

# Fluke 1750 Power Analyze

## Release Notes

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# Current

## Version 2. 1

1. Order of views changed. **Summary** (former EN50160 view) now initially shows a power quality overview of the loaded measurement file.
2. In **Summary** view the evaluation **start/end time** can now selected by the user. There are three options:
  - a. All (entire duration of the measurement file)
  - b. User defined Start/End time
  - c. One week period starting on a user defined date and time
3. In **Summary** view the **phase names** are now reflecting the power configuration. If a delta system is configured L12/L23/L31 (AB/BC/CA) is shown.
4. In **Summary – Events** the lower table was improved to show also events which are not specified by the standard.
5. **Limits for the Summary** (former: Statistic Limit Values) can now be changed by the user. The defaults are set to EN50160. A sample configuration is provided to perform analysis according to IEC61000-2-4.
6. **Auto Report** added. It is now possible to create a fully customizable report in either PDF, RTF or only as a preview. The configuration may be stored for repeated usage.
7. Power/Energy view now delivers all parameters in the selected demand interval. **15min** interval added.  
Note: 15min interval is only available on recordings with firmware 22.03 or higher.
8. **1750 Shut down** added in menu **Tools**. This feature shuts down the firmware and disables the UPS. This allows to safely disconnecting the power cord without the need to wait 5 minutes until the instrument is turned off.
9. Time to open a measurement file significantly reduced (about seven times faster)
10. The time stamp of 10 minutes values is now rounded to full 10 minutes. (E.g. 13:09:59 is now shown as 13:10:00)
11. Software version added to the title bar.
12. **Current Unbalance** added to THD view.
13. Right click on a measurement guide allows switching to **relative measurements** between the guides.
14. Manual scale on y-axis added. Right click on the axis offers the option to either perform **Auto Scale** (former: Zoom to Fit) or **Manual Scale**. Auto Scale now does not zoom to the full extent but keeps a small margin to the borders (~3%).
15. In **Snapshot – Harmonics** view the **zoom** button was added.

16. Values based on the **fundamental** of the input signal are now **suppressed** when the value of the fundamental is **too low**. Suppressed values are either shown as – in Live mode, as empty cells in table views of recorded data or as gaps in graphs.  
The limits for Voltage, Current, and Power depend on the voltage and current ratios and the used Current probes.
17. A measurement description can be added now to the file. Either it is added prior or during the measurement is performed in the **1750 Setup** panel or after the measurement has been downloaded in the **View Settings** dialog. The measurement description may contain of up to 6 rows with 50 characters each. The captions are default text that you can delete or overwrite with up to 20 characters. The measurement description is cleared only when erasing the 1750 memory.
18. The power configuration in the **1750 Setup** dialog has been improved to allow the selection of the nominal voltage only for the requested parameter (phase to phase or phase to neutral) according to the topology.
19. In Instrument tab of **1750 Setup** it is now possible to **synchronize** the **1750 time** to the PC time.
20. On initial connection the **instrument time** is **checked**. If the deviation to the PC time is more than 10 minutes a pop up window is shown and opens automatically the Instrument tab of 1750 Settings if the user wants to adjust the time.
21. Support of **User scale** of <1 for voltage and current. This allows increasing the sensitivity by wrapping the Flexi several times around the wire.
22. Scroll bars added for **1750 Setup** and **View Settings**.
23. Phase to Phase names are now shown as **L12/L23/L31** instead of L1L2/L2L3/L3L1
24. Limit for **Slow Voltage Variation** changed to 95%.
25. Titles in **phase selection** better aligned to the checkboxes.
26. **French** translation revised
27. **Measurement guide** selection improved. Now only one is active at a time.
28. The **installer** now offers the option to choose a different file location for the user data (measurement files, auto report templates, configuration files ...). This is useful when the user account installing the application is different to the account using the application.
29. **Semi-F47** tolerance curve added. It can be accessed by choosing Custom – Choose an external tolerance curve file
30. Bug fixed that cursor labels were empty in Live view when switching to Interharmonics and back resp. when switching to Amps and back to Voltage
31. Bug fixed that Power values aggregated to 20 or 30 minutes were not calculated correctly.
32. Bug fixed that waveforms were never shown for Ground current (I<sub>pe</sub>).
33. Bug fixed that the cursor readings occasionally related to a neighboring point.
34. Bug fixed that values were not correct directly before and after gaps in table views.
35. Bug fixed that the download start/end time was sometimes not according to the settings when the From/To fields were used.

36. Bug fixed that Power Analyze crashes when Apply is clicked on a completely filled in 1750 Setup panel when no instrument is selected.
37. Bug fixed that Power Analyze crashed when clicking on Help-About after Limits for Summary was shown when there is no connection to an instrument and no data file is loaded.
38. Bug fixed that events were sometimes not shown when they occurred within the first 3 seconds after full 10 minutes.

# History

## **Version 2.01**

1. V/A/Hz view sometimes showed horizontal lines after zooming. Issue corrected
2. Interruption limit changed from 10% to 1% according to EN50160 standard
3. Upper plot in THD view now always shows the THD in %
4. THD in EN50160 now uses harmonics h02...h40 instead of h2...h50
5. Length of 95% bars in EN50160 overview graph corrected
6. Report writer now uses last used path as default destination
7. Bug fixed that upper plot showed traces with interpolation style straight line when waveform data was shown in lower plot
8. Unit for Flicker in EN50160 overview table removed (Flicker has no unit)
9. Bug fixed that the rows of swells in lower event table in EN50160 view were interchanged.
10. Calculation of harmonics relative to the fundamental in upper plot in Harmonics view corrected
11. Headers in tables are now consistent in all views. In THD for example, the cells for the measurement parameter are joined now when they are identically.
12. Issue resolved that Zoom-to-fit applied to lower plot when it is showing already all data zoomed out to 3 times of the total measurement time.
13. 1750 Live -Harmonics: X-Axis range fixed to h00 to h50
14. 1750 Live - Scope - Trend x axis label corrected. Showed wrong information in other languages than English
15. Selection of events in time evolution diagram sometimes caused problems. Resolved
16. Toolbars now are adjusted to fit the whole available width. Toolbars are not truncated anymore when the setup panel has been closed
17. Bug fixed that first call of Harmonics view showed wrong y-axis label. ("Volts" instead of "% Fundamental")
18. Phase identifiers in Event view now also change according to the setting in Preferences menu
19. Bug fixed: Click on Snapshot - Phasor resulted in an exception when the measurement data does not contain any snapshots.
20. In menu Settings-Preferences the user can enable or disable data point markers
21. Bug fixed: In German sometimes port number 62 is added instead of 18571 when configuring a device with a fixed IP address
22. Error message "Failed to create windows socket. Browsing for 1750 units will not function." when no Ethernet connection available rendered Power Analyze unusable. Bug fixed.
23. Drawing the rectangle for zoom-in is now possible in any direction, not just from top-left to bottom-right
24. Localized online help and Operators manuals added.
25. German menu item 1750 changed to ""Werkzeuge"" to be consistent with all other languages
26. Update of cursors in upper plot in Flicker view when view is changed in lower plot
27. Event duration calculation corrected
28. Event duration now indicated with a grey background in lower plot of Event view

29. Bug fixed that clicking on Help button in EN50160 graph did not open the help page
30. Bug fixed that the cursor labels showed the magnitude and timestamp of the data point next to the right of waveform or impulse plots
31. Temporary files are now deleted when changing the language
32. Table in Power/Energy view now shows data with the timestamp selected in upper plot
33. New/Edit in list of recorders localized
34. German translation of Demand changed to "Bezug"
35. Width of column of table adjusted to fit "COS PHI" and translations of "lag" in Power/Energy view
36. Upper plot in THD view now always shows the correct values independent from the settings for the lower plot
37. Update of lower plot when cursors in upper plot are moved with cursor keys
38. Excel export improved: Export of unit in harmonics table, number format changed for V/A/Hz export (3 digits after decimal point)
39. Moving cursors now also works with cursor keys (measurement label needs to be selected first)
40. Bug fixed that values in table adjacent to gaps is incorrect
41. Changed display of time information in lower table of THD
42. Cursor on harmonics bar not always showed correct values - corrected
43. When opening an odn file by double click in Windows Explorer the splash screen now is closed before opening the file (PC was unusable during file opening in previous version)
44. Impulse peak calculation changed to subtract slow ADC values from impulse data. Now the slow ADC values are low pass filtered with about 550Hz (-3dB)
45. Digits of max values in Event view table are changed to this format:  
0.000 ... 9.999  
10.000 ... 99.999  
100.00 ... 999.99
46. Dip limit changed to 10% (was 15% in previous version)
47. Removed nominal voltage in Dip line of EN50160 event table
48. Changed default value of event limit (+3.5% / -3.5%) to +10% / -10% according to EN50160 dip/swell limits

## **Version 2.00**

1. Flicker view added. Supported values: Pst, Plt
2. EN50160 view added. Available screens: Overview (graph/table), Events and Harmonics (graph/table)
3. Localization added: Available languages: English, French, Spanish, Italian, German and simplified Chinese.  
Known Issue: It is required to set the language for non-unicode programs to Chinese for correct display of Chinese characters in plot windows.  
Online help and Operators manuals are in English only
4. Cursors changed to two vertical lines which shows the time stamp and magnitude of the selected data point in a text window
5. Fixed bug that the last button in the toolbar is truncated in Windows Vista
6. Style of RMS traces changed to step charts: the line stays on the same value during the whole measurement interval (10min, 3s, 200ms or half-cycle)
7. Data point markers in plots added