

Our capabilities – your benefits

Electromagnetic compatibility (EMC) is becoming more and more a critical factor for the design of commercial products. The high integration density in electronics, the increasing number of electronic devices or also cost and time pressure cause the devices to interfere with each other. This is why we have deepened our know-how and created a professional laboratory infrastructure. We see EMC and RF (Radio Frequency) testing as a service accompanying the development process. You rely on a trusted partner experienced in the development of complex and multidisciplinary systems.



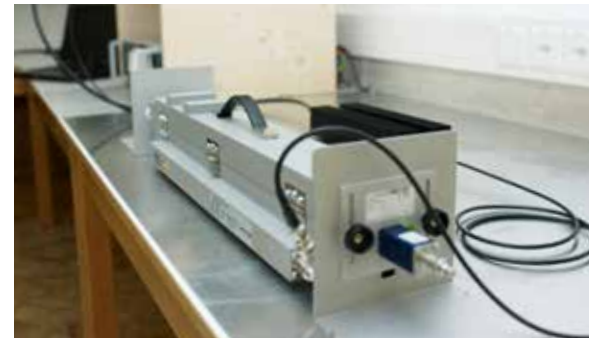
Analysis and problem solving

If there are any EMC or RF phenomena in the field, we have the equipment to reconstruct and simulate the situations, to analyze and solve the problem.



Consulting

For any type of project we give advise during the whole development iteration from the analysis, conception to the design, implementation, production and testing.



Prototype measurements

We address potential EMC and RF problems during functional model and prototype phases. Pre-compliant measurements help to avoid unexpected issues and to pass final EMC and RF approval tests at a third party accredited testing laboratory.



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Helbling Group

The Helbling Group was founded in 1963 and is owned by its managing partners. The internationally active engineering and consulting firm employs over 550 professionals in four business divisions focused on innovation/product development, management consulting, mergers & acquisitions, restructuring, information technology, real estate, energy and infrastructure.

Helbling Technik

Helbling Technik is a division of the Helbling Group, which was founded in 1963 and currently employs more than 400 professionals in Switzerland, Germany, the USA and China. The vision "Innovation, together we do it" positions Helbling Technik as a trusted long-term partner within clients' innovation network. Helbling Technik's highly trained and skilled engineers, computer scientists, physicists, and human factors experts utilize state-of-the-art development tools, processes, laboratories and equipment to develop innovative and successful products and support clients across the globe from idea inception to market launch.

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Electromagnetic Compatibility & Radio Frequency Testing

We help you to develop your product in a way that it functions safely, reliably and according to current standards with regard to electromagnetic compatibility and radiation.

Helbling Technik
Innovation, together we do it

Proven approach and professional equipment



Operation method

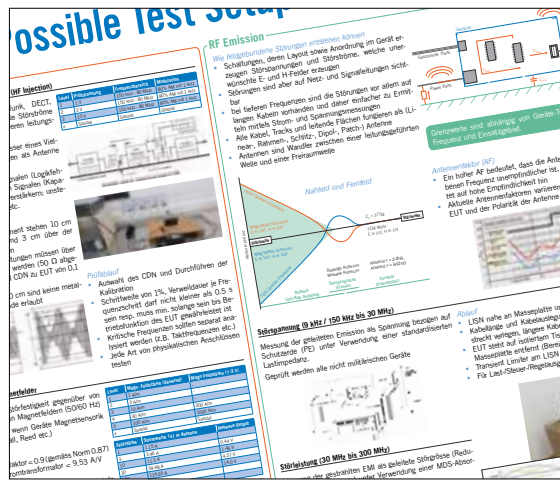
The EMC and RF laboratories are located in-house. Other laboratory infrastructure such as electronics workspace or a climatic chamber as well as employee's knowledge can be called in without delay.

We start with the problem analysis and then simulate the behavior in the laboratory. In this way, we gain further insights and get to know the system. From this we derive possible solutions, which we – if possible – immediately crosscheck again in the laboratory. Depending on the customer's requirements, a summary of the work is prepared in the form of a report.

A team combining creativity, technology and experience

EMC and RF are an interdisciplinary topics in all project phases. We work solution-oriented on system level or focused on a detail section. Some reference projects include:

- Optimization of HF interferences in a Lab system
- Analysis, simulation and localisation of a random error in printed circuit board
- Support of in-house developments of household appliances
- Reduction of a motor drivers conducted emission
- Wifi antenna matching



Qualified and competent EMC/RF measurements

Electromagnetic Compatibility (EMC) and Radio Frequency (RF) means that all electronic and electromechanical devices and machines run in their intended environment besides each other without interfering. Therefore, devices and systems must be tested (immunity and emitted interference) in accordance with the applicable standards.

Our infrastructure enables most conducted, single-phase measurements. Equipment such as antennas and EMI receivers and a table-top shielded box allow measurements in the field of high-frequency applications. When setting up the measurements, we make sure that they comply with the latest versions of EMC and RF test standards.



Covered test standards

