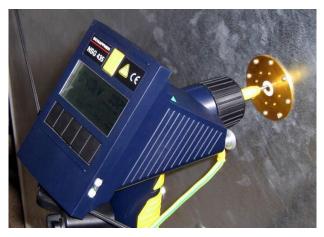
TESTING AND CALIBRATION LABORATORY OFFER



The Testing and Calibration Laboratory offers: environmental tests, electromagnetic compatibility (EMC) tests of equipment and electric/electronic systems, mechanic influence tests, safety tests, radio equipment devices tests and calibration of the testing and measuring equipment. The Laboratory has implemented a management system in accordance with EN ISO/IEC 17025:2017. In 2012 Institute of Power Systems Automation Ltd has the following certificates issued by Polish Centre for Accreditation: Calibration Laboratory No. AP 145 and Testing Laboratory No. AB 1384.



EMC tests according to Laboratory accreditation (AB 1384)

- electrostatic discharge immunity test (ESD) according to EN 61000-4-2
- radiated, radio-frequency, electromagnetic field immunity test according to EN 61000-4-3
- electrical fast transient/burst immunity test (EFT/B) according to EN 61000-4-4
- surge (1,2/50-8/20 μ s) immunity test according to EN 61000-4-5.

Calibration of the EMC testing equipment according to Laboratory accreditation (AP 145)

- calibration of electrostatic discharge (ESD) generators according to EN 61000-4-2
- calibration of electrical fast transient/burst (EFT/B) generators and coupling devices according to EN 61000-4-4
- calibration of the combination wave generators (CWG; 1,2/50-8/20 μ s, 10/700-5/320 μ s) and coupling devices according to EN 61000-4-5.

EMC tests not covered by an accreditation

- conducted disturbance measurements according to EN 55016-2-1
- radiated disturbance measurements in Fully Anechoic Room (FAR) according to PN-EN 55016-2-3
- ring wave immunity test according to EN 61000-4-12
- damped oscillatory wave immunity test according to EN IEC 61000-4-18
- immunity to conducted disturbances tests induced by radio-frequency fields according to EN 61000-4-6
- immunity to conducted common mode disturbances tests in the frequency range from 0 Hz to 150 kHz according to EN 61000-4-16
- voltage dips, short interruptions and voltage variations immunity tests according to EN IEC 61000-4-11 and EN 61000-4-29.





Calibration of the testing equipment with metrological traceability (not covered by an accreditation)

- calibration of voltage dips, short interruptions and voltage variations generators according to EN IEC 61000-4-11
- calibration of CDN, BCI and immunity testing generators according to EN 61000-4-6
- calibration of ring wave generators according to EN 61000-4-12
- calibration of damped oscillatory wave generators according to EN 61000-4-18
- calibration of the artificial networks (LISN/AMN) for disturbances measurement according to EN 55016-1-2
- calibration of pulse generators 1,2/50 μs for safety tests according to EN 61000-4-5
- calibration of a multifunction safety testers (e.g. for voltage withstand tests, leakage current, etc.).

Other tests not covered by an accreditation

- climatic tests in temperature range from -70°C to 180°C and relative humidity range from 10% to 98%
- mechanical strength tests for sinusoidal vibration or sinusoidal vibration with sweeping, random vibration, single surge, multiple surges
- safety tests
- radio equipment device tests according to ETSI standards.

