

RF Tester Suite 3.30 Release Notes

Updated: July 23, 2021

1. Overview

This document contains release notes for RF Tester software and TLF3000 hardware. For full instructions on using the software and the hardware, please see the user manual and other documents provided with the software.

2. Release Notes 3.30

2.1. *What's New*

- Bluetooth LE
 1. Improved flatness of sensitivity vs channel
 2. Improved timeout for lack of IQ reports when performing receiver CTE tests
 3. Class 1 output power test added
 4. Introduced ability for the TLF3000 to pause in between telling the DUT to receive and sending the first packet to the DUT
 5. Introduced ability to perform HCI reset from the GUI
 6. Improved modulation accuracy at low output power levels
 7. Bug with clearing Adv/Scan results fixed
 8. Updated default channels in which tests are performed
 9. Bluetooth serial ports no longer slow GUI performance
 10. Introduced manual control of external switch box from GUI
 11. Introduced ability to set the number of times a test script should be repeated

- Bluetooth BR/EDR
 1. Improved flatness of sensitivity vs channel
 2. Improved modulation accuracy at low output power levels
 3. Bug with setting low poll power on channel 18 fixed
 4. Signal analyser will always retain time series data when stopped
 5. Power control timeouts due to supervision timeout firing fixed
 6. Force loopback mode now saved into test script file
 7. Introduced ability to set the number of times a test script should be repeated changes to the IQ report event timeout to prevent "No samples" being reported in the results.

2.2. *Known Issues*

1. The red Overload LED on the unit does not turn on in an overload condition on either BR/EDR or 802.15.4. The overload LED status works correctly in the software GUI.

2. In the “DUT control” pane where the available COM ports are listed, the COM port for the TLF3000 itself will periodically appear and then disappear. This will cause the list of COM ports to move up and down which sometimes makes it difficult to select a COM port.

3. Previous Release Notes

3.1. Release Notes 3.20

3.1.1. *What's New*

- Changes to all applications:
 1. External clock indication in health panel fixed
 2. Temperature compensation of power measurements added
 3. Temperature compensation of output power added
- Changes to Bluetooth LE application:
 1. Support for devices which do not support all mandatory HCI commands
 2. Ability to force use of HCI V2 test commands
 3. IQ sample reports now use channel index and not channel number
 4. Improved error reporting on IQ reports
 5. Fixed problems with plotting CTE coherency/dynamic range where antenna 0 was being used
 6. Fixed problems plotting CTE coherency/dynamic range against packet length and antenna
 7. Corrected antenna switching integrity test numbering
 8. Signal generator now includes reference slot in switching pattern
 9. Support for measurements of CW signals
 10. Corrected specification packet lengths for rx tests for 1M and 2M in GUI
 11. Sniffed AdvA address no longer loses leading 0's in Adv/Scan mode
 12. Improved fan control
 13. Improved temperature compensation of results
 14. Corrected repeat count for PER integrity tests
 15. Improved randomization of PER integrity test packet count
 16. Corrected false results on first ACP reading
 17. Improved accuracy of ACP measurements
 18. Added frequency dependent cable loss
 19. Added support for switch box control
 20. Fixed phy tester C/I for asymmetric selection of offset channels
 21. Fixed DTM communications sending CTE command if CTE length is zero
 22. Fixed signal analyzer not stopping if input packet rate was extremely high
 23. Added time stamping of serial data log
 24. Added additional serial log messages
 25. Fixed typos and terminology in GUI
 26. Fixed UART on DIO connector
 27. Changed UART DIO pins when external IO voltage selected

New code which contains option for forcing V2 commands in preference to V1 commands. This is done using a button in the "DUT control" menu. This button will only be visible if an HCI interface has been selected.

It is essential to do a "Query DUT features" (query button on toolbar) before running tests so that the TLF3000 can establish that the DUT does supports V2 commands. The default setting for TLF3000 assumes that the DUT does not support V2 commands.

- Changes to Bluetooth Classic application:
 1. Support added for devices which support loopback but not Tx test mode
 2. Added frequency dependent cable loss
 3. Improved DEVM on EDR transmissions
 4. Improved ACP gating to eliminate own transmissions
 5. Improved ACP measurement accuracy
 6. Fixed typos in GUI
 7. Improved oversampling of FM demodulated waveforms
 8. Added EIR support when inquiring for devices
 9. Improved fan control
 10. Improved temperature compensation of results
 11. Corrected min/max order in modulation results
 12. Added PER measurements on receiver tests
 13. BER measurements now check for correct packet length and channel
 14. Improved accuracy for carrier drift measurements
 15. Improved accuracy of DEVM measurements
 16. Support for measurements of CW signals
 17. Averaging of frequency range measurements fixed for shorter packet lengths
 18. Issues with LMP_name_req rejection on reconnection
 19. New version of LMP
- Added python example scripts for Bluetooth and 802.15.4.
- Updated the user documentation for all applications.

4. System Requirements

For optimal performance, the software should run on a recent generation computer. However, the software should also operate on machines that are below the minimum requirements specified here, at the cost of slower performance, provided the memory, storage and display requirements are satisfied.

4.1. Software

Operating System:

- Windows 10 (32 and 64 bit) with latest Service Pack.

4.2. Hardware

Processor:

- Core i5 processor at 2.7 GHz

Memory (RAM):

- This software application may use up to 4 GB of RAM in the host machine. For improved performance of the software, it is recommended that 8 GB of RAM be installed on the host machine.

Non-volatile Storage (SDD or Hard Disk):

- 250 MB is required for installing the Frontline Analyzer software on the host machine.
- At least 20 GB of additional storage space is needed for operation of the software application and for storing recorded data in files. Note that large captures can require multiple gigabytes and can quickly fill your available storage space.

Display:

- To take full advantage of the rich visualization and analysis of Wireless Protocol Suite application it is recommended that the display be set to at least 1050 lines of vertical resolution with at least 24-bit color depth.
- The minimum requirement for the display is a resolution of 1024x768 with at least 16-bit color depth.

5. Support

Online Download

Please periodically check Teledyne LeCroy Protocol Solutions Group's web site for software updates and other support related to this product. Software updates are available to those users with current Maintenance Agreements.

Web (SW downloads): <http://www.fte.com/products/default.aspx>

Online Support

Web: <http://www.fte.com/support/supportrequest.aspx>

E-Mail: Frontline_TechSupport@Teledyne.com

Sales Information

Web: <http://www.fte.com/support/supportrequest.aspx>

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SyncML decoder written by ARS Software GmbH, Munich/Germany, www.ars2000.com.

This product contains features utilizing the Qt open source library, licensed under LGPL.

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