

**ROHDE & SCHWARZ**

Make ideas real



# R&S® ELEKTRA EMC TEST SOFTWARE

Accelerate EMC tests under real driving conditions

Flyer | Version 01.00



# AT A GLANCE

R&S®ELEKTRA, the ideal choice for swift and reliable measurement of electromagnetic emissions and immunity, now enables synchronization of EMC tests with automotive test benches (ATB).

R&S®ELEKTRA supports EMC testing with simulation of real driving conditions, which is important for detecting electromagnetic vulnerabilities in electric vehicles. Real-time synchronization of parameters and measurement data with test benches ensures that tests are reliable and repeatable.

A new class of drivers are supported to interface with test benches during emissions measurement and susceptibility evaluation. The driver interface enables the synchronization of parameters, data and the test system state during the separate phases of the test cycle.

The test bench drivers for emission measurement fetch the test bench parameters and synchronizes them with the emission data that is continuously measured in R&S®ELEKTRA before updating the result tables. For susceptibility evaluations, EMC test system information for each frequency is synchronized with the test bench.

R&S®ELEKTRA identifies the maximum emissions by varying several test bench parameters.

R&S®ELEKTRA supports electric drivetrain test benches with specific and generic drivers. The generic drivers are based on the R&S®ELEKTRA ATB interface specification. The specification describes the communication and sequence of commands between ATBs and R&S®ELEKTRA for EMC testing.

## Key facts

- ▶ Supports in-depth analysis of emissions and immunity that goes beyond current standards
- ▶ Easy to set up
- ▶ Emission measurement supports maxima search for all selected test bench parameters followed by final measurement with test bench parameters showing the highest emissions
- ▶ Susceptibility evaluation is performed at every frequency during the test bench cycle
- ▶ Support for various brands of test benches (R&S®ELEMC-ATB license option required)



The R&S®ELEKTRA EMC test software controls entire EMC test systems to perform automated or interactive electromagnetic interference (EMI) and electromagnetic susceptibility (EMS) measurements on equipment under test (EUT) and verify compliance with relevant standards.