

EMC32 / AMS32 V8.52

Release Note

Products:

- | R&S®EMC32-EB
- | R&S®EMC32-S
- | R&S®AMS32

This document gives an overview of the additional features and improvements that are implemented with version 8.52

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1 Scope

This document gives an overview of the additional features and improvements that are implemented with version 8.52:

- EMC32-EB (EMI Base Module)
- EMC32-S (EMS Base Module)
- EMC32-K1,K2,K3,K4,K6,K7,K8,K10,K11,K21,K22,K26,K33,K51 (Software Extension)
- AMS32 (OTA Measurement Software)
- IMS OS Software (Note: depending on the model type .12 or .14)

Subject to change

2 Installation / Update

2.1 Update Procedure

Download and expand the “Update_EM32_8V52.zip” file (requires password for unzip and is encrypted with WinZip 2.0 method) into a temporary folder on your hard drive.

Run the “Setup.exe” program in order to update your EMC32 / AMS32 installation to V8.52.

3 EMC32 Main Program

3.1 Extensions

3.1.1 EMC32 Explorer

- **Remove create subfolder limitation for tests**
 - In previous versions it was not supported to create subfolders of folders using the name 'EMI radiated' or 'EMI conducted' in the TESTS root folder.

3.1.2 EMC32 Backup / Restore

- **Backup / Restore of Graphics Options**
 - When restoring a configuration generated with older EMC32 versions the "*.opt" file containing the graphics options is now restored.

3.1.3 Report

- **Show drive for Desktop in the report file output dialog**
 - When starting the dialog for saving the report as a file, then the Desktop can also be selected as a folder destination.
- **Graphics in report: title display in the graphics window**
 - A new property (checkbox) has been added which enables to suppress the title display in the graphics window.
This allows to get an even larger diagram (on a sheet of paper).
- **Placeholder variables like #Test# or #Date# for the electronic report file name**
 - Placeholder variables like #Test# or #Date# are now supported as part of a file name for the electronic report files generated in a test. The file name can be defined in the report settings dialog of a test template.
This function is especially useful in combination with the EMC32-K11 Test Sequence.
- **Test components explorer now provides "Export File" function for report files (PDF, RTF)**
 - An "Export File" function is provided in the popup menu of report files (PDF, RTF) via right click on the report file in the test components explorer.

3.2 Improvements

3.2.1 Signal Path Calibration

- **Signal path calibration editor → auxiliary paths switching → path combo box is not correctly filled with existing paths**
 - The path combo box was not filled with the existing paths for the selected switching unit. Only if the switching unit was changed the combo box is filled correctly. This has been fixed.

3.2.2 Delta Marker

- **Delta marker units in graphics**
 - Delta Marker now shows delta value for dB scaling only in dB and not longer in the same unit as the level of the trace (e.g.: dB for the Delta Marker and not dBuV/m as for radiated emissions trace).

3.2.3 Extras - Options

- **Changing Extras → Options dialog settings from users under Windows 7**
 - Changes in the following dialogs when running Windows 7 could cause a 'registry write conflict':
 - *Extras – Options ... - General*: switch User Management, EMS Leveling on or off
 - *Extras – Options ... - EMS/EMI Options*: All entries
 - *Extras – Language ... - Language*
 - *Extras – Language ... - Use 'u' as character for unit prefix micro*

This has been fixed now.

3.2.4 Wait Action

- **Message dialog on Wait action**
 - During executing the Wait Action a dialog showing the remaining time is shown. This dialog is now only moved to foreground when EMC32 is the active application. This improves working with other programs while the remaining time is not elapsed.

4 EMC32-EB Section

4.1 Extensions

- **Receivers: Support external reference input**
 - The receiver driver now supports the switching between the internal and external 10 MHz reference oscillator.
New checkbox in the receiver properties: Use external reference oscillator

4.2 Improvements

- **Receivers**
 - With short measurement times it could happen that an overload leads to a timeout. This has been corrected.
 - During single measurements in spectrum analyzer mode an incorrect warning could show up when an overload had been detected.
 - FSV/FSVR: The preamp option FSV-B24 will now be detected correctly.
- **Test**
 - Restarting of a stored test after a preceding language change led to an incompatibility of the result table structure. This has been corrected.

5 EMC32-S Section

5.1 Extensions

- **Generic Generator: LAN interface support**
 - Support of LAN communication via VISA interface has been added.
- **Generic Power Meter: LAN interface support**
 - Support of LAN communication via VISA interface has been added.
- **Support LFGEN1 SQR waveform for SMB100A**
 - Beside sine waveform, now the SQR waveform for LFGEN1 is available.
- **NRP + NRP-Z81: switch frequency correction permanently on**
 - For the NRP-Z81 the frequency correction is now permanently activated in order to compensate for the input coupling capacitor.
- **Description of Multi Band Amplifiers in online-help**
 - Guidelines (refer to the configuration book) for integrating multi band amplifiers into EMC32-S - especially the R&S BBA100 - have been added to the online help.
- **R&S BBA 100: switch to Standby when test is started**
 - The switch unit driver for the R&S BBA100 now switches the amplifier to the standby mode before the band is changed if the amplifier was set to operate manually by the operator.

- **New RF probes are supported**
 - Support of NRP-Z211, NRP-Z221, NRP-Z85, NRP-Z86 RF probes has been added.
- **Support for SMB100A frequency extension option B112, B120, B140**
 - Frequency extension options B112, B120, B140 are now supported for SMB100A.
- **LAN support for Generic Oscilloscope driver**
 - For the remote control of R&S RTO or R&S RTM, a LAN interface support via VISA has been added.

5.2 Improvements

- **EMS Scan template editor**
 - EMS Power Limitation:
The value from the EMS Scan template editor (fixed value or table value) is now evaluated as PEAK instead of RMS value for AM modulation.

6 EMC32-K1 Automotive / MIL

6.1 Improvements

- **EMS Leveling: power limitation on reference calibration file now max power to nominal target level from immunity shape is interpolated**
 - If for example the reference calibration has been done with 100mA and a limit shape starting with 30mA up to 100mA applies, then in such cases EMC32 now interpolates the appropriate reduced forward power for each test frequency.

7 EMC32-K2 Wireless Section

7.1 Extensions

- **New extension EMC32-K26 for LTE Terminals**
 - The new extension allows spurious emission and audio breakthrough measurements on LTE Terminals using a R&S CMW500 with the appropriate signaling option.

8 EMC32-K3 RVC Method

8.1 Extensions

- **RVC for MILSTD 461 F: only one sensor position is used during the calibration**
 - The reverberation chamber calibration procedure supports now the calibration for one sensor position only. In this case the statistics evaluations of several sensor positions are disabled.

8.2 Improvements

- **Antenna Cable correction for receiving antenna measurement path**
 - The cable correction defined in the Antenna properties dialog of the receiving antenna is now applied for the calculation of the receiving antenna level.

9 EMC32-K26 LTE extension for EMC32-K2

9.1 Extensions

- **New Extension for spurious emission and audio breakthrough measurements on LTE Terminals**
 - LTE Signaling SISO on CMW500

10 Device Drivers

10.1 Extensions

- **CMU200 Driver**
 - The following selections for CDMA FER measurement have been added:
 - Stop Condition --> None, Any Limit exceeded, Confidence Level, Max. FER
 - Max FER
 - Min. Confidence Level
 - Use of a self-disappearing message when setting up a call for CDMA too.

10.2 Improvements

- **OSP: handling of path names containing the character ','**
 - The usage of such path names is now supported.

11 Online Help

11.1 Extensions

- **Multi Band Amplifiers**
 - A guide line was added for integrating multi band amplifiers into EMC32-S, especially for the R&S BBA100 .

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Regional contact

USA & Canada

USA: 1-888-TEST-RSA (1-888-837-8772)

from outside USA: +1 410 910 7800

CustomerSupport@rohde-schwarz.com

East Asia

+65 65 13 04 88

CustomerSupport@rohde-schwarz.com

Rest of the World

+49 89 4129 123 45

CustomerSupport@rohde-schwarz.com

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Rohde & Schwarz GmbH & Co. KG

Mühl Dorfstraße 15 | D - 81671 München

Phone + 49 89 4129 - 0 | Fax + 49 89 4129 - 13777

www.rohde-schwarz.com