

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Polytec, Inc.

1 Cabot Road, Suite 102
Hudson, MA 01749

Andrew Goldberg 508-417-1039

CALIBRATION

ISO/IEC 17025 Accreditation Granted: **24 February 2025**

Certificate Number: **AC-3356**

Certificate Expiry Date: **24 February 2027**

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Polytec Laser Velocity Decoders – AC Voltage	0.895 0 Vrms	0.000 8 V	Comparison to Keithley / NI-USB Multimeter, Tektronix AFG Function Generator
	0.990 0 Vrms	0.000 8 V	
	1.980 0 Vrms	0.001 1 V	
	2.475 0 Vrms	0.004 7 V	
	3.960 0 Vrms	0.005 4 V	
	4.950 0 Vrms	0.005 8 V	
Polytec Laser Displacement Decoders – AC Voltage	0.061 9 Vrms	0.000 5 V	Comparison to Keithley / NI-USB Multimeter, Tektronix AFG Function Generator
	0.247 5 Vrms	0.000 7 V	
	0.353 0 Vrms	0.000 8 V	
	0.495 0 Vrms	0.001 9 V	
	0.565 0 Vrms	0.000 9 V	
	0.742 5 Vrms	0.015 V	
	0.883 9 Vrms	0.003 V	
	0.990 0 Vrms	0.000 8 V	
	1.237 4 Vrms	0.000 9 V	
	1.361 2 Vrms	0.000 9 V	
	1.385 9 Vrms	0.000 9 V	
	1.414 0 Vrms	0.001 6 V	
	1.768 0 Vrms	0.005 5 V	
	1.980 0 Vrms	0.001 1 V	
	2.722 4 Vrms	0.004 8 V	
	2.771 9 Vrms	0.004 8 V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Polytec Laser Displacement Decoders – AC Voltage	2.828 0 Vrms 3.536 0 Vrms 4.950 0 Vrms	0.005 8 V 0.006 3 V 0.005 8 V	Comparison to Keithley / NI-USB Multimeter, Tektronix AFG Function Generator
Polytec Laser Acceleration Decoders – AC Voltage	0.028 3 Vrms 0.030 9 Vrms 0.061 9 Vrms 0.123 7 Vrms 0.247 5 Vrms 0.495 0 Vrms 0.990 0 Vrms 1.336 4 Vrms 1.385 9 Vrms 1.980 0 Vrms	0.000 4 V 0.000 4 V 0.000 4 V 0.000 4 V 0.000 6 V 0.000 7 V 0.000 8 V 0.000 9 V 0.000 9 V 0.001 1 V	Comparison to Keithley / NI-USB Multimeter, Tektronix AFG Function Generator
Polytec Laser Velocity Decoders – AC Voltage	0.020 0 Vrms 0.040 0 Vrms 0.050 0 Vrms 0.080 0 Vrms 0.100 0 Vrms 0.200 0 Vrms 0.204 1 Vrms 0.250 0 Vrms 0.400 0 Vrms 0.408 2 Vrms 0.500 0 Vrms 0.800 0 Vrms 0.816 3 Vrms 1.000 0 Vrms 2.000 0 Vrms 2.500 0 Vrms 4.000 0 Vrms 5.000 0 Vrms	0.000 8 V 0.001 5 V 0.001 9 V 0.003 V 0.003 7 V 0.007 4 V 0.014 V 0.015 V 0.015 V 0.019 V 0.018 V 0.032 V 0.032 V 0.039 V 0.074 V 0.093 V 0.15 V 0.18 V	Comparison to Keithley / NI-USB Multimeter, Metra MMF Mechanical Shaker

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Polytec Laser Displacement Decoders – AC Voltage	0.007 8 Vrms	0.012 V	Comparison to Keithley / NI-USB Multimeter, Metra MMF Mechanical Shaker
	0.015 6 Vrms	0.013 V	
	0.020 0 Vrms	0.013 V	
	0.031 3 Vrms	0.013 V	
	0.040 0 Vrms	0.014 V	
	0.040 8 Vrms	0.014 V	
	0.050 0 Vrms	0.015 V	
	0.062 5 Vrms	0.017 V	
	0.080 0 Vrms	0.019 V	
	0.081 6 Vrms	0.019 V	
	0.100 0 Vrms	0.022 V	
	0.125 0 Vrms	0.012 V	
	0.156 3 Vrms	0.012 V	
	0.200 0 Vrms	0.012 V	
Polytec Laser Displacement Decoders – AC Voltage	0.204 1 Vrms	0.012 V	Comparison to Keithley / NI-USB Multimeter, Metra MMF Mechanical Shaker
	0.250 0 Vrms	0.012 V	
	0.312 5 Vrms	0.012 V	
	0.400 0 Vrms	0.012 V	
	0.408 2 Vrms	0.012 V	
	0.500 0 Vrms	0.012 V	
	0.625 0 Vrms	0.026 V	
	0.781 3 Vrms	0.031 V	
	0.800 0 Vrms	0.032 V	
	0.816 3 Vrms	0.032 V	
	1.000 0 Vrms	0.039 V	
	1.250 0 Vrms	0.047 V	
	1.562 5 Vrms	0.059 V	
	2.000 0 Vrms	0.074 V	
	2.040 8 Vrms	0.076 V	
	2.500 0 Vrms	0.093 V	
	3.125 0 Vrms	0.12 V	
	4.081 6 Vrms	0.15 V	
	5.000 0 Vrms	0.18 V	

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Polytec Laser Acceleration Decoders – AC Voltage	0.020 0 Vrms	0.012 V	Comparison to Keithley / NI-USB Multimeter, Metra MMF Mechanical Shaker
	0.040 0 Vrms	0.012 V	
	0.080 0 Vrms	0.012 V	
	0.100 0 Vrms	0.013 V	
	0.200 0 Vrms	0.014 V	
	0.400 0 Vrms	0.019 V	
	0.800 0 Vrms	0.032 V	
	1.000 0 Vrms	0.032 V	
	2.000 0 Vrms	0.074 V	

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%.



Jason Stine, Vice President