

Detect EMC Issues Early

Seminars and Consulting by Langer EMV-Technik GmbH

Developing EMC-compliant assemblies saves time and costs – especially when electromagnetic issues are identified early, not during final compliance testing. That's exactly where our approach begins: By integrating pre-compliance testing and the right know-how into the development process, critical EMC vulnerabilities can be identified and addressed during the design

phase.

Our EMC experimental seminars are designed to provide hands-on training in applying a pre-compliance strategy. Developers learn how to identify and resolve real-world emissions early in the process—directly on the assembly and using our own measurement equipment. Electromagnetic immunity is also assessed and optimized at this early stage. Each participant works independently on real test

setups using near-field probes, disturbance generators, and

structured diagnostic methods.

Key benefit: Many participants discover entirely new ways to apply Langer measurement tools during the seminar – for example, to pinpoint EMC issues in the layout or improve existing designs. The training expands practical understanding of the product range and strengthens the ability to solve EMC challenges efficiently.

You can find available seminar dates here

In addition to training, we also offer individual consulting services – either on-site at your location or at Langer EMV-Technik. Our EMC engineers analyze your assembly in detail, identify critical traces or circuit-level weaknesses, and suggest targeted countermeasures. The greatest benefit is achieved when our expertise is integrated early into your development cycle – providing hands-on support for EMC- and standards-compliant products.





EMC Performance of Connectors

Measurement and Evaluation by Langer EMV-Technik GmbH

Connectors have become a standard component in today's electronic assemblies—not only in consumer applications but increasingly in industrial systems as well. The ongoing shift toward modular designs continues to drive this trend.

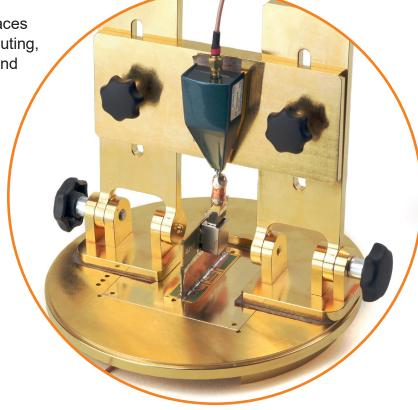
However, from our perspective, the EMC performance of connectors is still significantly underestimated. This is where Langer EMV-Technik comes in:

COCI - Measurement of the Coupling Inductance of Connectors and Cables

We offer in-house measurements of connector EMC behavior and provide a generalized EMC parameter. This parameter can be used during the early development phase to support simulations or calculations for both emissions and immunity—well before the final assembly is built.

The goal: to design connector interfaces with EMC in mind, optimize signal routing, and avoid unnecessary test cycles and unclear coupling effects later in the process.

For more details about the measurement method and available results, feel free to contact us directly.







Summer School 2025 - Sønderborg

Langer EMV-Technik GmbH at the EMC Summer School in Denmark

From August 4 to 8, 2025, Langer EMV-Technik GmbH will take part in the International EMC Summer School in Sønderborg, Denmark. The technical program brings together international participants from industry and academia to address current challenges in electromagnetic compatibility and signal integrity.

As an industry partner, Langer EMV-Technik will be present with its own booth. Two of our team members will be on site throughout the entire event to showcase solutions and measurement approaches related to development-phase EMC diagnostics. In addition, one of our engineers will give a technical presentation as part of the official agenda on August 5.

We will provide practical insights into near-field measurement, coupling mechanisms, and immunity evaluation—topics relevant to both developers and EMC professionals. We look forward to speaking with you at our booth.

EMC Europe 2025 – Paris

Langer EMV-Technik GmbH at EMC Europe 2025 in France

From September 1 to 5, 2025, Langer EMV-Technik GmbH will take part in EMC Europe 2025, hosted at Sorbonne Université in Paris. As one of the leading European conferences in the field of electromagnetic compatibility, the event covers a broad range of topics—from signal integrity and coupling mechanisms to EMC in safety-critical and high-frequency applications.

At our booth, we will present a selection of precomliant EMC measurement tools, including solutions for current and voltage analysis, DPI testing, and component-focused diagnostics using our IC product line. The showcased systems reflect key conference topics such as high-frequency behavior, PCB-level effects, and electromagnetic resilience.

Two of our team members will be on site throughout the event and are available for discussions. We welcome the opportunity to exchange ideas with engineers, specialists, and research teams—particularly regarding specific applications or feedback from security-driven EMC environments.





CHES 2025 - Kuala Lumpur

Langer EMV-Technik GmbH at CHES 2025 in Malaysia

From September 14–18, 2025, Langer EMV-Technik GmbH will participate in CHES 2025 (Conference on Cryptographic Hardware and Embedded Systems) in Kuala Lumpur, Malaysia. CHES is the world's leading conference on cryptographic hardware, embedded security, and implementation attacks—placing special focus on side-channel analysis and electromagnetic fault injection (EMFI).

At our booth, we will showcase high-performance tools for both side-channel analysis and electromagnetic fault injection. Our sensitive near-field microprobes for side-channel analysis, along with our powerful single and double pulse EM field sources for EMFI, enable precise analysis of cryptographic implementations under realistic attack conditions—whether in academic research or industrial security assessments.

We look forward to engaging with experts from industry and academia. Visitors to our booth will gain hands-on insights into current techniques for vulnerability analysis and system hardening in the context of side-channel attacks and EMFI.

