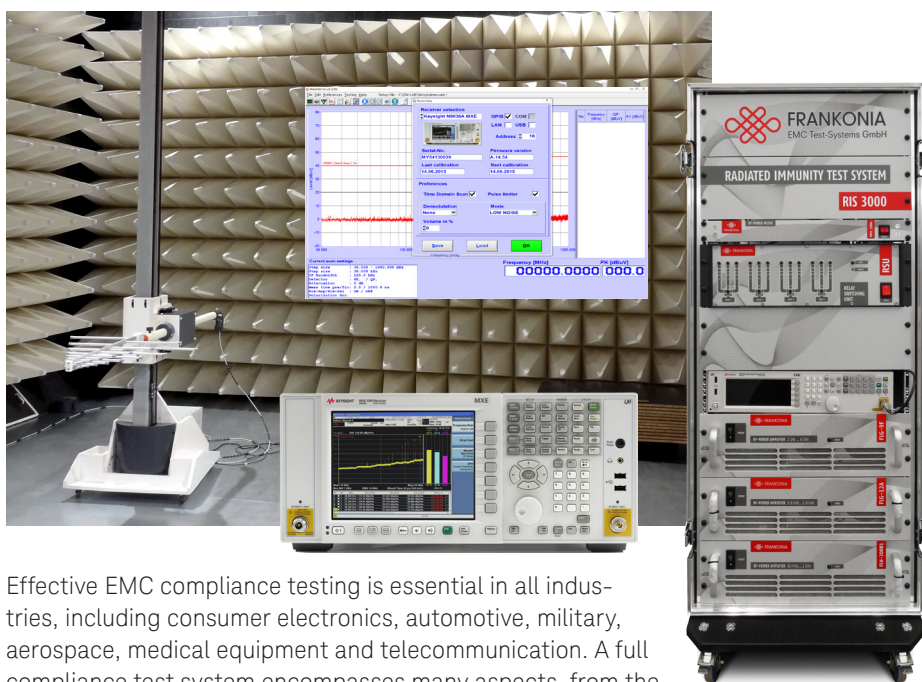


# EMC Compliance Testing Systems

Keysight Technologies and  
Frankonia EMC Test-Systems GmbH

Turn-key conducted and radiated EMC test systems for complete test confidence



Effective EMC compliance testing is essential in all industries, including consumer electronics, automotive, military, aerospace, medical equipment and telecommunication. A full compliance test system encompasses many aspects, from the instrumentation used to stimulate the device under test and measure the results, to the environment in which the tests are made. When selecting a supplier for your EMC test facility, experience counts for everything.

With more than 20 years of experience, Frankonia EMC Test-Systems GmbH is one of the leading manufacturers of RF-shielded rooms and anechoic chambers for EMC testing. Frankonia offers a comprehensive range of conducted and radiated EMC compliance testing systems for immunity tests and emission measurements up to a frequency range of 6 GHz. Keysight Technologies is a world leader in design and measurement solutions and offers a wide portfolio of products for EMC and EMI testing including the MXE N9038A EMI Receiver and EXG RF Analog Signal Generator.

- Turn-key EMC compliance test facilities, including fully equipped anechoic chamber and test systems
- Conducted and radiated EMC measurements to CISPR, FCC, MIL and EN standards
- Uses Keysight MXE EMI Receiver
- Immunity measurements to IEC, ISO and MIL standards
- Uses Keysight EXG RF Analog Signal Generator
- Automated measurements with EM-LAB and RF-LAB software
- Software control of turntable and masts
- Ensures your products meet all relevant EMC standards

## EMC Compliance Testing Systems

Together Frankonia and Keysight can deliver turn-key EMC facilities up to a frequency range of 40 GHz. The MXE EMI receiver is fully standards-compliant and fulfills the highest demands of quality by providing fast FFT analysis. When incorporated into an EMC test facility, the MXE EMI receiver can be operated by Frankonia's powerful emission control software EM-LAB. The software can also control the movement of antenna masts and turntables making the operation fully automatic.

For immunity testing up to 40 GHz Frankonia integrates signal generators, such as the EXG RF Analog Signal Generator, and power meters from Keysight Technologies. Immunity test systems can be fully automated with Frankonia's control software RF-LAB. Immunity test systems from Frankonia and Keysight are available for the Industrial sector, compliant to IEC/EN 61000-4-3, for the Automotive industry, to ISO 11452-2, and for the Military sector, to MIL-STD 461.

With conducted and radiated EMC compliance test systems from Frankonia and Keysight you can be sure that your products meet all the relevant EMC standards, whatever your industry.

### Case Study

Keysight Technologies and Frankonia EMC Test-Systems GmbH developed an EMC compliance test facility for a manufacturer of electrical drives. The customer was looking for a turn-key testing solution that included an anechoic chamber, an immunity test system compliant with IEC/EN 61000-4-3 and an emission test system.

Full software control of the test systems was required. Frankonia incorporated the software driver of the MXE N9038A EMI Receiver into its control software, EM-LAB and the software driver of the EXG N5171B-506 RF-Analog Signal Generator into its control software, RF-LAB. The system software controls the test instruments and the movements of the mast and turntable inside the anechoic chamber.

### System Components

#### Keysight Technologies

|                |   |
|----------------|---|
| MXE N9038A     | EMI Receiver, 20 Hz – 44 GHz                  |
| EXG N5171B-506 | RF-Analog Signal Generator, 9 kHz – 1/3/6 GHz |

#### Frankonia EMC Test-Systems GmbH

|              |  |
|--------------|--|
| SAC-3-SQUARE | Semi-Anechoic Chamber lined with hybrid absorbers and equipped with turntable, mast, controller, RF-switching, couplers, power meters, amplifiers, antennas etc. |
| EM-LAB       | Control Software for conducted/radiated emission measurements including automated control of turntable and masts   |
| RF-LAB       | Control Software for immunity tests  |

To learn how this solution can address your specific needs please contact

Keysight's solutions partner,  
Frankonia EMC Test-Systems GmbH  
[www.keysight.com/find/frankonia](http://www.keysight.com/find/frankonia)



**FRANKONIA**

Keysight & Solutions Partners  
Extending our solutions to meet your needs

Keysight and its Solutions Partners work together to help customers meet their unique challenges, in design, manufacturing, installation or support. To learn more about the program, our partners and solutions go to  
[www.keysight.com/find/solutionspartner](http://www.keysight.com/find/solutionspartner)

With more than 20 years of experience in planning and realizing EMC test laboratories, Frankonia is one of the worldwide leading manufacturers and suppliers of turn-key EMC solutions.  
<http://www.frankoniagroup.com/>

For information on Keysight Technologies' products, applications and services, go to  
[www.keysight.com](http://www.keysight.com)

Product specifications and descriptions in this document are subject to change without notice

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