

# RF Tester Suite 3.40 Release Notes

Updated: February 15, 2022

## 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 3.40

### 2.1. *What's New*

1. Windows 11 support
2. Python 3v9 64bit support
3. New date/time format in reports

### 2.2. *Bug Fixes*

1. Fixes the issue with the signal generator controlling the DUT when transmitting AoD with 1us slots
2. Fixed default blocking channel for BR/EDR
3. Fixed control DIO connector
4. Work around for DTM CTE control
5. Fixed blocking retest power being reported as -49.9dBm

### 2.3. *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 3.30

### 3.1.1. 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.

## 3.2. Release Notes 3.20

### 3.2.1. 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 7, 10 and 11 (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](mailto:Frontline_TechSupport@Teledyne.com)

## Sales Information

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