

Newsletter

EMC32

Version 6.10 SP1

1 Scope

This document gives an overview of the fixed problems and additional features that are implemented with service pack 1 for version 6.10:

- EMC32-E/E+
- EMC32-S
- EMC32-K1,K2,K3,K4,K6,K7
- IMS OS Software

Subject to change

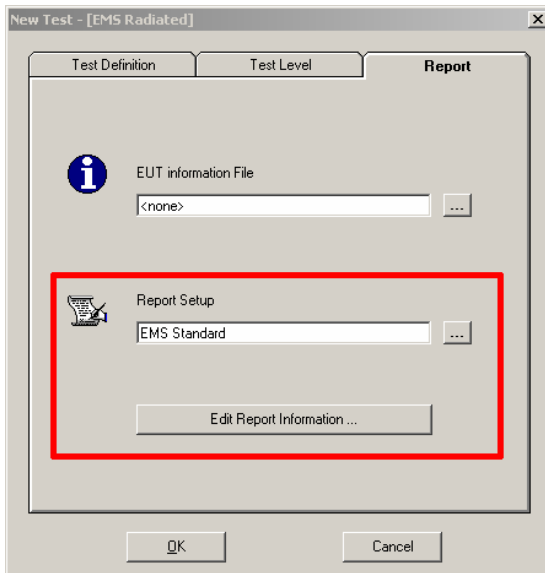
2 EMC32 Main Program

2.1 Extensions/Improvements

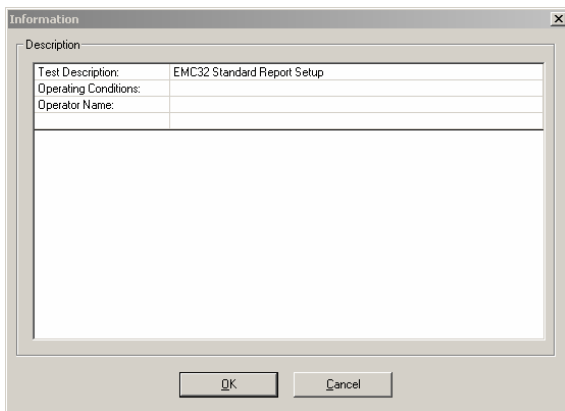
- **Test Information / Test New / Report Information:**

The following new functions replaces the function for the input of the test information as known from V5.x . The test information dialog opened via the explorer popup menu in V6.10 SP1 is a read only dialog.

Since version 6.10 the Test New dialog allows to select a report setup file which will be copied into the new test as the *reference* report setup (will be marked with red color in the Test Component Explorer). Before the new test is created the report information from the selected report setup can be edited and will be copied into the new test (the original report setup from the System folder will be untouched). The test information dialog as described in the paragraph above will show the report information section of the reference report setup.



A new parameter in the Extras → Options → File/Test dialog allows to open this report information editor automatically every time a new test is created.



When a test is open and the report open icon of the EMC32 toolbar is clicked the reference report setup will be opened. The same function is applied when the test information button is clicked. Here the report information editor of the reference report setup is opened.

- **Report Graphics:**

A new parameter in the properties dialog of the graphics report component allows to force the report to expand/shrink this graphics block so that it fits into the current page.

- **Signal Path Calibration:**

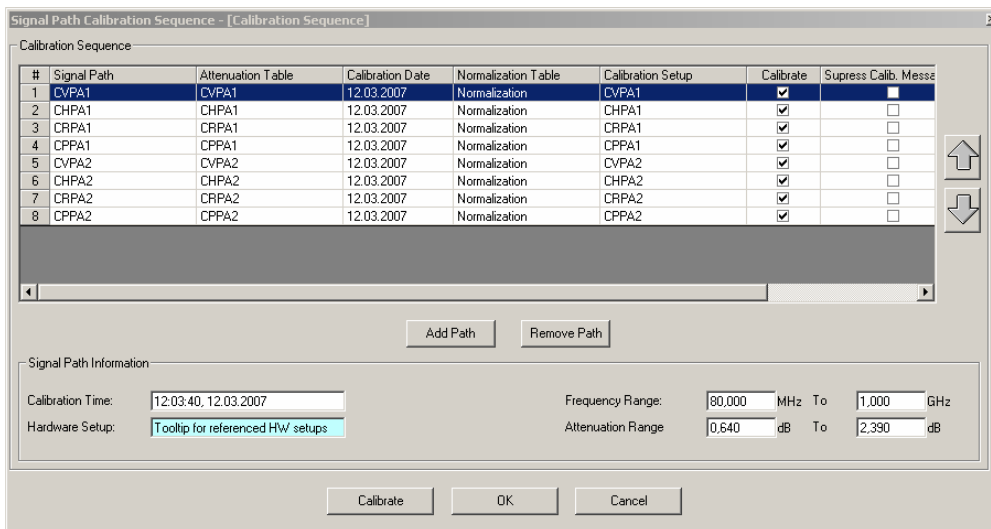
The signal path calibration editor has been completely revised. A calibration mode selection box replaces the DUT selection tab. A new tab allows defining auxiliary path to be switched during normalization or calibration or both.

For further information on this issue refer to the System Calibration section in the online help.

- **Signal Path Calibration Sequence:**

The signal path calibration sequence allows defining a list of signal path calibration configurations which will be executed in a sequence and gives a better guidance during the system calibration.

Therefore a new data type *Calibration Sequence* has been added to the SYSTEM folder.



For further information on this issue refer to the System Calibration section in the online help.

2.2 Fixed Problems

- **Report:**

EUT Information data was not shown in a test report.

- **New Test:**

The option not to go automatically into the measurement mode when a new test is created is now implemented for EMI as well.

3 EMI Section

3.1 Extensions

No extensions for EMI have been implemented for service pack 1.

3.2 Fixed Problems

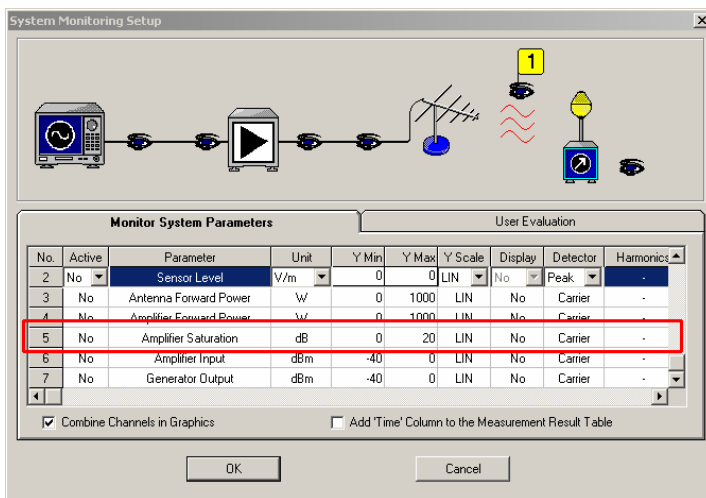
- **EMI Auto Tests:**
When changing the hardware setup in an existing autotest template, then EMC32 crashed (caused by an incompatibility with a user specific extension).
- **EMI Auto Tests:**
When restarting a loaded test, then EMC32 could give a message about missing limit lines.
- **EMI Auto Test 'MIL-STD 461 C':**
The preview template couldn't be found if located in a sub-folder other than the default one.
- **EMI Auto Test according to EN55025:**
The retrieval of the limit lines which are being used for the final (narrowband/broadband) evaluation, had failed.
- **EMC32-K2:**
The CMU driver can now be used without having the EMS section active.
- **EMC32-K2:**
The adjustment full range problem during 'Radiated Power' tests (no turntable movement) is now fixed.

4 EMS Section

4.1 Extensions

- **Amplifier Saturation Measurement:**

The new release of the EMC standard EN61000-4-3:2006 Edition 3 requires to run an amplifier saturation check after the field uniformity calibration is completed (section 6.2.1 step j). Therefore a new System Monitoring parameter called Amplifier Saturation Check has been implemented in the EMS Scan editor. When this parameter is activated, the RF signal generator level is decreased by 5.1 dB and then the level is compared to the forward power level without the level shift. The difference is shown in a system monitoring channel graphics.

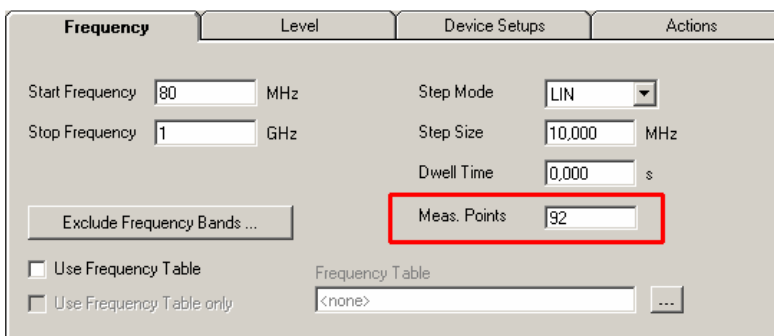


- **Power Limitation on a Reference Calibration File:**

For this measurement mode the limit line calculated out of the transducer input power column of the reference calibration file is now shown correctly depending on the chosen signal detector (Carrier, Peak) for this system monitoring graphics.

- **EMS Scan Editor:**

The editor shows now a preview of the number of measurement points which are calculated from the frequency step size and step mode settings. Frequencies from a frequency list are not added to this calculation.



- **EMC32-K2:**

The Audio Breakthrough Calibration function has been extended with new functions to improve the flexibility of the calibration algorithm.

4.2 Fixed Problems

- **EMS Auto Test:**
The signal generator level is now set to -60 dBm during the report creation between two loop steps of the EMS auto test.
- **Dec-Lin Frequency Stepping:**
The wrong calculation of the frequency steps has been corrected.
- **Band Exclusion:**
The problem that the band exclusion algorithm did not exclude all specified frequencies correctly has been corrected.

5 Device Drivers

5.1 Extensions

- **R&S SMA100A:**
The RF signal generator R&S SMA100A is now supported. The driver requires installing the SMA VXI driver located in the folder Tools\SMA100A.
- **R&S CMU200:**
The driver supports now additional mobile phone bands (UMTS band 4 to 9, CDMA450).
- **R&S Analyzer FSEx**
The R&S spectrum analyzer family FSEx is now supported as selective power meter for susceptibility measurements.
- **NRP-Zxx:**
The R&S RF probes NRP-Z21,22,23,24 are now supported by the device driver.
- **Generic Monitoring:**
The driver supports now more set and read commands.
- **bmcm meM-ADfo:**
The external miniature measurement device meM-ADfo of the company bmcm is now supported for EUT monitoring purpose. It provides digital and analog inputs and outputs.
- **Vector CANoe:**
The EMC32 driver for Vector CANoe supports now also the evaluation of LIN bus DBF files. Additional the driver can now perform a max/min hold on several monitored signals during the dwell time.
- **AR FM2000:**
The driver allows now to switch off the internal auto ranging function and to set a fixed measurement range during the measurement.
- **AR FI7000:**
The AR laser powered field probe FI7000 is now supported via serial interface.
- **System Control:**
The system control driver supports now more than one video inserter devices. After the update the devices must be re-selected.

5.2 Fixed Problems

- **Bonn Switch Unit:**
The driver supports now the remote control via the USB interface correctly.