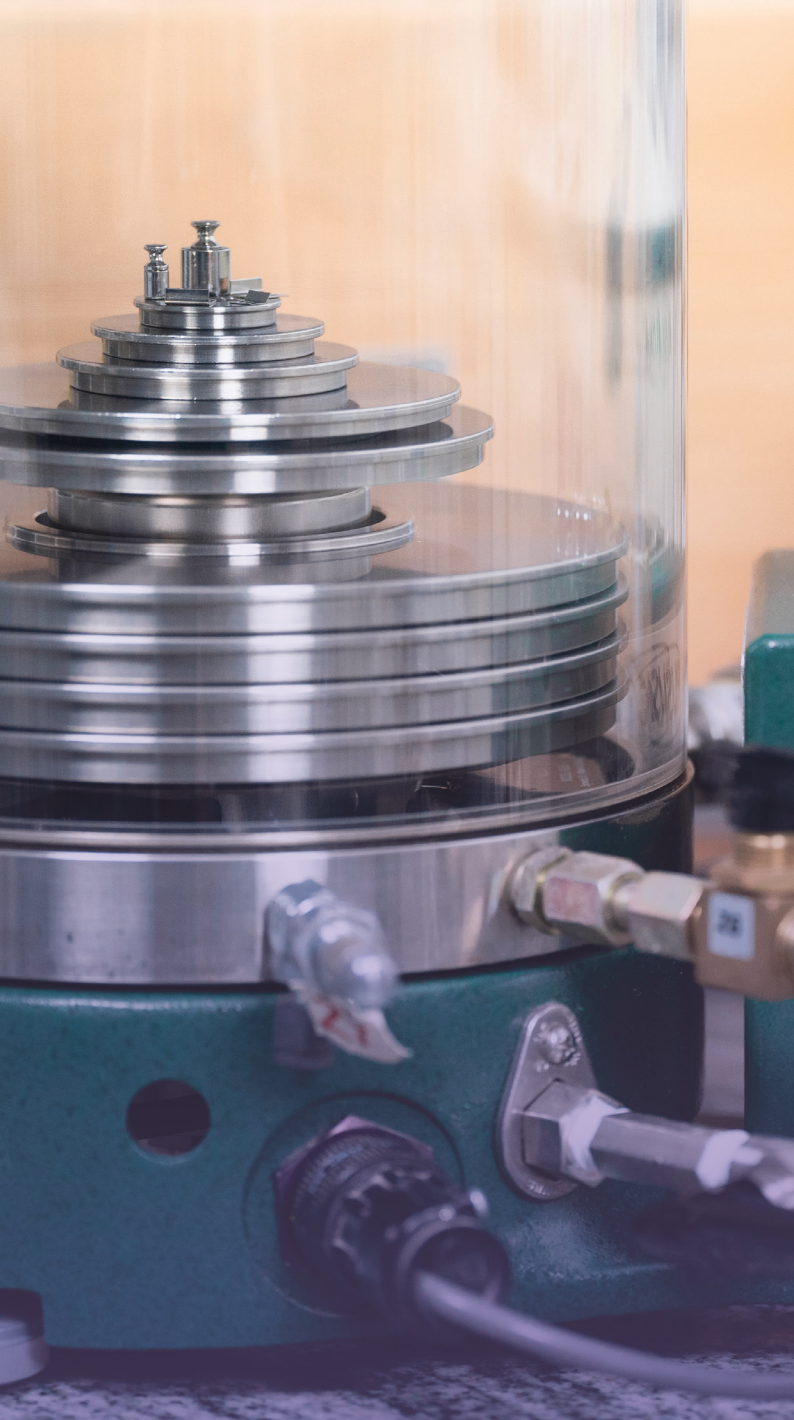


accredited calibration laboratory

calibration of the
measuring instruments



Modern and professional equipment enables our laboratories to provide services at the highest level. Participation in interlaboratory comparisons, knowledge, staff experience, and measurement uncertainty with CMC achieved through the use of measurement standards with the highest accuracies guarantee the high quality of our services.

Plum's Calibration Laboratory meets the requirements of the PN-EN ISO/IEC 17025:2018-02 standard and is accredited by the Polish Accreditation Center.

- competitive prices
- high quality services
- professional customer service
- attractive lead time

calibration of devices in plum

We are a specialized stationary calibration laboratory providing services in the calibration of measuring instruments. We offer calibration services for instruments measuring temperature, pressure, electrical quantities, and relative air humidity.



accredited calibration laboratory provides calibration services:



electronic thermometers and temperature transmitters



RTD temperature sensors (the comparative calibration and the fixed point calibration)



instruments for measuring temperature and relative humidity: thermohygrometers, hygrometers



radiation pyrometers and photoelectric



simulators and temperature indicators



fixed resistors and decade boxes



digital and mechanical pressure gauges, pressure transmitters



insulation resistance testers and electrical safety testers



digital multimeters, multifunction calibrators: voltage (DC, AC), current (DC, AC), resistance (DC, AC), frequency and capacity



temperature		
type of the calibrated measuring instruments	measuring range*	CMC*
calibration in the calibration bath		
RTD temperature sensors	(-40 ÷ 230) °C	0.008 °C
temperature transmitters with temp. sensors		0.010 °C
electronic thermometers		0.010 °C
calibration in the fixed points cells		
standard platinum resistance thermometers (SPRT), electronic thermometers	-38.8344 °C in cell tpHg	0.0030 °C
	0.01 °C in cell tpH2O	0.0025 °C
	29.7646 °C in cell mpGa	0.0030 °C
	156.5985 °C in cell fpIn	0.0040 °C
	231.928 °C in cell fpSn	0.0050 °C
calibration in the temperature chamber		
electronic thermometers	(-30 ÷ 80) °C	0.1 °C
temperature transmitters with temp. sensors		
calibration of pyrometers		
radiation & photoelectric pyrometers	(-15 ÷ 100) °C	0.8 °C
	(100 ÷ 200) °C	1.2 °C
	(200 ÷ 300) °C	1.5 °C
	(300 ÷ 400) °C	2.0 °C
	(400 ÷ 500) °C	2.4 °C
relative air humidity		
type of the calibrated measuring instruments	measuring range*	CMC*
devices for measuring the environmental conditions		
thermohygrometers	humidity measurement: (10 ÷ 95) %rh in the temperature range: (10 ÷ 60) °C	(0.9 ÷ 1.2) %rh
temperature and relative humidity transmitters		
pressure		
type of the calibrated measuring instruments	measuring range*	CMC*
digital pressure gauges, pressure calibrators mechanical pressure gauges, pressure transmitters, barometers calibration possible in a temperature chamber, in the temperature range (-40 ÷ 180) °C	gauge pressure (nitrogen, air, water)	
	(-100 ÷ 7000) kPa	≥ 0.0036 %
	(7000 ÷ 10000) kPa	≥ 0.020 %
	(10000 ÷ 70000) kPa	≥ 0.026 %
	absolute pressure (nitrogen, air, water)	
	(1.4 ÷ 7000) kPaa	≥ 0.0036 %
(7000 ÷ 10000) kPaa	≥ 0.020 %	
(10000 ÷ 70000) kPaa	≥ 0.026 %	
electrical quantities		
type of the calibrated measuring instruments	measuring range*	CMC*
digital multimeters, resistance meters, oscilloscopes, insulation resistance testers		
DC voltage	10 μV ÷ 1100 V	≥ 0.0002 %
DC current	0.01 μA ÷ 20 A	≥ 0.0015 %
DC resistance	0.001 Ω ÷ 20 GΩ	≥ 0.00025 %
AC resistance	10 mΩ ÷ 210 mΩ	≥ 1 mΩ
capacity	0.4 nF ÷ 100 μF	≥ 0.29 %
AC voltage (10 Hz ÷ 1 MHz)	1 mV ÷ 1100 V	≥ 0.007 %
AC current (10 Hz ÷ 10 kHz)	10 μA ÷ 20 A	≥ 0.020 %
frequency	1 Hz ÷ 100 MHz	≥ 0.0003 %
clamp meters		
DC current	(0 ÷ 1000) A	≥ 0.5 % + 0.2 A
AC current (50 Hz)	(0 ÷ 1000) A	≥ 0.25 % + 0.1 A
multifunction calibrators, insulation resistance testers, voltage sources, power supplies, fixed resistors, decade boxes, generators		
DC voltage	10 μV ÷ 4000 V	≥ 0.00015 %
DC current	0.01 μA ÷ 20 A	≥ 0.0015 %
DC resistance	0.001 Ω ÷ 1.999 GΩ	≥ 0.0003 %
AC voltage (10 Hz ÷ 500 kHz)	1 mV ÷ 5200 V	≥ 0.012 %
AC current (40 Hz ÷ 10 kHz)	10 μA ÷ 30 A	≥ 0.042 %
frequency	1 Hz ÷ 100 MHz	≥ 0.0003 %
temperature indicators (meters), temperature simulators		
temperature indicators and temperature simulators compatible with RTD temperature sensors (e.g. Pt100, Pt1000)	(-200 ÷ 200) °C	0.005 °C
	(200 ÷ 500) °C	0.010 °C
	(500 ÷ 850) °C	0.015 °C

*a detailed list of the measuring ranges together with the measurement capability values of the CMCs is given at: lab.plum.pl/en/calibration-lab/

transparency and support in the collaboration process

The knowledge and experience of specialists employed in the laboratory, along with standards of the highest accuracy, provide a strong guarantee for the services we offer. The established collaboration process gives a sense of security and efficiency in the execution of services entrusted to us.

