



# CERTIFICATE OF ACCREDITATION

**The ANSI National Accreditation Board**

Hereby attests that

**Transcat – San Diego**

**7726 Arjons Drive  
San Diego, CA 92126**

Fulfills the requirements of

**ISO/IEC 17025:2017**

and national standard

**ANSI/NCSL Z540-1-1994 (R2002)**

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).

A handwritten signature in black ink, appearing to be 'J. Stine', is positioned above a horizontal line.

Jason Stine, Vice President

Expiry Date: 01 September 2026  
Certificate Number: L2214



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**

**AND**

**ANSI/NCSL Z540-1-1994 (R2002)**

**Transcat – San Diego**  
7726 Arjons Drive  
San Diego, CA 92126  
Martin Bakker 858-621-2630

**CALIBRATION**

Valid to: **September 1, 2026**

Certificate Number: **L2214**

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Current – Source <sup>2</sup>	Up to 220 µA (0.22 to 2.2) mA (2.2 to 22) mA (22 to 220) mA (0.22 to 2.2) A	45 µA/A + 6.9 nA 39 µA/A + 8.1 nA 39 µA/A + 46 nA 58 µA/A + 0.7 µA 0.24 mA/A + 12 µA	Fluke 5720A Multiproduct Calibrator
DC Voltage – Source <sup>2</sup>	Up to 220 mV (0.22 to 2.2) V (2.2 to 11) V (11 to 22) V (22 to 220) V (220 to 1 000) V	9.1 µV/V + 0.4 µV 5.7 µV/V + 0.7 µV 4.4 µV/V + 2.5 µV 4 µV/V + 4 µV 6.3 µV/V + 40 µV 7.6 µV + 0.4 mV	Fluke 5720A Multiproduct Calibrator
AC Current – Source <sup>2</sup>	Up to 220 µA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (0.22 to 2.2) mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.032 % of reading + 16 nA 0.019 % of reading + 10 nA 0.014 % of reading + 8 nA 0.026 % of reading + 10 nA 0.11 % of reading + 65 nA 0.031 % of reading + 40 nA 0.019 % of reading + 35 nA 0.014 % of reading + 35 nA 0.026 % of reading + 0.11 µA 0.11 % of reading + 0.65 µA	Fluke 5720A Multiproduct Calibrator



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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Current – Source <sup>2</sup>	(2.2 to 22) mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (22 to 220) mA (10 to 20) Hz (20 to 40) Hz 40 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz (0.22 to 2.2) A 20 Hz to 1 kHz (1 to 5) kHz (5 to 10) kHz	0.033 % of reading + 0.4 μA 0.02 % of reading + 0.35 μA 0.015 % of reading + 0.35 μA 0.022 % of reading + 0.55 μA 0.11 % of reading + 5 μA 0.033 % of reading + 4 μA 0.018 % of reading + 3.5 μA 0.014 % of reading + 2.5 μA 0.021 % of reading + 3.5 μA 0.11 % of reading + 10 μA 0.047 % of reading + 0.17 mA 0.095 % of reading + 0.38 mA 0.36 % of reading + 0.16 mA	Fluke 5720A Multiproduct Calibrator
AC Voltage – Source <sup>2</sup>	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 (2.2 to 22) 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	0.16 % of reading + 4 μV 0.1 % of reading + 4 μV 0.077 % of reading + 4 μV 0.12 % of reading + 4 μV 0.17 % of reading + 5 μV 0.33 % of reading + 10 μV 0.47 % of reading + 20 μV 0.58 % of reading + 20 μV 0.044 % of reading + 4 μV 0.031 % of reading + 4 μV 0.015 % of reading + 4 μV 0.031 % of reading + 4 μV 0.059 % of reading + 5 μV 0.12 % of reading + 10 μV 0.16 % of reading + 20 μV 0.3 % of reading + 20 μV	Fluke 5720A Multiproduct Calibrator



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Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
AC Voltage – Source <sup>2</sup>	(22 to 220) mV		Fluke 5720A Multiproduct Calibrator
	(10 to 20) Hz	0.028 % of reading + 12 μV	
	(20 to 40) Hz	0.011 % of reading + 7 μV	
	40 Hz to 20 kHz	0.009 % of reading + 7 μV	
	(20 to 50) kHz	0.021 % of reading + 7 μV	
	(50 to 100) kHz	0.047 % of reading + 17 μV	
	(100 to 300) kHz	0.092 % of reading + 20 μV	
	(300 to 500) kHz	0.14 % of reading + 25 μV	
	500 kHz to 1 MHz	0.28 % of reading + 45 μV	
	(0.22 to 2.2) V		
	(10 to 20) Hz	0.028 % of reading + 40 μV	
	(20 to 40) Hz	0.01 % of reading + 15 μV	
	40 Hz to 20 kHz	0.005 % of reading + 8 μV	
	(20 to 50) kHz	0.008 % of reading + 10 μV	
	(50 to 100) kHz	0.012 % of reading + 30 μV	
	(100 to 300) kHz	0.043 % of reading + 80 μV	
	(300 to 500) kHz	0.1 % of reading + 0.2 mV	
	500 kHz to 1 MHz	0.18 % of reading + 0.3 mV	
	(2.2 to 22) V		
	(10 to 20) Hz	0.028 % of reading + 0.4 mV	
	(20 to 40) Hz	0.01 % of reading + 0.15 mV	
	40 Hz to 20 kHz	0.005 % of reading + 50 μV	
	(20 to 50) kHz	0.008 % of reading + 0.1 mV	
	(50 to 100) kHz	0.011 % of reading + 0.2 mV	
(100 to 300) kHz	0.03 % of reading + 0.6 mV		
(300 to 500) kHz	0.1 % of reading + 2 mV		
500 kHz to 1 MHz	0.17 % of reading + 3.2 mV		
(22 to 220) V			
(10 to 20) Hz	0.028 % of reading + 4 mV		
(20 to 40) Hz	0.01 % of reading + 1.5 mV		
40 Hz to 20 kHz	0.006 % of reading + 0.6 mV		
(20 to 50) kHz	0.009 % of reading + 1 mV		
(50 to 100) kHz	0.016 % of reading + 2.5 mV		
(100 to 300) kHz	0.09 % of reading + 16 mV		
(220 to 750) V			
(30 to 50) kHz	0.061 % of reading + 11 mV		
(50 to 100) kHz	0.23 % of reading + 45 mV		

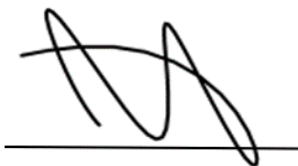
**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
DC Resistance – Source <sup>2</sup> (Fixed-Simulated Values)	1 Ω	98 μΩ/Ω	Fluke 5720A Multiproduct Calibrator
	1.9 Ω	96 μΩ/Ω	
	10 Ω	24 μΩ/Ω	
	19 Ω	25 μΩ/Ω	
	100 Ω	11 μΩ/Ω	
	190 Ω	11 μΩ/Ω	
	1 kΩ	9.4 mΩ/kΩ	
	1.9 kΩ	10 mΩ/kΩ	
	10 kΩ	10 mΩ/kΩ	
	19 kΩ	10 mΩ/kΩ	
	100 kΩ	12.6 mΩ/kΩ	
	190 kΩ	29.5 mΩ/kΩ	
	1 MΩ	22 Ω/MΩ	
	1.9 MΩ	125 Ω/MΩ	
	10 MΩ	74 Ω/MΩ	
19 MΩ	0.65 kΩ/MΩ		
100 MΩ	0.6 kΩ/MΩ		

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. Based on an accredited calibration by the manufacturer, used at the temperature in which the Multiproduct Calibrator was calibrated ( $t_{cal} = \pm 5 \text{ }^\circ\text{C}$ ) and assuming the instrument is zeroed at least every seven days or when the ambient temperature changes more than 5 °C.
3. The legal entity for this Multisite location is Transcat, Inc.
4. This scope is formatted as part of a single document including Certificate of Accreditation No. L2214.



Jason Stine, Vice President