.06 % of generate value	Comparison to Biddle 550055 TTR Calibration Standard
Inductance – Source/Measure ¹	100 μ H to 1 H 1 kHz 100 μ H to 1 H 100 Hz	0.25 mH/H 1.7 mH/H	Comparison to General Radio 1689 with Lionmount Inductance Box Type LD8 Ferrite

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Capacitance – Source/Measure ¹	1 pF to 1.111 11 μ F 1 kHz 1 pF to 1.111 11 μ F 100 Hz (0.2 to 100) μ F 300 Hz (100 to 200) μ F 50 Hz (0.2 to 1.1) mF 15 Hz	0.21 mF/F 0.27 mF/F 0.21 mF/F 0.21 mF/F 0.21 mF/F	Comparison to General Radio 1689 with GenRad 1413
AC Power Source and Measure ¹ 60 Hz (PF 1)	Up to 25mW (25 to 225) mW (225 to 2.5) W (2.5 to 22.5) W (22.5 to 250) W (250 to 2.25) kW (2.25 to 30) kW	0.32 mW 1.3 mW 0.0077 W 0.053 W 0.53 W 0.004 6 kW 0.051 kW	Comparison to N4L PPA2530 Power Meter with Meatest 9010+ Calibrator
AC Power Source and Measure ¹ 60 Hz (PF 0.5 Lead)	Up to 12.5 mW (12.5 to 112.5) mW (112.5 to 1.25) W (1.25 to 11.25) W (11.25 to 125) W (125 to 1.125) kW (1.125 to 15) kW	0.32 mW 1.3 mW 0.0078 W 0.053 W 0.53 W 0.004 6 kW 0.051 kW	Comparison to N4L PPA2530 Power Meter with Meatest 9010+ Calibrator
AC Power Source and Measure ¹ 60 Hz (PF 0.5 Lag)	Up to 12.5 mW (12.5 to 112.5) mW (112.5 to 1.25) W (1.25 to 11.25) W (11.25 to 125) W (125 to 1.125) kW (1.125 to 15) kW	0.32 mW 1.3 mW 0.0072 W 0.052 W 0.52 W 0.004 6 kW 0.051 kW	Comparison to N4L PPA2530 Power Meter with Meatest 9010+ Calibrator
DC Power Source and Measure ¹	Up to 25mW (25 to 225) mW (225 to 2.5) W (2.5 to 22.5) W (22.5 to 250) W (250 to 2.25) kW (2.25 to 30) kW	0.32 mW 1.3 mW 0.0077 W 0.053 W 0.53 W 0.004 6 kW 0.051 kW	Comparison to N4L PPA2530 Power Meter with Meatest 9010+ Calibrator

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DC Energy Source ¹	2.4 μ Ws to 0.144 Ws (0.144 to 1.44) Ws (1.44 to 144) Ws 144 Ws to 14.4 kW	0.07 % of reading 0.03 % of reading 0.03 % of reading 0.03 % of reading	Comparison to Meatest 9010+ Calibrator
AC Energy Source ¹ (15 Hz to 1kHz)	2.4 μ Ws to 0.144 Ws (0.144 to 1.44) Ws (1.44 to 144) Ws 144 Ws to 14.4 kW 14.4 kW to 0.72 MWs (0.72 to 10.332) MWs (10.332 to 38.745) MWs	0.07 % of reading 0.03 % of reading 0.03 % of reading 0.03 % of reading 0.04% of reading 0.05% of reading 0.05% of reading	Comparison to Meatest 9010+ Calibrator
Phase Source and Measure ¹	(0 to 360) $^{\circ}$ (15 to 1 000) Hz	(0.01 $^{\circ}$ * kHz) + 0.006 $^{\circ}$	Comparison to N4L PPA2530 Power Meter with Meatest 9010+ Calibrator
High Voltage capacitance source ¹ 10 kV 60 Hz	100 pF	0.006 pF	Comparison to Megger 670500-1 Capacitance & DF Standard
Dissipation Factor Generate ²	0.000 % 0.105 % 0.320 % 1.050 % 3.200 %	0.005 % 0.006 % 0.008 % 0.016 % 0.039 %	Comparison to Megger 670500-1 Capacitance & DF Standard
Dissipation Factor generate ^{1,2} Low Voltage fixed points 100 Hz	0.63 % 3.2 % 6.5 % 15 % 25 %	0.001 5 % 0.004 3 % 0.005 5 % 0.013 % 0.026 %	Comparison to General Radio 1413 with standard decade resistor
Oscilloscope Voltage ¹ DC Voltage into 50 Ω load DC Voltage into 1M Ω load Sinewave into 50 Ω load Sinewave into 1M Ω load Square Wave into 50 Ω load Square Wave into 1M Ω load	Up to 3.5 V (pk) Up to 200 V (pk) Up to 3.5 V (rms) Up to 200 V (rms) Up to 3.5 V (pk) Up to 200 V (pk)	0.15 % of reading + 97 μ V 0.03 % of reading + 4 mV 0.3 % of reading + 0.2 mV 0.1 % of reading +11 mV 0.1 % of reading + 5 mV 0.25 % of reading + 0.3 V	Comparison to Meatest 9010+ Multifunction calibrator with SCO1(1.1 GHz Scope Option)

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Scope Levelled Sine Amplitude ¹	1.4 mV to 1.5 V (pk) 15Hz-100kHz (100 to 500) kHz (0.5 to 10) MHz (10 to 100) MHz (100 to 600) MHz (0.6 to 1.1) GHz	0.6 % of reading +358 μ V 2 % of reading +265 μ V 2.5 % of reading +263 μ V 3.3 % of reading +255 μ V 3.7 % of reading +255 μ V 6.5 % of reading +253 μ V	Comparison to Meatest 9010+ Multifunction calibrator with SCO1(1.1 GHz Scope Option)
Scope Levelled Sine Flatness ¹	1.4 mV to 1.5 V (pk) 15Hz-100kHz (100 to 500) kHz (0.5 to 10) MHz (10 to 100) MHz (100 to 600) MHz (0.6 to 1.1) GHz	0.2 % of reading +100 μ V 0.5 % of reading +100 μ V 1.2 % of reading +100 μ V 3.3 % of reading +255 μ V 2.5 % of reading +200 μ V 4.5 % of reading +200 μ V	Comparison to Meatest 9010+ Multifunction calibrator with SCO1(1.1 GHz Scope Option)
Oscilloscope Time Marker into 50 Ω load ¹	1 ns to 10 s	0.000 01 % of reading	Comparison to Meatest 9010+ Multifunction calibrator with SCO1(1.1 GHz Scope Option)
Thermocouple Indicators ¹ Type E Type J Type K Type R Type T Type S Type B Type N Type C	(-250 to 1 000) °C (-210 to 1 000) °C (-200 to 1 372) °C (-50 to 1 767) °C (-200 to 400) °C (-50 to 1 767) °C (400 to 1 820) °C (-200 to 1 300) °C (0 to 2 315) °C	0.11 °C 0.1 °C 0.11 °C 0.16 °C 0.11 °C 0.16 °C 0.16 °C 0.13 °C 0.12 °C	Electrical Simulation using Keysight 3458A/Opt-002 with Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt3850 R0:100	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C (630 to 800) °C	0.05 °C 0.06 °C 0.07 °C 0.1 °C 0.12 °C 0.16 °C 0.21 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
RTD indicators, Generate ¹ Pt3851 R0:100	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C (630 to 800) °C	0.05 °C 0.06 °C 0.08 °C 0.1 °C 0.12 °C 0.17 °C 0.21 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt3926 R0:100	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C	0.06 °C 0.06 °C 0.08 °C 0.1 °C 0.12 °C 0.17 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt3916 R0:100	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C	0.06 °C 0.06 °C 0.08 °C 0.1 °C 0.12 °C 0.17 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt385 R0:200	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C	0.05 °C 0.05 °C 0.08 °C 0.1 °C 0.12 °C 0.16 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt385 R0:500	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C	0.05 °C 0.05 °C 0.05 °C 0.1 °C 0.12 °C 0.17 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator
RTD indicators, Generate ¹ Pt385 R0:1 000	(-200 to -190) °C (-190 to -100) °C (-100 to 0) °C (0 to 250) °C (250 to 460) °C (460 to 630) °C	0.04 °C 0.05 °C 0.05 °C 0.1 °C 0.11 °C 0.16 °C	Electrical Simulation using Meatest 9010+ Multifunction calibrator

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Humidity Measure ¹	(30 to 70) %RH	3 %RH	Comparison to COMET S3121, Temp/Humidity Logger
Temperature Measure ¹	(-200 to 0) °C	0.009 1 % of reading + 0.016 °C	Direct Comparison to Fluke 8508A+ Fluke 5615 PRT
	(0 to 420) °C	0.007 2 % of reading + 0.016 °C	
Temperature Generate ¹	(30 to 420) °C	0.34 °C	Direct Comparison to Fluke 8508A+ Fluke 5615 PRT with Techne DB-700A Block Calibrator

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Frequency - Source	10 Hz to 1.1 GHz	0.6x10 ⁻⁹ Hz/Hz	Comparison to GPS based 10MHz distributed signal with Fluke PM6680B Counter, Keysight 33250A Function Generator, Meatest 9010+ Calibrator
Frequency - Measure	10 Hz to 1.3 GHz	0.6x10 ⁻⁹ Hz/Hz	Comparison to GPS based 10MHz distributed signal with Fluke PM6680B Counter
Time Interval Timers & Stop Watches Time Base	0 ns to 10 ⁷ s	6.4 ns/s	Totalize method using GPS based 10MHz distributed signal with Fluke PM6680B

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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current Measure/Source ¹	Up to 100 nA 100 nA to 1 μ A (1 to 10) μ A (10 to 100) μ A 100uA to 1mA (1 to 10) mA (10 to 100) mA 100 mA to 1A	65 μ A/A + 40 pA 19 μ A/A + 51 pA 27 μ A/A + 0.12 nA 30. μ A/A + 0.73 nA 22 μ A/A + 5 nA 24 μ A/A + 48 nA 49 μ A/A + 0.44 μ A 118 μ A/A + 10 μ A	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
DC Current Measure/Source ¹	(1 to 2) A	0.92 mA/A + 0 μ A	Comparison to Keithley 2001 with Fluke 5500A Calibrator
DC Current Measure/Source ¹	(2 to 20) A	106 μ A/A + 0.27 mA	Comparison to SR-30 Shunt with Keysight 3458A/Opt-002 with Fluke 5500A Calibrator, Meatest M143 Calibrator
DC Voltage Measure/Source ¹	Up to 100 mV (0.1 to 1) V (1 to 10) V (10 to 100) V (100 to 1 000) V	6 μ V/V + 0.3 μ V 4.3 μ V/V + 0.3 μ V 4.4 μ V/V + 0.6 μ V 6.4 μ V/V + 30 μ V 10 μ V/V + 0.11 mV	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
DC High Voltage measure ¹	(1 to 10) kV	0.06 % of reading	Comparison to JRLKV-VB-10-1C Divider with Keysight 3458A Opt-002
	(10 to 30) kV	0.58m V/V + 1 V	Comparison to Ross VD30 Divider with Keysight 3458A Opt-002

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance Measure/Generate ¹	Up to 10) Ω (10 to 100) Ω (100 to 1 000) Ω (1 to 10) k Ω (10 to 100) k Ω (0.1 to 1) M Ω (1 to 10) M Ω (10 to 100) M Ω (0.1 to 1) G Ω	15 $\mu\Omega/\Omega$ + 52 $\mu\Omega$ 13 $\mu\Omega/\Omega$ + 0.5 m Ω 13 $\mu\Omega/\Omega$ + 0.4 m Ω 10 $\mu\Omega/\Omega$ + 5 m Ω 10 $\mu\Omega/\Omega$ + 52 m Ω 22 $\mu\Omega/\Omega$ + 2 Ω 54 $\mu\Omega/\Omega$ + 0.1 k Ω 0.5 m Ω/Ω + 1 k Ω 5m Ω/Ω + 10 k Ω	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
AC Current Measure/Generate ¹	0 to 100 μ A (10 to 20) Hz (20 to 45) Hz (45 to 100) Hz 100 Hz to 1 kHz 0.1 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	4 mA/A + 30 nA 1.5 mA/A + 30 nA 0.7 mA/A + 30 nA 0.7 mA/A + 30 nA 4 mA/A + 0.2 μ A 1.5 mA/A + 0.2 μ A 0.6 mA/A + 0.2 μ A 0.3 mA/A + 0.2 μ A 0.6 mA/A + 0.2 μ A 4 mA/A + 0.4 μ A 5.5 mA/A + 1.5 μ A	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
AC Current Measure/Generate ¹	(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 + 2 μ A 1.5 mA/A + 2 μ A 0.61 mA/A + 2 μ A 0.32 mA/A + 2 μ A 0.61 mA/A + 2 μ A 4 mA/A + 4 μ A 5.5 mA/A + 15 μ A 4 mA/A + 20 μ A 1.5 mA/A + 20 μ A 0.61 mA/A + 20 μ A 0.31 mA/A + 20 μ A 0.61 mA/A + 20 μ A 4 mA/A + 40 μ A 5.5 mA/A + 0.15 mA	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current Measure/ Generate ¹	(0.1 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	4 mA/A + 0.2 mA 1.6 mA/A + 0.2 mA 0.81 mA/A + 0.2 mA 1 mA/A + 0.2 mA 3 mA/A + 0.2 mA 10 mA/A + 0.4 mA	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
AC Current Measure/ Generate ¹	(1 to 2) A (20 to 50) Hz (50 to 200) Hz 200 Hz to 1 kHz (1 to 10) kHz (10 to 30) kHz (30 to 50) kHz	3.6 mA/A + 0.3 mA 2.1 mA/A + 0.3 mA 3.1 mA/A + 0.3 mA 4.6 mA/A + 0.3 mA 15 mA/A + 0.3 mA 40 mA/A + 0.3 mA	Comparison to Keithley 2001, Fluke 5500A Calibrator
AC Current Generate ¹	(2 to 11) A (45 to 65) Hz (65 to 500) Hz 500 Hz to 1 kHz	1.1 mA/A + 1.2 mA 1.4 mA/A + 1.5 mA 3.4 mA/A + 1.9 mA	Comparison to Fluke 5500A Calibrator
	(11 to 20) A (20 to 200) Hz 200 Hz to 1 kHz	2 mA/A + 3 mA 2.5 mA/A + 10 mA	Comparison to Meatest M143 Calibrator
DC Current Generate Clamp-On Non-Toroidal ¹	(11 to 275) A (275 to 550) A	0.41 % of reading 0.41 % of reading	Comparison to Meatest 140-50 Current Coil with Fluke 5500A
DC Current Generate Clamp-On Non-Toroidal ¹	(550 to 1 000) A	0.4 % of reading	Comparison to Meatest 140-50 Current Coil with Meatest M143
AC Current Generate Clamp-On Non-Toroidal ¹	(20 to 400) Hz (11 to 275) A (275 to 550) A	0.25 % of reading 0.32 % of reading	Comparison to Meatest 140-50 Current Coil with Fluke 5500A
	(20 to 400) Hz (550 to 1 000) A	0.34% of reading	Comparison to Meatest 140-50 Current Coil with Meatest M143

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage Measure/Source ¹	(1 to 10) mV 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (10 to 100) mV 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (0.3 to 1) MHz (1 to 2) MHz (0.1 to 1) V 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 300) kHz (0.3 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 (0.3 to 1) MHz	0.2 mV/V + 1.1 μ V 0.3 mV/V + 1.1 μ V 1 mV/V + 1.1 μ V 5 mV/V + 1.1 μ V 40 mV/V + 2 μ V 0.13 mV/V + 2 μ V 0.18 mV/V + 2 μ V 0.32 mV/V + 2 μ V 0.81 mV/V + 2 μ V 3 mV/V + 10 μ V 10 mV/V + 10 μ V 15 mV/V + 10 μ V 78 μ V/V + 20 μ V 0.15 mV/V + 20 μ V 0.3 mV/V + 20 μ V 0.8 mV/V + 20 μ V 3 mV/V + 0.1 mV 10 mV/V + 0.1 mV 15 mV/V + 0.1 mV 74 μ V/V + 0.4 mV 74 μ V/V + 0.2 mV 0.14 mV/V + 0.2 mV 0.3 mV/V + 0.2 mV 0.8 mV/V + 0.2 mV 10 mV/V + 1 mV 3 mV/V + 1 mV	Comparison to Keysight 3458A/Opt-002 with Fluke 5500A Calibrator
	(10 to 100) V 40 Hz to 1 kHz (1 to 20) kHz (20 to 50) kHz (50 to 100) kHz (100 to 700) V 40 Hz to 1 kHz (1 to 20) kHz	0.2 mV/V + 2 mV 0.2 mV/V + 2 mV 0.35 mV/V + 2 mV 1.2 mV/V + 2 mV 0.42 mV/V + 20 mV 0.61 mV/V + 20 mV	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC High Voltage Measure ¹	(1 to 10) kV 60 Hz	0.4 % of reading	Comparison to JRLKV-VB-10-1C Divider with Keysight 3458A Opt-002
	(10 to 30) kV 60 Hz	2.2 mV/V + 46 V	Comparison to Ross VD30 Divider with Keysight 3458A
Resistance Generate ^{1,3} (Fixed Resistor) High Current	100 $\mu\Omega$	0.28 % of reading	Comparison to AVO Biddle 249005 shunt
	1 m Ω	0.01 % of reading	Comparison to 3NN P310.001 Ω Resistor
	10 m Ω	0.01 % of reading	Comparison to 3NN P310.01 Ω Resistor
	100 m Ω	0.01 % of reading	Comparison to 3NN P321.1 Ω Resistor
Resistance Generate ^{1,3} (Fixed Resistor) High Voltage	500 k Ω	0.5 % of reading	Comparison to CGR 500k-5W Resistor
	1 M Ω	0.5 % of reading	Comparison to CGR 1MG-3W Resistor
	10 M Ω	0.5 % of reading	Comparison to CGR 10MG-5W Resistor
	100 M Ω	0.5 % of reading	Comparison to CGR 100MJ-10W Resistor
	1 G Ω	0.5 % of reading	Comparison to CGR 1GF-5W Resistor
	10 G Ω	0.5 % of reading	Comparison to 10CJ-5W Resistor

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Capacitance Generate ¹	(0.33 to 0.499 9) nF (0.5 to 1.099 9) nF (1.1 to 3.299 9) nF (3.3 to 10.999) nF (11 to 32.999) nF (33 to 109.99) nF (110 to 329.99) nF (0.33 to 1.099 9) μ F (1.1 to 3.299 9) μ F (3.3 to 10.999) μ F (11 to 32.999) μ F (33 to 109.99) μ F (110 to 329.99) μ F (330 to 1.1) mF	5 mF/F + 0.01 nF 5 mF/F + 0.01 nF 5 mF/F + 0.01 nF 5 mF/F + 0.01 nF 2.5 mF/F + 0.1 nF 2.5 mF/F + 0.1 nF 2.5 mF/F + 0.3 nF 2.5 mF/F + 1 nF 3.5 mF/F + 3 nF 3.5 mF/F + 10 nF 4 mF/F + 30 nF 5 mF/F + 100 nF 7 mF/F + 300 nF 10 mF/F + 300 nF	Comparison to Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ Type E	(-250 to -100) °C (-100 to -25) °C (-25 to 350) °C (350 to 650) °C (650 to 1 000) °C	0.5 °C 0.16 °C 0.14 °C 0.16 °C 0.21 °C	Electrical Simulation using Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ Type J	(-210 to -100) °C (-100 to -30) °C (-30 to 150) °C (150 to 760) °C (760 to 1 200) °C	0.27 °C 0.16 °C 0.14 °C 0.17 °C 0.23 °C	Electrical Simulation using Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ 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	0.33 °C 0.18 °C 0.16 °C 0.26 °C 0.4 °C	Electrical Simulation using Fluke 5500A Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Thermocouple Generate/Measure ¹ Type N	(-200 to -100) °C (-100 to -25) °C (-25 to 120) °C (120 to 410) °C (410 to 1 300) °C	0.4 °C 0.22 °C 0.19 °C 0.18 °C 0.27 °C	Electrical Simulation using Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ Type R	(0 to 250) °C (250 to 400) °C (400 to 1 000) °C (1 000 to 1 767) °C	0.57 °C 0.35 °C 0.33 °C 0.4 °C	Electrical Simulation using Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ Type S	(0 to 250) °C (250 to 1 000) °C (1 000 to 1 400) °C (1 400 to 1 767) °C	0.47 °C 0.36 °C 0.37 °C 0.46 °C	Electrical Simulation using Fluke 5500A Calibrator
Thermocouple Generate/Measure ¹ Type T	(-250 to -150) °C (-150 to 0) °C (0 to 120) °C (120 to 400) °C	0.63 °C 0.24 °C 0.16 °C 0.14 °C	Electrical Simulation using Fluke 5500A Calibrator
DC Power Generate ¹	33 mV to 1 020 V (3.3 to 8.999) mA (9 to 32.999) mA (33 to 89.99) mA (90 to 329.99) mA (0.33 to 0.8999) A (0.9 to 2.1999) A (2.2 to 4.4999) A (4.5 to 11) A	0.04 % of Watts output 0.03 % of Watts output 0.04 % of Watts output 0.03 % of Watts output 0.08 % of Watts output 0.06 % of Watts output 0.12 % of Watts output 0.09 % Watts output	Fluke 5500A Calibrator

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Power Generate ¹ 45Hz to 65 Hz PF=1	33 mV to 329.999 mV (3.3 to 8.999) mA (9 to 32.999) mA (33 to 89.99) mA (90 to 329.99) mA (0.33 to 0.8999) A (0.9 to 2.1999) A (2.2 to 4.4999) A (4.5 to 11) A	0.4 % of Watts output 0.25 % of Watts output 0.35 % of Watts output 0.25 % of Watts output 0.35 % of Watts output 0.25 % of Watts output 0.35 % of Watts output 0.25 % of Watts output	Comparison to Fluke 5500A Calibrator
	330 mV to 1 020 V (3.3 to 8.999) mA (9 to 32.999) mA (33 to 89.99) mA (90 to 329.99) mA (0.33 to 0.8999) A (0.9 to 2.1999) A (2.2 to 4.4999) A (4.5 to 11) A	0.25 % of Watts output 0.15 % of Watts output 0.25 % of Watts output 0.15 % of Watts output 0.25 % of Watts output 0.15 % of Watts output 0.2 % of Watts output 0.15 % of Watts output	
Phase Generate ¹	±(0 to 179.99)° (10 to 65) Hz (65 to 500) Hz 500 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.15° 0.9° 2.0° 6° 10°	Comparison to Fluke 5500A Calibrator

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Humidity Measure ¹	(30 to 70) %RH	3 %RH	Comparison to COMET S3121, Temp/Humidity Logger
Temperature Measure ¹	(-30 to 80) °C	0.45 °C	Comparison to COMET S3121, Temp/Humidity Logger
	(80 to 105) °C	0.54 °C	

Time and Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Frequency Generate ¹	(0.01 to 119.99) Hz (120.0 to 1199.9) Hz (1.2 to 9.99) kHz (10 to 119.99) kHz (120 to 1199.9) kHz (1.2 to 2) MHz	10 μ Hz/Hz+6 mHz 24 μ Hz/Hz+3 mHz 6 μ Hz/Hz+1 Hz 7 μ Hz/Hz+6 Hz 7 μ Hz/Hz+57 Hz 2 μ Hz/Hz+0.58 kHz	Comparison to Fluke 5500A Calibrator
Frequency Measure ¹	(1 to 40) Hz 40 Hz to 100 MHz	0.05% of reading 0.01% of reading	Comparison to Keysight 3458A/Opt-002

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. Unitless linear value.
3. Nominal values are approximate.



Jason Stine, Vice President