

Fluke Energy Analyze Release Information

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Revision History

Fluke Energy Analyze Plus V3.0.1

- Corrected data path handling in installer and EnergyAnalyze Plus. This solves an issue with unresolvable data path evaluation that occurred in new FEA+ 3.0.0 installations.
- Improved En50160 statistics calculation.

Known Issues: see rev 3.0.0

Fluke Energy Analyze Plus V3.0.0

- New: support for Fluke 1742/46/48 Firmware rev 1.0.1
 - Export of data to PQDIF.
 - Quick reports from Project Manager tab.
 - Extended session- and instrument-information on PM tab.
 - Extended parameter set 1746/48.
 - New PQEvent functions – Rapid Voltage Changes, Waveform Deviation.
 - Extended EN50160 and IEEE519 PQHealth Summary views and reports.
 - 1742/46/48 Instrument Setup.
 - Increased resolution for cursor-readouts in events detail recording views.

Known Issues:

- Windows Device Manager may show failed installation of 173x and 174x serial port drivers. This is not an issue for Energy Analyze Plus, because these instruments do not use serial port communication.
- Energy Analyze may show duplicate entries of found 174x instruments in dropdown selectors (data download, instrument setup). This occurs if several connections are possible, e.g. by WiFi, USB cable and Ethernet.
- Translations are incomplete – some text items are displayed in English language when a different language is selected. This also affects reports.
- Some occasions of FEA+ being unable to access data locations. This may manifest in error messages when trying to access Calendar View, or saving downloaded data to the target directory – issue is not fully understood yet.
- FEA+ may not be able to find instruments if these are connected to a different LAN segment than the PC running FEA+. FEA+ utilizes below listed ports. Please contact your IT specialist for assistance on routing issues. The installer will by default attempt to add exceptions to the PC's firewall, network policy may prevent these exceptions.
 - 18571 (UDP), and 18572 (TCP) for device discovery and communication.
 - 443 (HTTPS) for all activities related to Instrument Setup.
- Creating pdf documents from the report preview window fails. Select "PDF" as desired report print output format from FEA+ Preferences menu to work around.
- Full assessment of Mains Signalling Voltage levels, including derived events, will be published with a subsequent release of instrument firmware and FEA+.

- 1742 users should access Flicker data from the Advanced tab. 1746/48 users can access Flicker data from the PQ+Study/PQHealth-summary view.
- Over-/underdeviation data is available from the Advanced tab.
- Unbalance readings are available from the Advanced tab.
- The Advanced tab does not honor color scheme settings.

Fluke Energy Analyze Plus V2.3

- New Feature: support for Fluke 1732/34 Firmware rev 2.1
- New Feature – download data from an instrument even if it is locked. FEA+ does not support changing the screen lock code.
- Improved instrument identification in download and set-time panels.
- Improved export to csv.
- Improved storing/restoring of bookmarks.
- Corrected calculation of THD results.
- Corrected input of energy cost schemes.
- Changed communication through USB cable to utilize Ethernet-over-USB style of transfers (RNDIS). This approach works around an issue encountered with the previously utilized mode under Windows 10. **IMPORTANT:**
 - Users of 1732/34/36/38 who have FEA+ rev 2.2 (or earlier) already installed **MUST** choose to remove 173x USB drivers during installation of revision 2.3!
 - Users of 1730 must who have FEA+ rev 2.2 (or earlier) already installed, need not re-install Fluke 1730 drivers, but can choose an option to leave drivers unchanged.

Known issues:

- It may take up to 90 seconds for Windows to provide required functionality for Energy Analyze to communicate with an instrument attached by USB cable.
- Windows' Device Manager may show an unknown CDC device after connecting 173x instruments to the USB port (Windows7); this device is not used.

Fluke Energy Analyze Plus V2.2

- New Feature: support for Fluke 1730 Firmware rev 1.3
 - Improved handling of time stamps from instrument firmware results in millisecond resolution. Backward compatible with data collected using previous firmware revisions of 1730, these do not support millisecond resolution in time stamps.
- Improved FEA+ UI to fully support non-Latin character sets. This removes a character corruption issue.
- Disabled showing firmware update information if the connected instrument has the latest state firmware installed.
- Change order of tabs under “PQ+ Study” to show “Harmonics” view by default when first opening a new session. FEA+ rev 2.1 by default showed the feature “Harmonics Limit Evaluation” which requires a firmware license.

- Disabled “phase-to-phase” selection for nominal voltage input in single phase topologies on “Load Study/Demand Table” view.
- Removed context menu from “PQ+ Study/PQHealth” views erroneously enabled in rev 2.1

Known issues: see revision 2.1, below.

Fluke Energy Analyze Plus V2.1

- New Feature: support for Fluke 1738 instrument
 - Extended “PQ+ Study” tab to support analysis according to EN 50160 and IEEE 519.
 - IEEE 519 based analysis allows users to correct instruments settings I_{sc} and I_L .
 - Extended report functionality to provide all relevant data in pdf/rtf reports.
 - Extended Events tab to support event RMS profile and wave-shape plots. Modified Event List view to show hierarchical structure of “combined events” and components.
 - Extended export function to handle new datasets.
- Added support for licensed features “1736/Upgrade”, “IEEE 519”, “WiFi Infrastructure”.
- Extended information shown on “Project Manager” tab.
- Extended “Advanced” tab to handle new data.
- Improved Version lookup and compare.

Known issues:

- Adding a high-resolution image on the 'Project Manager' tab will show distorted colors. Pictures are printed properly in reports, though!
- Reports created in Japanese language result in large .pdf files (font embedding).

Fluke Energy Analyze Plus V2.0

- New Feature: support for Fluke 1736 instrument
 - Added “PQ+ Study” tab to support analysis of “Events” and harmonic content recorded by the 1736.
 - Added neutral line current to selectors on existing “Energy Study” and “Load Study” tabs.
 - Added voltage unbalance selector to “Energy Study/V, A, Hz, THD” view.
- New Feature: use the “Advanced” tab to create custom defined graphs. This tab allows you to compare data series in one graph beyond the combinations available from the “Energy Study”, “Load Study” and “PQ+ Study” tabs. You can also export data used within the custom graph using the table view.
- New Feature: FEA+ looks up availability of Firmware (1730 and 1736) and Software updates and informs users accordingly. Users can disable this function and decide to check for updates at their discretion using “Help/Updates”.
- New Feature: go to “Settings/Report Logo” and select the FLUKE or a custom logo for reports.
- Fixed: Energy Analyze 1.2 occasionally stopped working when comparing multiple sessions in “Calendar” view.
- Improved: The “Auto Scale” context menu item in graph views sometimes produced erroneous results.

Fluke Energy Analyze V1.2

- New Feature: “Time-range tables” and “Graph views” can be shown concurrently. Pull time-range table up to do this. Use blue expand/collapse icons to switch views.
- New Feature: “Download data” from instrument using a Wi-Fi connection. FEA 1.1 and previous connected to instruments through USB, only.
- New Feature: Show “inductive/capacitive loads” or “load direction” with Power Factor results in graphs and tables.
- New Feature: “Customize trace colors” – users can pick custom colors to be used for individual traces on plots.
- New Feature: “Create reports in .rtf” – Rich text format has been added as a choice for report output formats (menu ‘Setting/Report output format/...’).
- New Feature: “Project Manager” shows extended session information (transducer ratio, time zone adjusted on instrument when logging, ...)
- New Feature: Exported data contains time zone information.
- New Feature: If a session description is truncated on the “data download” panel, point to that entry and get the full description shown in a tool tip.
- New Feature: Bookmark items can be renamed from within the report tab.
- Improved: Users can open a .fel file (e.g. received USB thumb drive contents by email) from the file-open dialog and do not have to use the file download panel any more.
- Improved: Option to choose data logged within trend or demand interval for graph view under Energy Study/Demand tab. Additionally to the data source (trend or demand), the drop-down selection lets you define aggregation intervals to be applied to all shown data. A function that automatically re-calculates data to a common aggregation interval for all shown sessions is also offered in order to help comparing data that was (erroneously) logged at different interval lengths.
- Improved: Working with notes – text input box can be resized.
- Improved: Working with zoom in graph views – occasionally the zoom rectangle was not shown.
- Improved: Occasionally, time-range tables were not shown correctly after restarting FEA.
- Improved: Last shown graph views were not restored properly when restarting FEA.
- Improved: Collapsed/expanded state of table views were not restored properly when restarting FEA.
- Improved: Readability of axis (x and y) labeling in all graph views.
- Improved: FEA memory management has been reworked leading to slightly faster starting, lower memory and OS resource consumption.
- Fixed: Calculation and display of Power Factor results.
- Fixed: Recalculation of volts, amps, and estimated apparent power to different aggregation intervals.
- Fixed: FEA occasionally stopped working when a large session file was shown at high granularity in calendar tab (e.g. months-long logging shown in hours).

Fluke Energy Analyze V1.1

- New Feature: “Add Notes” to graphs. Notes can be attached to a curve point or become placed on the graph area. Notes that are anchored with a curve will be prefilled with clear-text readings of the corresponding curve point and will only be printed in reports if they are visible at the time of creating the report item. Notes that are placed on the graph area (not anchored with a curve point) will remain visible regardless of the adjusted zoom levels and will always be printed in reports. Notes can be edited, removed, or moved/attached, select either action from a context menu (right-mouse button click on a note).
- New Feature: “Add Image” accepts generic .jpg images.
- New Feature: Instrument screen shots are shown and can be loaded from the data download dialog. Data on the instrument can be after downloading from the same dialog.
- New Feature: Users can adjust what data to export when using the ‘Export’ widget in the ‘Project Manager’ tab.
- New Feature: the ‘Settings’ widget in the ‘Project Manager’ tab can be used to correct/adjust scaling parameters for AUX channels, and to enter cost of energy parameters.
- New Feature: use ‘Synchronize time...’ from the ‘Settings’ menu to adjust the instrument time. This function is not available during logging.
- New Feature: Time range tables can be viewed concurrently with graph views; tables are switched off if no time range is selected.
- Added Japanese UI translation.
- Improved: display of icons on the ‘Calendar’ tab after removing sessions from a project.
- Improved: occasional data corruption caused by removing sessions.
- Improved: application stability with different date/time format settings.
- Improved: corrected display of Power Factor min/max values.
- Improved: multiple limit lines were shown when only one was expected.

Known issues:

- Adding a high-resolution image on the 'Project Manager' tab will show distorted colors. Pictures are printed properly in reports.
- If notes are placed in close proximity on a curve they will overlap. Zooming out can cause notes to become hidden. All notes are printed OK according to the actual visibility in reports.
- The state of table views may become distorted – i.e. some tables may be shown in collapsed state though they should be shown in expanded state. Reopening the analysis file resets this error.
- Reports created in Japanese language result in large .pdf files (font embedding).
- Energy Analyze Help will give information related to V1.0 – new help topics will be made available at www.fluke.com shortly.

Fluke Energy Analyze V1.0

Initial Release

FAQ

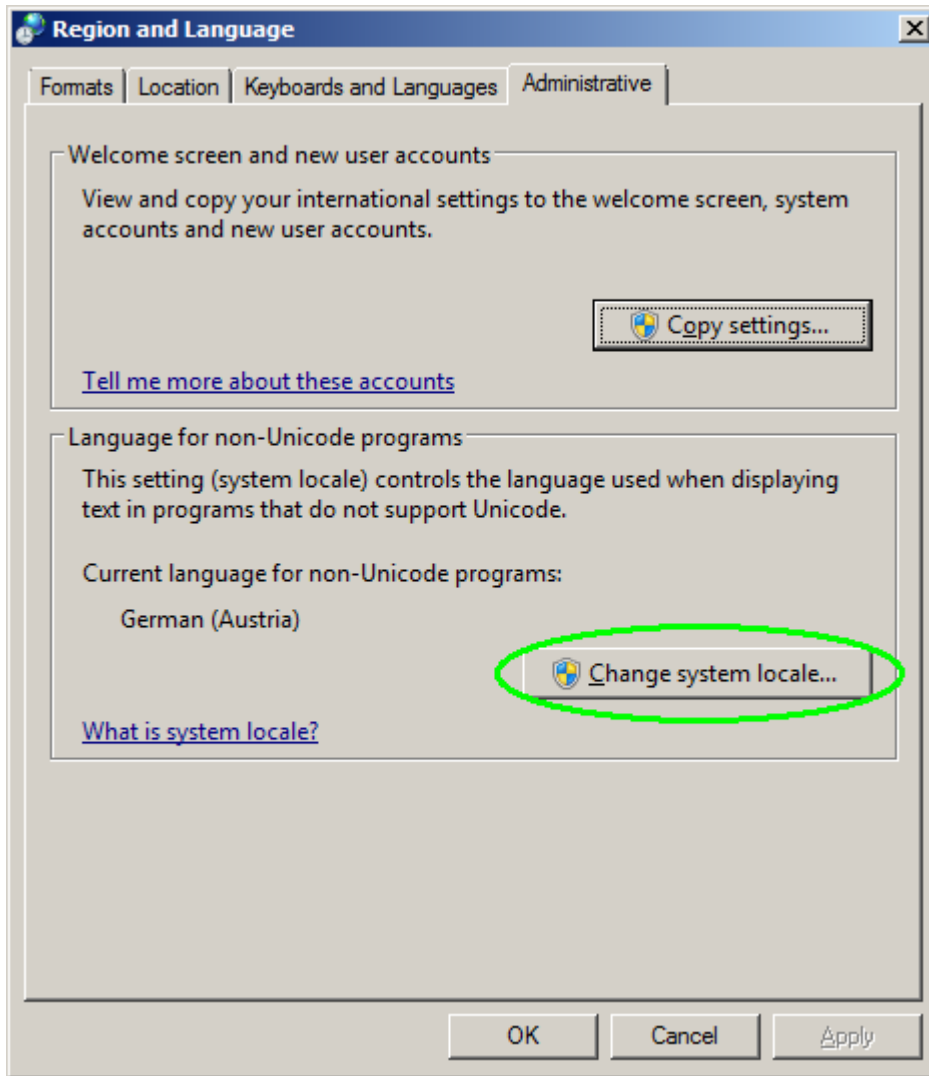
- **Q:** Fluke Energy Analyze shows question marks (?) on graph legends and cursor readouts. How can I get proper readings?

A: Make sure the “Language for non-Unicode programs” is adjusted to the language you want to use Fluke Energy Analyze with. On Windows 7, the setting is adjusted as follows (you need administrative rights to change the setting):

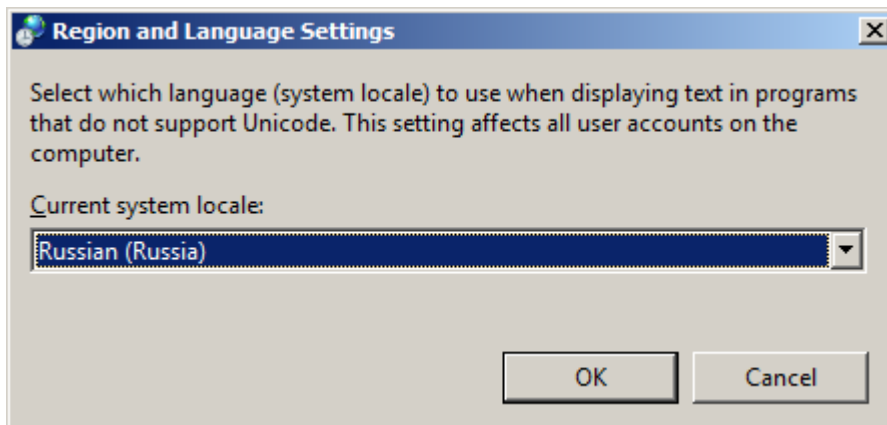
From the Control Panel, select “Change display language”



Go to the “Administrative” tab and click “Change system locale...”



Select the language that matches your requirements (example here: Russian)



Click "OK" – you may need to reboot your PC for the adjustment to take effect.

- Q: Reports in Korean or Simplified Chinese language do not contain show invalid characters. How can I create a report (.pdf file) in these languages?

A: The Fluke Energy Analyze report writer expects the fonts "Microsoft YaHei" for Simplified Chinese, and "Malgun Gothic" for Korean to exist, which may not be the case if running Windows

XP. If reports do not show reasonable texts in these languages under Windows XP, the mentioned fonts need to be obtained from the links given below:

“Malgun Gothic”: <http://www.microsoft.com/en-us/download/details.aspx?id=10490>

“Microsoft YaHei”: <http://www.microsoft.com/en-us/download/details.aspx?id=14577>

- Q: I have got two or more Fluke 1730 Energy Loggers connected to my PCs USB ports and want to download data concurrently. Does Fluke Energy Analyze support this?

A: Fluke Energy Analyze allows the connection of several instruments at the same time, but cannot download data from these concurrently; you need to select one unit after another as “Source”.

There is a weakness that occasionally can cause malfunction if multiple units are attached at the same time. If this occurs, the instruments (USB sticks) are not listed on the “Source” dropdown selector, and you need to temporarily disconnect unused instruments (or USB sticks) as a workaround.

- Q: I tried loading data from the instrument using a Wi-Fi connection to the instrument, but FEA does not show or fill the “download data” panel.

A: FEA relies on the operating system to qualify a Wi-Fi link as “available”, and shows the panel only after having access to an ‘available’ Wi-Fi connection. The time this takes may depend on other applications running on the same computer. It is recommended to enable the “Connect automatically” option (Network and Sharing Center) when connecting to a 1730 device for the first time. This will speed up subsequent connections and also avoid having to repeatedly input the WPA2 security key.