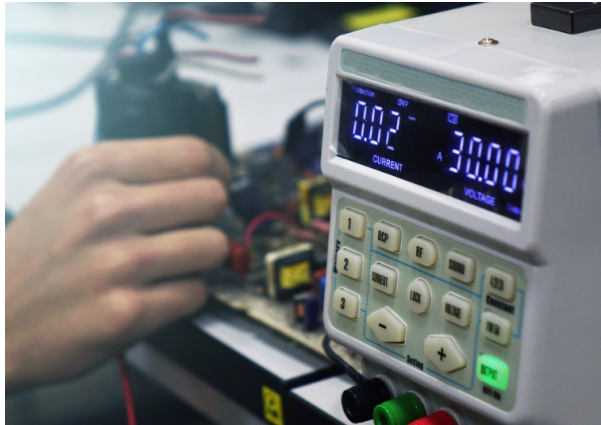


Electrical and Low Frequency Calibration



What is Electrical and Low Frequency Calibration?

Electrical and low frequency calibration ensures the accuracy of measurement instruments used in these areas. At [Applus+ Laboratories](#), we offer both [on-site](#) and in-laboratory [calibration services](#), complying with ISO 17025, ensuring traceability and international compliance. Our services ensure that instruments provide accurate and reliable measurements, essential for industrial, research and quality applications.

Electrical and Low Frequency Measurement Units

We calibrate the following quantities and measurement fields to guarantee the accuracy and reliability of the instruments:

- **Resistance:** Calibration of resistors and resistance decades to ensure accurate measurements.
- **Capacitance:** Measurement of electrical capacitance in capacitors and other devices.
- **AC/DC Current:** Calibration of AC and DC current for various equipment.
- **AC/DC Voltage:** Measurement and calibration of AC and DC voltages.
- **Power:** Calibration of voltmeters and other electrical power measurement devices.

Most Common Equipment for Electrical and Low Frequency Calibration

Applus+ Laboratories calibrates a wide variety of electrical and low frequency measurement equipment, ensuring its accuracy and reliability.

- **Multimeters:** Used to measure voltage, current and resistance in electrical circuits. We guarantee their accuracy for industrial and laboratory applications.

- **Temperature Indicators:** Instruments that measure and display the temperature of different environments. They are essential in industrial processes and quality control.
- **Temperature calibrators and simulators:** Used to calibrate thermometers and other [temperature measuring devices](#), ensuring that they provide accurate readings.
- **Ampmeter Clamps:** Tools that measure electrical current without interrupting the circuit, used in electrical maintenance and diagnostics.
- **Signal generators:** Devices that produce electrical signals to test and calibrate other equipment. They are essential in laboratories and electronic equipment testing.
- **Power supplies:** They provide controlled electrical energy to different devices, their calibration ensuring an accurate and stable power supply.
- **Signal Converters:** Devices that transform a signal of one type into another, used in many industrial and automation processes.
- **Resistors and Resistance Decades:** Used to create specific resistors in circuits and calibrate other measuring devices.
- **Insulation testers:** Used to measure insulation resistance in electrical equipment and detect insulation faults.
- **Other equipment:** Oscilloscopes, Dielectric meters, Ohmmeters, Milliohmmeters and Ultrasonic flaw detectors, according to standard 22232-1.

How to Certify Electrical and Low Frequency Instruments

To certify measuring instruments in these areas, follow these steps:

1. **Select an Accredited Laboratory:** Choose Applus+ Laboratories, accredited to ISO 17025.
2. **Send Instruments for Calibration:** Instruments can be sent to our laboratory or our experts can perform on-site calibration.
3. **Calibration Process:** We use traceable reference standards to test and adjust instruments, ensuring that your measurements are aligned with recognized benchmarks.
4. **Receive Calibration Certificate:** A detailed calibration certificate is issued, confirming that the instrument meets the required standards.

Benefits of Electricity and Low Frequency Calibration

Calibrating these instruments offers numerous benefits:

- **Improved Accuracy:** Ensures accurate measurements for critical processes.
- **Regulatory Compliance:** Meets stringent ISO 17025 standards.
- **Reliability:** Increases the reliability of measurement data.
- **Traceability:** Provides documented traceability to national and international standards.

- **Cost Efficiency:** Prevents costly errors and penalties for non-compliance.

Why Choose Applus+ Laboratories for Electricity and Low Frequency Calibration?

Applus+ Laboratories offers several advantages for the calibration of these instruments:

- **Accredited Experience:** We are accredited by ENAC according to ISO 17025, guaranteeing high standards of accuracy and reliability.
- **Comprehensive Services:** Our calibration services cover a wide range of instruments and measurement variables.
- **Advanced Equipment:** We use state-of-the-art equipment for accurate calibration.
- **Experienced Professionals:** Highly trained personnel with extensive experience in electrical and frequency measurements.
- **Customized Solutions:** Services tailored to the specific needs of each customer.
- **Quality Assurance:** Rigorous quality controls and traceability in all calibration processes.