

# ELECTROMAGNETIC COMPATIBILITY TESTING

On-site or laboratory EMC tests



## Your expectations

You want to:

Understand the behaviour of the on-board electronics to optimise its design and improve its reliability performance

Study, qualify or improve the resistance of your systems and their components, including those dedicated to electric mobility (e-mobility), to electromagnetic interference and waves within the scope of the EMC Directive 2014/30/EU, Regulation ECE R10 or Regulation (EU) No. 168/2013

Know the failure modes of your systems in harsh electromagnetic environments, in relation to **Machinery Regulation (EU) 2023/1230** and manufacturers' specifications

## Our solutions

Cetim offers you:

**an analysis of the design** of your system and its components, from the architecture of the control and monitoring system through to the electronic diagram, or from the preliminary risk assessment to the issuing of the accompanying documents to ensure proper use of the system

**tests in anechoic chamber** making it possible to achieve electric field levels of up to 200V/m in accordance with standards ISO 11451-2 and ISO 11452-2, in combination with a monitoring system to supervise the functions of the tested equipment (cameras, signal or fieldbus monitoring, etc.) on vehicles and machines weighing up to 4,000 kg and their sub-assemblies; and to measure radio-frequency disturbances in accordance with CISPR12 and CISPR25

**tests on benches dedicated to conventional and/or electric mobility solutions**, such as an E-Bike test bench (EN 15194), a transient voltage surge test bench for batteries (ISO 7637-2, ISO 16750, etc.), an electrostatic discharge test bench (ISO 10605), etc.

**tests in anechoic chamber and laboratory** so as to carry out tests on all other stationary equipment (harmonics, flicker, electrostatic discharge, radiated immunity, transients, shock waves, conducted immunity, magnetic fields, voltage variations, conducted emission, radiated emission, etc.)

**advice** to help you ensure compliance before placing your equipment on the market and to improve its durability and reliability

a dedicated **Cetim Academy training course: K18** | "Introduction to EMC"

## Your benefits



More than 35 years of experience in conducting EMC tests on vehicles, machinery and industrial products  
Get ahead with the assistance provided by our experts, members of standardisation committees, and particularly in relation to the new EU machinery regulation

A multi-disciplinary team with a technical expert in charge of the project

A COFRAC Testing accredited laboratory (accreditation No. 1-7263), Liste of sites and scope available on [www.cofrac.fr](http://www.cofrac.fr)

A pragmatic approach supported by many R&D projects