



# EMC and radiofrequency testing

DEKRA On the safe side

## Measuring radiofrequency and checking electromagnetic compatibility

Electronic devices inevitably generate some form of unwanted interference and, furthermore, all of them influence each other when interconnected or close. As it's important to prevent unexpected situations, manufacturers need to face a double challenge: first, to ensure that electronic devices operate properly and, secondly, to assure safety for final users and the environment.

A safe electronic device is that which works as intended, only emits a limited amount of interferences and it can work properly exposed to the level of electromagnetic energy expected in its environment.

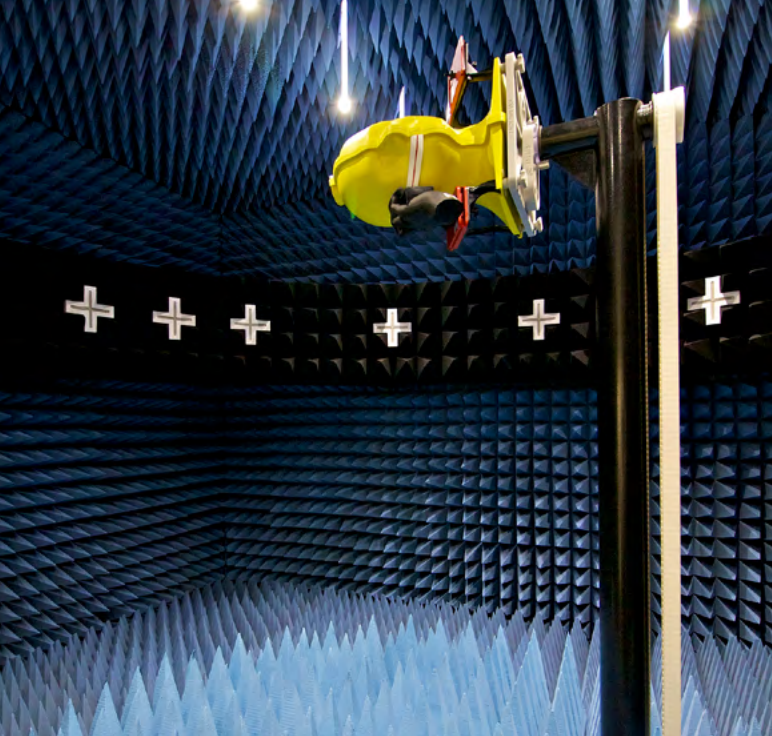
DEKRA supports you to prepare your product for market access. With our global network of accredited testing laboratories, our specialized experts can help you to guarantee your product meets the applicable Electromagnetic Compatibility & Radiofrequency (EMC & RF) requirements and standards of each market. In addition, DEKRA offers a comprehensive testing scope for wireless communication devices covering the largest variety of technologies (GSM/GPRS/EDGE, WCDMA, HSPA, LTE, LPWAN, Bluetooth®, Wi-Fi®, RFID, UWB, NFC and 5G) and a wide range of electric and electronic devices coming from different industries:

- ▶ Electric and Electronic Devices and Components
- ▶ Lighting
- ▶ Appliances
- ▶ Industrial Machinery
- ▶ Air Conditioning Equipment
- ▶ Automotive
- ▶ Consumer Products
- ▶ Healthcare
- ▶ TIC
- ▶ Military & Aerospace

### Services

We provide testing and certification services of EMC & RF:

- ▶ Pre-compliance testing
- ▶ EMC regulatory testing according to international standards (ISO, IEC, EN, etc.)
- ▶ Emission and Immunity (radiated and conducted tests)
- ▶ Certification testing (CE, FCC, ISED, etc.)
- ▶ On-site testing
- ▶ E-mark services (UN-ECE Regulation 10) (Testing & Type Approval)
- ▶ EMC testing for OEM automotive standards
- ▶ Notified Body for EU directives (RED Directive 2014/53/EU and EMC Directive 2014/30/EU)
- ▶ Telecommunication Certification Body (TCB) for USA and Canada
- ▶ Training and customized services



## Products we test

At DEKRA we work to provide safety throughout the whole of your value chain.

There are some examples of products we test:

- ▶ Electric and electronic equipment
- ▶ Power supplies & batteries
- ▶ Smart home devices
- ▶ Internet of Things devices
- ▶ Wireless modules and devices
- ▶ Smartphones
- ▶ Hearing instruments
- ▶ IT products
- ▶ Medical devices
- ▶ Automotive electronics and electric vehicles
- ▶ Railway equipment
- ▶ Machinery
- ▶ Security Systems and alarms
- ▶ Power tools
- ▶ Household appliances/lighting products
- ▶ Military and aerospace equipment
- ▶ E-bikes, scooters
- ▶ Toys

## About DEKRA

DEKRA has been active in the field of safety for almost 100 years and it is today one of the world's leading expert organizations. With qualified and independent expert services, they work for safety on the road, at work and at home. These services range from vehicle inspection and expert appraisals to claims services, industrial and building inspections, safety consultancy, training courses, temporary work, as well as testing and certification of products and systems of consumer, industrial, automotive, ICT products, medical devices and equipment used in explosive atmospheres, among others. The vision for the company's 100th birthday in 2025 is that DEKRA will be the global partner for a safe, secure and sustainable world.

## Your benefits

**Access to International markets.** As Notified Body under the European Electromagnetic Compatibility directive 2014/30/EU, our experts help you gain access to EU markets and also to countries outside the European Union, such as the USA, South Africa, Japan, South Korea and Australia.

**Knowledge and Expertise.** Our experts have deep knowledge and experience as well as an active role in technical committees and industrial consortia to be aware of latest standards developments and market trends.

**Global network of accredited laboratories.** DEKRA laboratories are located in multiple key sites of the world, such as the United States, Europe, Mainland China, Taiwan and South Korea.

**Full and flexible testing:** We offer full type approvals as well as flexible independent testing methods tailored to your specific needs.

### Contact

[www.dekra.com/en/contact-product-testing/](http://www.dekra.com/en/contact-product-testing/)

