

EMC, Radio & Telecommunications

Electromagnetic Compatibility (EMC)

Electromagnetic compatibility (EMC) means the ability of a device, unit of equipment or system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment.

Generally, the investigation of electromagnetic compatibility is categorised into two main areas. The investigation of:

- Electromagnetic Immunity, which means the ability of a device, unit of equipment or system to perform without degradation in the presence of an electromagnetic disturbance.
- Electromagnetic disturbing emissions, the phenomenon by which electromagnetic disturbance is emitted from a device, equipment or system.

Our goal is to provide fast, accurate and courteous service that meets all of your EMC product testing and certification needs. Our assessments, test reports and certificates assure EMC conformity for important markets. We also provide pre-compliance testing and consulting to help you in your design process. We do all this by maintaining state-of-the-art facilities that cut testing time and expenses, and by employing knowledgeable and helpful staff.

SIQ acts as a Competent/Notified Body under the EMC Directive (2004/108/EC).

Scope of Services:

- EMC testing according to the requirements of international IEC/EN standards, national standards and industry specifications,
- Measurement of power harmonics and voltage flickers,
- Measurement of conducted emissions,
- Measurement of low-frequency electric and magnetic fields and selective measurement of electromagnetic fields up to 26 GHz,
- Immunity testing of electrostatic discharges up to 25 kV (ESD),
- Immunity testing of electrical fast and slow transients (BURST/SURGE),
- Immunity testing of static and dynamic electric and magnetic fields,
- Immunity testing of voltage dips and interruptions,
- Measuring the effectiveness of electromagnetic shielding enclosures,
- Provision of technical help (technical documentation, use of correct standards, interpretation of different national legislation ...),
- Training based on EMC legislation, standardization, EMC design,
- EMC testing for automotive industry according to the ECE R 10.2 or the EU Directive 2004/104/EC and its amendments.





Radio and Telecommunications Terminal Equipment

Radio and telecommunications terminal equipment, intended for placement on the market and putting into service in the European Community, has to meet requirements of the European R&TTE Directive 1999/5/EC. SIQ acts as a Notified Body under the R&TTE Directive 1999/5/EC (Annex III, IV and V).

Scope of Services

- Assessment of test reports and technical documentation to demonstrate compliance to essential requirements of the R&TTE Directive and consequently issuing CE Certificate/Expert opinion:
 - Protection of the health and the safety of users and any other person, including the objectives with respect to safety requirements, the protection requirements with respect to electromagnetic compatibility (EMC).
 - Effective use of the radio frequency spectrum.
 - Particular requirements for certain equipment classes.
- Definition of necessary and adequate tests for radio equipment that are considered to be essential for and as a basis of the conformity assessment,
- Testing according to harmonised standards under the scope of the R&TTE Directive:
 - Safety requirements
 - EMC requirements
 - Effective use of the radio frequency spectrum (measurement of short range devices - EN 300 220, EN 300 330...)
- Approval of a quality management system (full quality assurance) on the basis of ISO 9000 standards as a way for performing the conformity assessment for radio and telecommunications terminal equipment under the company's responsibility. This allows the company to mark all products with SIQ identification number without the additional Notified Body's assessment of the product.
- Technical assistance in issues related to compliance and placing of R&TT equipment on the EU market:
 - Conformity assessment procedures.
 - Notification in accordance with Article 6.4 of the R&TTE Directive.
 - Responsibility of the manufacturer, its authorised representative or the person responsible for placing a product on the EU market.
 - Technical Construction File and Declaration of Conformity.
 - CE marking (CE, Notified Body number; Class 1 or Class 2 equipment).

Information SIQ

Tržaška cesta 2
SI - 1000 Ljubljana, Slovenia
Phone: +386 1 4778 230
Fax: +386 1 4778 444
e-mail: sales@siq.si
web: www.siq.si

SIQ
www.siq.si