

Version
01.00

August
2008

R&S®EMC32-EB EMI Measurement Software

For manual and partly automated disturbance measurements in R&D and conformance testing

Efficient

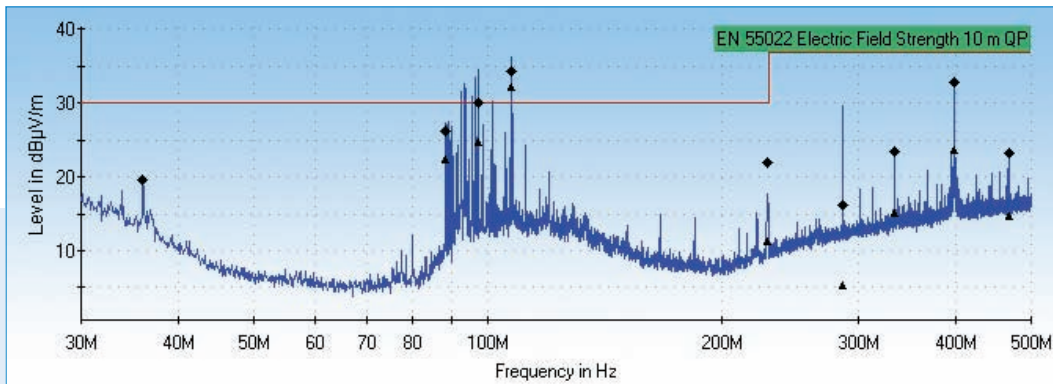
- ◆ Graphical operating concept for configuring instruments and measurement systems
- ◆ Menu-guided, intuitive user interface for all measurements
- ◆ EUT-specific test selection and data management
- ◆ Installation and configuration wizard
- ◆ English-language online help

Flexible

- ◆ Measurement of disturbance voltage, disturbance power and disturbance field strength
- ◆ Support of commercial and military standards (CISPR, EN, ETS, FCC, VCCI, VDE, MIL-STD, DEF-STAN)
- ◆ Manual and partly automated EMI measurements
- ◆ Combined use possible with all current EMI test receivers/analyzers from Rohde & Schwarz
- ◆ Drivers for numerous accessory components included

Future-oriented

- ◆ Modular program structure
- ◆ Data storage in text format
- ◆ Report generation also as PDF, RTF or HTML file
- ◆ 32-bit software for Windows® Vista, Windows® XP and Windows® 2000



EMI under control ...

The R&S®EMC32-EB software is used to measure disturbance voltage, disturbance power and disturbance field strength, and it runs on the current 32-bit operating systems from Microsoft®. It is a module of the R&S®EMC32 EMC measurement software and supports both manual as well as partly automated EMI measurements in line with commercial and military standards. This allows the reliable acquisition, analysis, documentation and traceability of measurement results. The software may be combined with almost all current Rohde & Schwarz EMI test receivers and spectrum analyzers (excluding the R&S®FSH). Moreover, it includes drivers for a large number of accessory components such as mast and turntable systems which may be manually remote-controlled via the user interface (virtual instrument). Automated test routines with fully automatic accessory control are offered as the R&S®EMC32-K10 option. The R&S®EMC32-K11 EMC test sequencer option extends the R&S®EMC32-EB basic software with the capability to further automate the measurement procedure by intelligently combining different EMI tests into a single test sequence.

... flexible

An essential feature of R&S®EMC32-EB is that it can be flexibly adapted to the requirements of different EMC applications.

Certification measurement

Predefined tests make it possible to perform and document standardized EMI measurements quickly and easily.

Tests during development

Flexible configurability and open software structure make it possible to easily replace system components or quickly switch between various test setups.

Calibration

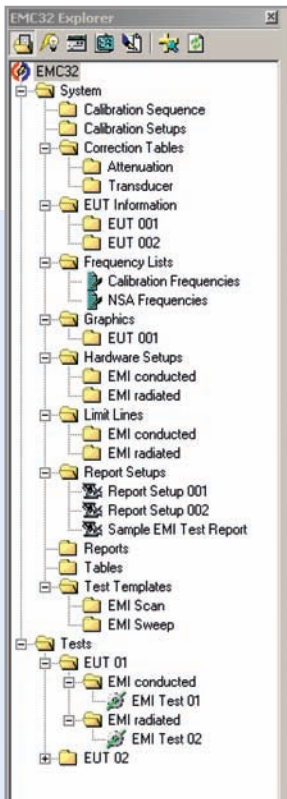
Owing to the integrated calibration concept, the characteristics of individual system components can be detected by using an optional tracking generator or an external signal generator. In addition, calibration data can also be imported as an ASCII file or manually entered.

Documentation

The report generator offers extensive capabilities for selecting the components required for the test report and flexibly arranging them. Plus, it enables users to integrate image and text files.

Once layouts are created, they can be stored as templates. The test report itself can be generated as a printout or as a PDF, RTF and HTML file.

The software already contains the limit values of various international standards. Furthermore, users can very easily edit and store new reference criteria as well as integrate them into the corresponding test templates as manufacturer- and product-specific limit values.



EUT-oriented test directory structure in the R&S®EMC32-EB file explorer. A test directory contains all measurement results plus the associated test templates, limit lines and correction tables (transducers), which clearly define how the measurement results were obtained. Thus, users can confidently trace the results and reliably reproduce the measurements (important for accreditation)

... efficient

The straightforward graphical user interface is based on simple elements that make learning the system quick and easy. Operating the system is intuitive and efficient.

Graphical representation

Not only traces but also measurement and calibration setups as well as device settings are visually displayed, providing a better overall understanding of each of them.

Configuration wizard

A wizard that guides the user through all important steps makes configuring the measurement system quick and easy. The wizard also includes a context-sensitive help function.

EUT-oriented test selection and file storage

Measurement settings as well as all associated calibration data, limit values and device parameters can be pre-defined in R&S®EMC32-EB. They can also be stored as EUT-specific or standard-specific test templates. This yields a library of test templates that can quickly be implemented.

Measurement results are stored in folders related to either the EUT or type of measurement, and file management and data backup can be performed directly in the Windows® operating system.

R&S® EMC32-EB as virtual measurement instrument: display during measurement of disturbance field strength.

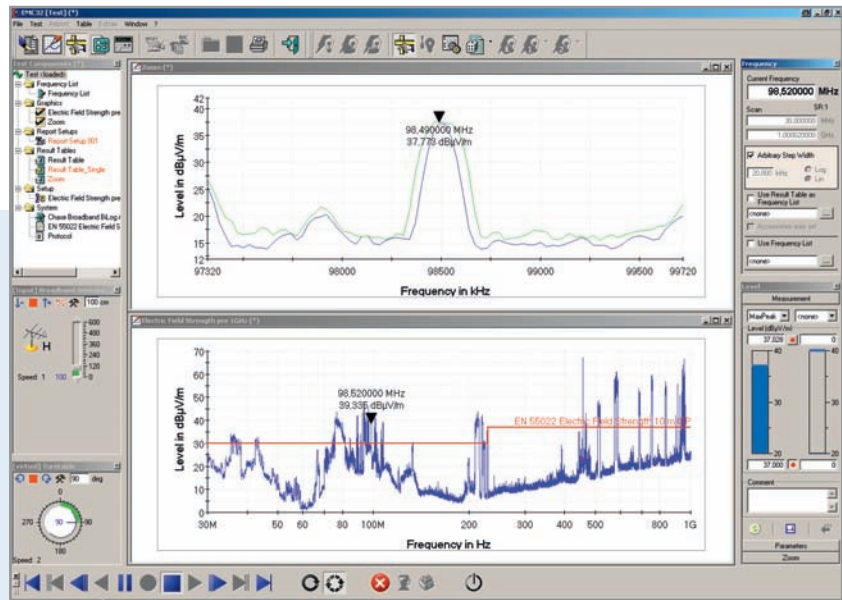
The test component explorer (top left) provides an overview of all loaded files of the current measurement. Directly below it are the entry fields for the manual remote control of mast and turntable.

The area in the center provides the graphics for the following:

- The overview measurement (preview) with the results of the individual EMI measurement*
- The zoom function which is used to perform a sweep or scan of a user-definable area around the disturbance frequency.*

The windows on the right are used for setting the frequency of the test receiver. They also display the current result of the individual EMI measurement numerically and as a bargraph (ClrWrite and MaxHold).

The symbols at the bottom are used to control the test routine (pause, end, start, frequency step, etc.)



... future-oriented

In addition to its flexibility and adaptability to modified or new measurement requirements, R&S® EMC32-EB has additional features that make it well-prepared for the future.

Data storage and processing

All measurement, configuration and report data is stored in standard file formats in user-definable file directories:

- ◆ Alphanumeric data (calibration, measured values, settings) in text format
- ◆ Graphics (traces) in WMF format
- ◆ Test reports as PDF, RTF and HTML files

32-bit platform

R&S® EMC32-EB is a 32-bit application for the Windows® Vista, Windows® XP and Windows® 2000 operating systems.

Expandability and support

The modular structure of R&S® EMC32-EB helps to ensure smooth software expansions and modifications as part of the Rohde & Schwarz software update service. This also means adaptability to future measurement tasks.

Specifications/system requirements

- ◆ Operating system: Windows® Vista, Windows® XP with Service Pack 2 or Windows® 2000 with Service Pack 4 (32-bit version)
- ◆ Administrator rights (for installation)
- ◆ Microsoft Internet Explorer 5.0 or later
- ◆ PC with Pentium processor (at least 3 GHz or equivalent)
- ◆ 1 Gbyte RAM (Windows® Vista), 512 Mbyte (Windows® XP) or 256 Mbyte (Windows® 2000)
- ◆ 200 Mbyte free hard disk space
- ◆ Minimum screen resolution 1024 × 768 pixel, 65536 colors (recommended resolution: 1280 × 1024 pixel)
- ◆ USB interface, integrated into the motherboard (for i-Key software protection ¹⁾)
- ◆ IEC/IEEE bus interface card from National Instruments with IEEE 488 driver (version 2.50 recommended)

Further software modules and options of R&S®EMC32

A variety of modules and options of the R&S®EMC32 software family are available, e.g.:

- ◆ R&S®EMC32-S: for electromagnetic susceptibility test systems (EMS)
- ◆ R&S®EMC32-K10: for fully automated EMI tests (R&S®EMC32-EB required)
- ◆ R&S®EMC32-K11: for combining individual EMI/EMS measurements into a complete test sequence (R&S®EMC32-EB or R&S®EMC32-S required)

For further information on other R&S®EMC32 options and device drivers (RF generators, mast and turntable controllers, etc.), visit

www.emc32.rohde-schwarz.com

Ordering information

Designation	Type	Order No.
EMI Measurement Software	R&S®EMC32-EB	1300.7010.02
Multiusers License	R&S®EMC32-MEB	1300.7010.12
EMI Auto Test Option	R&S®EMC32-K10	1117.6840.02
EMC Test Sequencer Option	R&S®EMC32-K11	1117.6862.02
EMS Measurement Software	R&S®EMC32-S	1119.4638.02

¹⁾ Software protection: All R&S®EMC32 modules are protected by a hardware dongle (i-Key). For demonstration purposes or if system components (hardware) will not be used, R&S®EMC32 can also be installed on a PC without further registration and operated without the i-Key.



Further information at
www.emc32.rohde-schwarz.com



ROHDE & SCHWARZ

www.rohde-schwarz.com

Europe, Africa, Middle East +49 1805 12 42 42* or +49 89 4129 137 74 customersupport@rohde-schwarz.com

North America 1-888-TEST-RSA (1-888-837-8772) customer.support@rsa.rohde-schwarz.com

Latin America +1-410-910-7988 customersupport.la@rohde-schwarz.com

Asia/Pacific +65 65 13 04 88 customersupport.asia@rohde-schwarz.com