

## EMI64k Automation Software Suite

The EMI receiver families TDEMI® of GAUSS INSTRUMENTS provide a huge fully CISPR compliant real-time bandwidth and therefore allow to speed up your measurements tremendously and to reduce the measurement uncertainty significantly - both at the same time. By using the full automation software suite EMI64k from GAUSS INSTRUMENTS the test procedures according to the CISPR 16-2-3 standard for the FFT-based measuring instruments as well as conventional testing (pre-scan and final maximization) and further EMC Standards are available. In comparison to the previously conventional pre-scan and final measurement strategy, the overall test quality can be significantly increased whereas the testing times are reduced by orders of magnitudes.

By the EMI64k software suite a full automation of EMI testing according to all commercial and military standards is available. The EMI64k software allows to embed the TDEMI systems in a fully automated test environment. During the measurements carried out by the TDEMI the positioning devices e.g. turntable and antenna mast, are controlled. The line impedance stabilisation network (LISN) as well as many other auxiliary equipment can be controlled via Ethernet, GPIB (IEEE-488), Sub-D 25-pin (Parallel Port), USB or RS232 (Serial Port). Each setup or project can be stored and later reloaded into a project tree. The setup contains the drivers, transducers, hardware setup, scan settings and measurement data.

Using the capabilities of the TDEMI ULTRA, TDEMI X, TDEMI G, TDEMI M+, TDEMI M and TDEMI S with a gapless processing and full quasi-peak detection, the EMI64k is the only software that provides a full automation even under conditions of sporadic interferences or drifting emissions. This unique technology avoids manual searching of peaks and improves the overall test quality.

This allows you to make your EMC testing more sustainable. For example it is possible to create an entire database and documentation with radiation patterns, test procedures, and casing construction but also many more information. New product developments and designs can be tested right from the beginning to make sure all the required limits are fulfilled. This saves you time and money in your development and design process but also in the final market certification process. Of course the EMI64k is not limited only to CISPR applications, but also measurements according to FCC and ANSI or MIL-461 and DO-160 standards are also applicable as well.

The EMI64k automation software is available for all TDEMI product families and can be hosted on your TDEMI System or from a separate work station via an external PC or Laptop.

The EMI64k software supports conducted emissions, measurement of disturbance power, radiated emission measurements in a full anechoic room (FAR) or at an open area test site (OATS) as well as in a semi anechoic chamber (SAC). For all these typical test setups the EMI testing is fully automated. The GTEM cell is a very effective approach to test small devices. With the EMI 64k software it is possible to speed up the measurement using the quasi-peak detector for a scan with a scan time of less than 10 s. The measurement is carried out at all 3 axis and the calculation of an OATS equivalent result is performed.

Due to a full support of 64-Bit operating systems and nowadays modern Multi Core CPUs also huge amounts of data can be managed simply and safely as well as fast and efficient.

The format of the stored measurement data of the EMI 64k software is compatible with Matlab and therefore highly flexible in its use and also extendable very easy by using drivers and test setups.

Whether for conducted or radiated emission measurements according to commercial, automotive, avionic and military standards, for your GTEM cell measurements, your measurements with your SLIDE or a combination of several modules, we provide an optimum and cost effective software solution tailored to your requirements.



These EMI64k modules are available and combinable:

- EMI64k Basic Package, Software package for radiated & conducted emission measurements (Requirement for all further packages)
- EMI64k-GTEM Package, Software package for GTEM measurements
- EMI64k-SLIDE Package, Software package for disturbance power measurements
- EMI64k-Rad Package, Software package for radiated emission measurements
- EMI64k-RadUF Package, Software package for ultra-fast radiated emission measurements
- EMI64k-MDM Package, Software package for Vector Signal Analysis