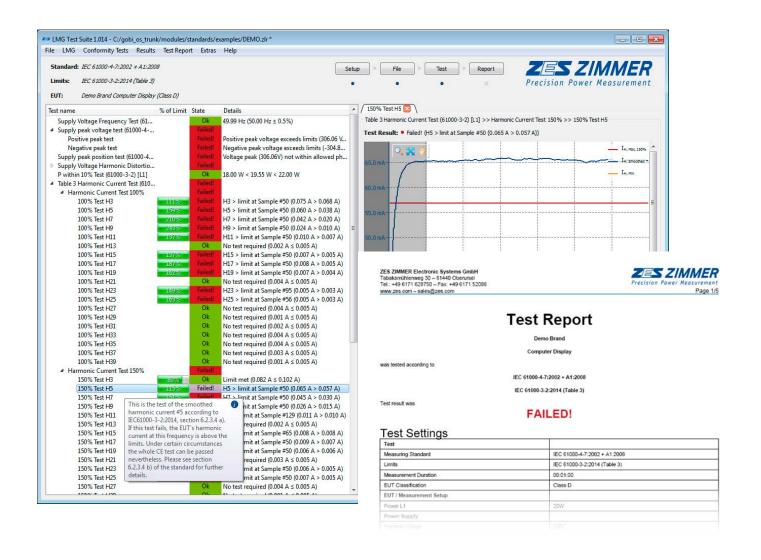


# **LMG Test Suite**

# CE compliance test system by ZES ZIMMER



Harmonics and flicker test according to EN 61000-3

LMG series' proven precision power measurement technology

**Detailed analysis** for targeted diagnostics and optimization

Clear overview of all parameters and values Comprehensive and customer-specific documentation

Manufacturerindependent use of **AC** power sources



#### Standards-compliant and meaningful

The ZES ZIMMER test system LMG Test Suite tests in accordance with the currently valid version of EN 61000-3-2/-12 or EN 61000-3-3/-11 and also supports measurements per ECE R-10.4 Annex 11 (e.g. electromagnetic compatibility of vehicles). As a manufacturer of precision power measurement technology, we are represented on the international standards committee. As a result, changes in standards are immediately incorporated into our test systems.

The measurement results and the limit values (either fixed or product-specific) defined in the standards are also graphically visualized. The analysis can be implemented either online, while directly linked with the measurement hardware, or offline, using stored data records.

Each measurement data record is furnished with the basic characteristic data of the test sample (RMS values of voltage and current, active power, reactive power and apparent power, power factor, harmonic distortion, etc.) to increase the significance of the information and to avoid incorrect allocations.

#### Proven precision power measurement technology

The system uses the LMG series' proven precision power measurement technology. ZES ZIMMER power analyzers measure with particularly great reliability and precision. A fast Ethernet interface (Gbit) guarantees smooth communication and data transfer with the test system.

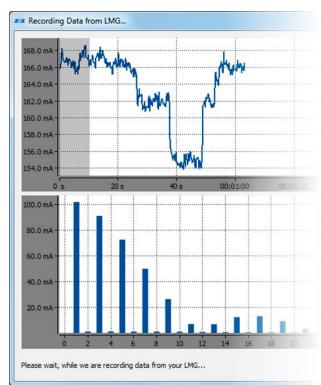
#### Detailed analysis for rapid diagnostics and product improvement

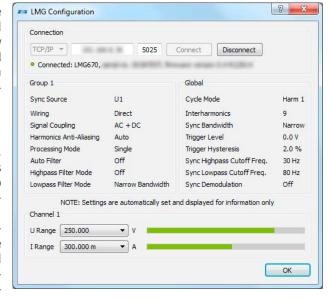
The LMG Test Suite compliance test system allows quick identification of the cause of an inadequate test result. All measurements can be displayed and evaluated in time domain alongside the familiar presentation in frequency domain. All harmonic frequencies can be isolated throughout the test and investigated to assist with localizing the problem. In addition, all data can be passed on to third-party applications in full resolution using the clipboard or file export for additional analysis.

#### Flexible hardware use, independent of manufacturer

The LMG Test Suite supports all AC power sources available on the market, which fulfil the requirements of the CE standards to be tested. This provides maximum flexibility for the customers. In particular, they can continue to use the sources that are already available and thus avoid additional investments.

Calibration of the AC power source specifically for the CE tests is not necessary as the test system monitors compliance with the stipulated source parameters. For example, the system analyzes the voltage harmonics and presents them graphically. This ensures freedom from distortion and voltage stability of the source. Any problems from this side of the test structure are thus excluded reliably.





## Comprehensive, customer-specific documentation

All results are documented in clear, comprehensive test reports in PDF format. Alongside the stipulated measurement values, all of the information regarding measurement equipment, test structure and settings is also integrated into the test reports – such as type designations, serial numbers and information on the calibration and traceability of the measurement instruments used. Of course, the reports can be supplemented with additional customer-specific information and design elements, in order to avoid unnecessary reworking of the reports outside the system.

### **System requirements:**

- Operating system: Windows 7/8 (32/64 bit)
- Hard drive: software: min. 100 MB, data: approx. 20 MB per minute of measurement/phase
- RAM memory: min. 2 GB
- Processor: min. 2 GHz, dual-core
- Interfaces supported: Gbit-Ethernet