ALPHA LAB
CALIBRATION CAPABILITIES

Discipline	Range	Function	Reference	Uncertainty (+/-)	Accredited	UUT (unit under test)
Temperature	-200 to 1200°C	Source	Oil Baths, LN2, Dryblock, Furnace	From 0.010°C	ISO17025	RTDs, PRTs, TCs, Thermistors, Thermometers, Chambers, Dryblocks, Liquid Baths, Temperature Dataloggers, LIG Thermometers, Recorders, KAYE IRTDs
	-95 to 150°C	Source	Dry Air Chamber	0.1°C	ISO17025	
	-200 to 660°C	Measure	SPRT	0.01°C	ISO17025	
	660 to 1200°C	Measure	TC-S	0.5°C	ISO17025	
	-196, -38, 0, 230, 420, 660°C	Source	Fluke Intrinsic Metal Cells	<0.01°C	ISO17025	
IR Temperature	-15 to 500°C	Source/Measure	Fluke 4180/4181	0.40%	ISO17025	Infrared Thermometers, Blackbody Calibrators
Humidity	0 to 95% RH	Source	Thunder 2500ST	0.3% RH	ISO17025	Hygrometers, T/RH Meters, Chilled Mirror Instruments, Dewpoint Transmitters, Chart Recorders, T/RH Chambers, Dataloggers
	-95 to +70°C Dew Point	Source	Thunder 3900	0.15°C	ISO17025	
	0 to 95% RH	Measure	Rotronic HC2	0.7% RH	ISO17025	
Electrical	0 to 1000V DC	Measure	Fluke 8508A	3.5 ppm	ISO17025	Multimeters, Current Clamps, Process Meters, Testers, Resistors, Thermometers, Dataloggers, Power Supplies, Decade Boxes, Insulation Testers (Megohmmeters), Hi-Pot Testers, Ground Earth Resistance Testers, Power Analyzers, Oscilloscopes, KAYE Validators
	0 to 1000V DC	Source	Fluke 5522A	12 ppm	ISO17025	
	0 to 1200A DC	Measure	Fluke 8508A/Shunts	14 ppm	ISO17025	
	0 to 40A DC	Source	Fluke 5522A	0.01%	ISO17025	
	0 to 2 Gohms	Measure	Fluke 8508A	8 ppm	ISO17025	
	0 to 1.1 Gohms	Source	Fluke 5522A	28 ppm	ISO17025	
	0 to 1000V AC	Measure	Fluke 8508A	90 ppm	ISO17025	
	0 to 1000V AC	Source	Fluke 5522A	0.02%	ISO17025	
	0 to 30A AC	Measure	Fluke 8508A	0.03%	ISO17025	
	0 to 40A AC	Source	Fluke 5522A	0.10%	ISO17025	
	0 to 1500A AC/DC	Source	Fluke 5522/COIL	0.30%	ISO17025	
	0 to 10 kV AC/DC	Measure	Vitrek 4700	0.04%	ISO17025	
	0 to 10 kV DC	Source	Fluke 410B	0.04%	ISO17025	
	Power: 20kW: AC/DC	Source	Fluke 5522A	0.05%	ISO17025	
	Harmonics (up to 50th)	Source	Fluke 5522A	0.10%	NIST	
	Oscilloscopes (up to 600 MHz)	Source	Fluke 5522A	0.25%	ISO17025	
	Capacitance: 0.19nF to 110mF	Source	Fluke 5522A	0.40%	ISO17025	
	Inductance: 10uH to 11.11H	Source	Inductance Box	0.05%	ISO17025	
	Thermocouples: E, J, K, N, R, S, T	Source/Measure	Fluke 5522A	0.2°C	ISO17025	
	RTD: Pt385, Pt3926, Pt3916	Source	Fluke 5522A	0.07°C	ISO17025	
	RTD: 0, 25, 100, 400 Ohms	Source	Hart Scientific 3591	6 ppm	ISO17025	
	Therm.: 0, 4, 10, 40, 100, 500 kOhms	Source	Hart Scientific 3591	50 ppm	ISO17025	
	Frequency: to 225 MHz	Source/Measure	Agilent 53131A	0.001%	ISO17025	
	Hi-Voltage Resistance: <1TOhm	Source	Cropico RH9A	0.1%	ISO17025	
	Fixed Point Resistances	Source	IET SRL Series	2.5 ppm	ISO17025	
	Precision Resistance: up to 2kOhm	Source	Cropico RBB6	0.05%	ISO17025	
Pressure	-60 to +60 in H2O	Source/Measure	DHI PPC3/Ruska 7250LP	0.01%	ISO17025	Gauges, Manometers, Differential Pressure Gauges, Transmitters, Transducers, Barometers, DWT
	0 to 1000 psig/psia	Source/Measure	Fluke 6270A	0.01%	ISO17025	
	200 to 20000 psig	Source/Measure	DWT	0.006%	ISO17025	
	500 to 1200 mbar	Source/Measure	Barometer	0.11 mbar	ISO17025	
	0 to -14.5 psig	Source/Measure	Fluke RPM4	0.0015 psig	ISO17025	
Conductivity	up to 100mS/cm	Source	Conductivity Solution	0.4%	ISO17025	Conductivity Meters
pH	4, 7, 10 pH	Source	pH Solutions	0.02 pH	ISO17025	pH Meters
Viscosity Cup	up to 446 cP, 531cSt	Source	Reference Oil	0.32%	ISO17025	Viscometers
Time	24 Hours	Source	Timometer	0.06s/day	ISO17025	Stopwatch, Timers
Tachometers	0 to 200000 rpm	Source/Measure	Fluke 5522A	150ppm	ISO17025	Non-Contact Tachometers
Sound	74 to 114 dB, up to 4 kHz	Source/Measure	GenRad 1986	0.5 dB	ISO17025	Sound Level Meters and Calibrators
Dimensional	up to 24"	Source/Measure	Mitutoyo	0.5 µm	ISO17025	Calipers, Micrometers Thickness, Flatness, Height Gauges
Gas	Methane, Oxygen, Hydrogren Sulfide, Propane, R 507 (refrigerant), CO, CO2, Penthane, Nitrogen and others	Source	Norlab Calibration Gases	2%	NIST	CO/CO2 Meters, Safety Gas Detectors and Analyzers, Gas Transmitters
Particles	From 0.3um to 5um	Source/Measure	Particle Measuring Systems Universal Reference Unit	4.4%	ISO17025	Particle Counters, Microbial Air Samplers, Molecular Contamination Monitors
Flow	From 0 SCCM to 1000 SLM	Source/Measure	Fluke Molbox1+/Molbloc	0.2%	ISO17025	Gas Flow Meters, Thermal Mass Flow Meters and Controllers, Coriolis Flow Meters, Laminar Flow Elements, Rotameters, Turbine Flow Meters, Bubble Meters

Additional Services:

1. Repair/Troubleshooting/Testing
2. Authorized Fluke/Hart Scientific Service Center
3. On-site Service (ISO 17025 Calibration) Available
4. Equipment Commissioning
5. Training
6. Customized Solutions
7. Authorized Particle Measuring Systems Calibration Facility
8. Authorized KAYE Distributor
9. Conformity Assessment
10. Risk Analysis
11. Method Validation

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