

An overview of our services

EMC tests

- Radiated emissions
 - Field strength measurements DC to 18 GHz
- Conducted Emissions
 - Interference voltage measurements up to 500 MHz
 - Interference current measurements up to 500 MHz
 - Harmonics and flicker (three phase up to 32 A)
- Immunity to radiation fields
 - HF radiation up to 100 V/m (10 KHz – 6 GHz)
- Immunity to Conducted interferences
 - Burst pulses up to 5.5 kV and surge pulses up to 7 kV
 - HF currents up to 1 GHz
 - Test pulses for automotive electronics
 - Simulation of voltage fluctuations and short-term power interruptions (three phase up to 32 A)
- Electrostatic discharges (ESD)
 - Air discharge up to 15 kV
 - Contact discharge up to 8 kV
- Shielding effectiveness measurements

Pre-Compliance tests, conducted in our lab or on site

Interference analyses

- Interference analysis of devices and systems
- Grid failure analysis and long-term measurements

Radiation control measurements for health protection

EMC design planning and consultation

- Environmental and risk analysis for new buildings and for buildings and systems already in use

Complete testing service together with inspectors from the TÜV NORD Group

Contact



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TÜV NORD CERT EMC Services



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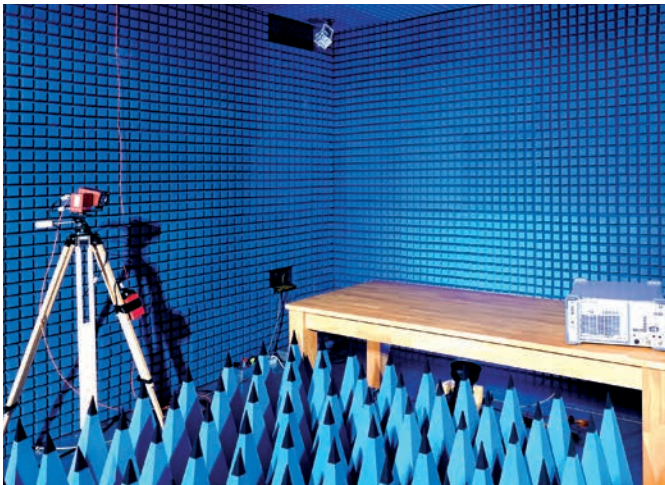
Expertise and experience

About us

When it comes to electromagnetic compatibility (EMC), TÜV NORD CERT is a strong and reliable partner.

Our EMC Services department offers you a comprehensive range of measuring and testing services. We are accredited by the German accreditation body Deutsche Akkreditierungsstelle (DAkkS) and are also recognized as a „technical service“ by the Federal Motor Transport Authority (Kraftfahrt-Bundesamt or KBA).

Our superbly equipped laboratory continuously adapts its capabilities in line with technical progress and all the new developments in EMC standards. Our test engineers have top-level qualifications and many years of experience. We are your partners in the product development process: fast turnaround times, and maximum flexibility in planning and performance, means our tests can be integrated into your organizational processes and workflows very smoothly.



Working with TÜV NORD CERT offers you additional benefits: in addition to EMC tests, we have a comprehensive portfolio of services that gives you access to consolidated expertise to support the development of your products and your company.

Cutting edge technology

Our laboratory

Semi-anechoic-chamber (SAC 10m)

- Electromagnetic interference measurements up to 10 m measuring distance in the frequency range up to 18 GHz
- Available space: length: 15 m, width: 8 m, height: 6.5 m
- Hall door: 3 m x 3 m
- Floor load capacity (incl. turntable): 3 t up to 10 t

Semi-anechoic-chamber (SAC 1m)

- Electromagnetic Interference measurements at 1 m measuring distance and immunity tests up to 6 GHz

Shielded measuring cabins

- Large cabin: available volume: 4 m x 5 m x 2.50 m
- Small cabin: available volume: 3 m x 4 m x 2.50 m

Unshielded laboratory area

- Approx. 100 m² with instruments for network simulations, preliminary design reviews, comparative tests etc.

Accreditation areas

- All generic standards
- All basic standards
- Devices for household appliances and similar purposes
- Electrical systems for home and buildings
- Audio, video, and audiovisual products
- Variable-frequency electric drives
- Programmable logic controls
- Alarm systems
- High-frequency industrial, scientific, and medical devices (ISM devices)
- Electrical equipment for control and laboratory use
- Electric lighting systems
- Information technology products
- Electrical medical devices
- Metrological aspects of non-automatic weighers
- Railway applications
- Industrial trucks and forklifts
- Navigational and radio communication devices for marine shipping
- Code of Federal Regulations, Telecommunication (FCC requirements)

Flexibility and commitment

On-site testing

At TÜV NORD CERT we also have a superbly equipped EMC measuring vehicle at our disposal, which allows us to conduct a range of tests on your products and systems on site, to support the development process and ensure conformity.

Interference analysis of devices and systems on site

Installers and operators of devices and systems often have EMC problems when highly sensitive electronics and powerful assemblies with high emissions are operated in close proximity to each other. In this analysis, we investigate the potential for interference (interference voltages, currents and field strengths) and arrive at conclusions about the possible effect on sensitive systems in the vicinity. The results are provided usually in the form of a test report or expert opinion, specifying ways of solving any problems.

Radiation control measurements for health protection

We examine technical systems such as high- and low-voltage systems, high-frequency industrial devices, and radio transmission systems, for compliance with the legal limits for electromagnetic radiation. We measure and assess the magnetic, electrical, and electromagnetic fields in buildings and outdoors, for the purpose of protecting human health. We issue reports/export opinions and analyze issues regarding health protection in relation to electromagnetic fields in both work and residential environments.

