EMI Measurement Software R&S®EMC32-E+

For manual and automated EMI measurements

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
◆ Assisted installation and configuration
◆ Online help

Flexible
◆ Measurements of RFI voltage, RFI power and RFI field strength
◆ Support of measurements to civil and military standards (CISPR, EN, ETS, FCC, VCCI, VDE, MIL-STD, DEF-STAN)
◆ Manual, semi-automated and fully 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 and HTML file
◆ 32-bit software, for Windows XP and Windows 2000

ROHDE&SCHWARZ
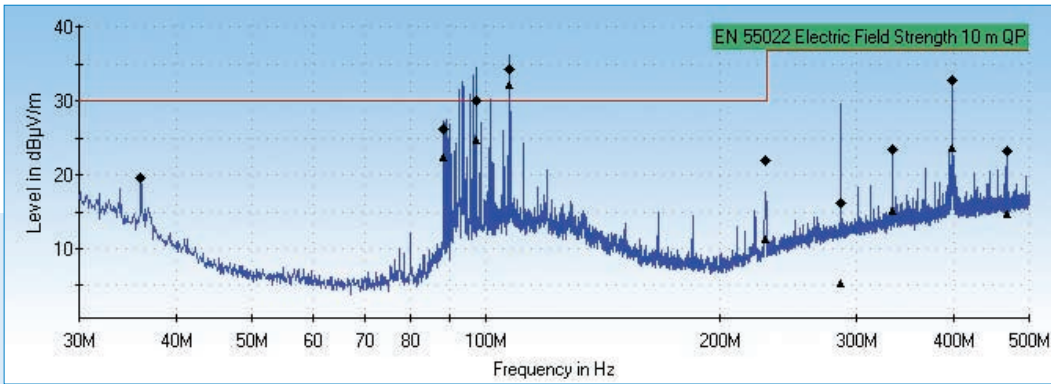
EMI under control ...

R&S®EMC32-E+ from Rohde & Schwarz is used to measure RFI voltage, power and field strength, and it runs on the current 32-bit operating systems from Microsoft. It is based on EMC Measurement Software R&S®EMC32 and supports both manual as well as partially and fully automated EMI measurements to civil and military standards. This ensures reliable acquisition, analysis, documentation and traceability of measurement results.

... flexible

An essential feature of R&S®EMC32-E+ is that it can be optimally adjusted to the requirements of different EMC applications.

Certification measurement
Predefined, fully automated measurement sequences make it possible to perform and document standardized EMI measurements quickly and easily.

Tests during development
Users can switch between interactive and automatic operation at any time.

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

Batch testing
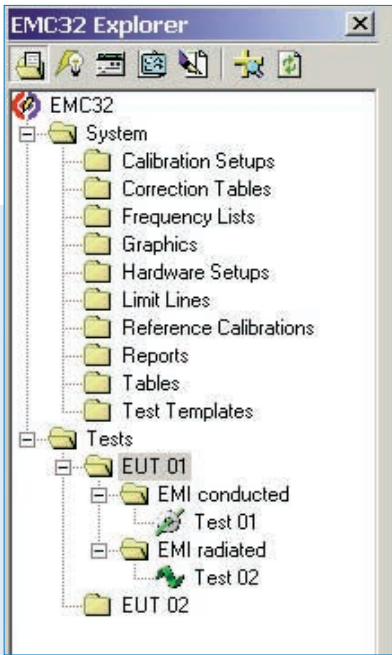The capability to graphically compare reference and batch measurements is ideal for batch testing.

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 .
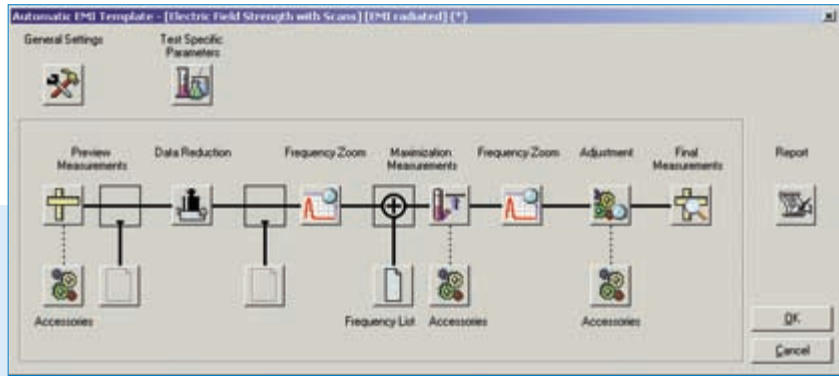
Documentation
The report generator offers extensive capabilities for selecting the components required for the test report and flexibly arranging them. Once layouts are created, they can be stored as templates. The test report itself can be generated as a printout or as a PDF, RTF and HTML file.

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.

Test template of an automatic RFI field strength measurement with the setting elements for preview measurement, data reduction, optional maximization of the critical frequencies with positioning of accessories, final measurement and report generation.

EUT-oriented test directory structure in the R&S®EMC32-E+ file explorer. A test directory contains all measurement results plus the associated test templates, device configurations, limit lines and correction tables (transducers), which clearly define how the measurement results were obtained. This ensures traceability of results as well as reliable reproducibility of 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. A context-sensitive help function is also included as a source of further information.

EUT-oriented test selection and file storage
Measurement settings as well as all associated calibration data, limit values and device parameters can be predefined in R&S®EMC32-E+. 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.

The R&S®EMC32-E+ screen as a "virtual" measurement instrument: Measurement mode view during measurement of RFI field strength. The test components explorer provides an overview of all loaded files of the current measurement. Below it are the (automatic or manual) settings for mast and turntable.

In the center are the measurement zoom graphics for frequency optimization, the overall result with a separate trace for each result table as well as the active measurement (scan/sweep).

The windows on the right provide information about the frequency setting of the test receiver and display the current measurement result numerically and as a bar graph (ClrWrite and MaxHold). The symbols at the bottom control measurement operation (pause, stop, start).
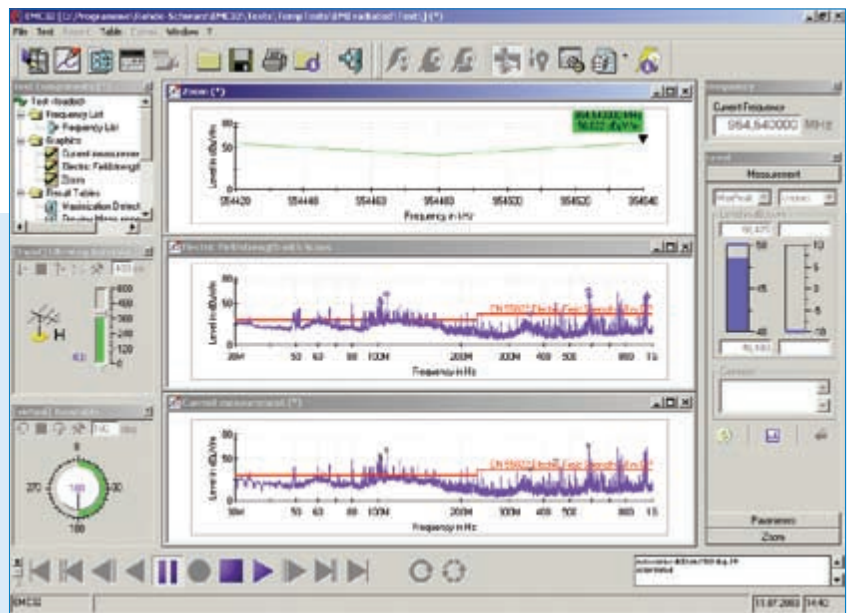
... future-oriented

In addition to its flexibility and adaptability to altered or new measurement requirements, R&S®EMC32-E+ 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 predefinable 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-E+ is a 32-bit application for the Windows XP und Windows 2000 operating systems.

Expandability and support

The modular structure of R&S®EMC32-E+ ensures 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 XP or Windows 2000
Administrator rights (for installation)
Microsoft Internet Explorer 5.0 or higher
PC with Pentium processor (min. 500 MHz)
256 Mbyte RAM (Windows XP) or 128 Mbyte RAM (Windows 2000)
100 Mbyte free hard disk space
Minimum screen resolution 1024 x 768 pixels, 65536 colours
USB interface, integrated into the motherboard (for i-Key software protection[1])
IEC/IEEE bus interface card from National Instruments

Available software modules

The following modules of EMC Measurement Software R&S®EMC32 are available:
R&S®EMC32-C: for electromagnetic interference and susceptibility test systems (EMI + EMS)
R&S®EMC32-A: for automotive test systems (EMI + EMS)
R&S®EMC32-E/E+: for electromagnetic interference test systems (EMI)
R&S®EMC32-S: for electromagnetic susceptibility test systems (EMS)
R&S®EMC32-L: for electromagnetic interference test systems (EMI) only in conjunction with the Test Receiver R&S®ESPI
Software modules R&S®EMC32-A, -E and -E+ support all current Rohde & Schwarz EMI test receivers/ analyzers.

For current information on other R&S®EMC32 device drivers
(RF generators, mast and turntable controllers, etc), visit the corresponding website at:
www.emc32.rohde-schwarz.com

Ordering information

EMI Measurement Software	R&S®EMC32-E+	1501.9590.02

[1] Software protection: Except for R&S®EMC32-L, 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.

Certified Quality System
ISO 9001
DQS REG. NO 1954 QM

Certified Environmental System
ISO 14001
DQS REG. NO 1954 UM

ROHDE&SCHWARZ