Luna 7600-C

V3.0.5 November 2024

New features and improvements

- Further improvements of the USB interface reliability
- Improvements to the firmware installation process
- Fixed issue where some machine swap file size was too small. Increased swap file size to 16GB during installation.
- Further improvements to data quality.

V3.0.4 September 2024

New features and improvements

- Improved reliability of the USB interface between the controller and the instrument
- Fixed issue where the trace min/max event values were not properly displayed when using units other than meters.
- Fixed issue where the Spectral Plot was not properly updated based on the Spectral Cursor location when using units other than meters.
- Fixed issue where the Spectral Cursor Width was not being applied to all populated traces.

V3.0.3 August 2024

Know Issues:

There is a known problem with the Ethernet over USB interface that connects the user software to the instrument. That can lead to intermittent instrument disconnects that require a restart to resolve. Luna is working with Dell to resolve this issue.

New features and improvements

- Added ability to update feature keys from the user software
    - Updated User's Guide to reflect new feature key update process from user software
- Fixed issue where setting focus to a value greater that 420m would crash the instrument
- Improved stability in longer length modes
    - Fixed issue where FPGA rounding could lead to overflow and inability to capture new measurement data until I&Q envelope compensation was refreshed

V3.0.2 June 2024

New features and improvements

- Improved error handling.
- Improved focus alignment with data.

- Improvements to the SCPI Interface:
  - The initial focus value is now set to 2/3 of the measurement mode length in modes longer than 50m.
  - The "MEAS" command now returns the new measurement data instead of the previous measurement data.
  - Entering a value for "GIND" (Group Index) that is the same as the current value is ignored instead of returning "Settings conflict".
  - SCPI commands "OFDR:FILT:GAUS:WIDT" and "OFDR:FILT:GAUS:STAT" now work properly as documented.
  - Changed "FETC" command. Default length is now matched to the active measurement mode (was 20m).
  - Fixed issue where the "LENG" command will hang the SCPI Interface due to calibration process.
- Improved user interface display:
  - User interface now displays the Focus value "Off" in 50m or shorter measurement modes.
  - Fixed incorrect data values as displayed in the Trace Options.

V3.0.1 April 2024

New features and improvements

- Improvements to data quality
- Speed and stability improvements in longer measurement modes (100m – 500m)
- Added a '\0' termination to the end of the data returned from a SCPI Query.
- Fixed issue where the maximum measurement focus was improperly set when changing the length units.

V3.0.0 March 2024

New features and improvements

- Initial release in support of the 7600-C

Luna 6415

What's New

V2.8.1 August 2023

New features and improvements

This release addresses features related to the 62xx and File Viewer.

- Fixed issues with measurement focus validation when displaying both Reflection and Transmission Measurements.
- Fixed issue where the Return Loss in the event table was not displayed when displaying both Reflection and Transmission measurements.
- Fixed issue where the wrong units of measure was being displayed for the Measurement Focus.
- Added busy cursor and disabled user interface while the system is busy to prevent the user from attempting to perform additional measurements prior to the current measurement completing.
- Fixed issue where the Trace Dialog is hidden behind the keyboard.
- Fixed issue where the Front Panel on the 62xx was not properly detected.

V2.8.0 July 2023

New features and improvements

- When switch Measurement Types (Reflection/Transmission), a measurement is now taken automatically.
- New SCPI Interface addressing several reported issues. **Note:** Port 5024 is no longer supported. Only port 5025 is supported. To use with telnet, type: alt-i to go into interactive mode. Many of the interactive mode (telnet) key sequences are not supported in this release.
- Added missing Configure:Distance SCPI command as described in the User Guide.
- Added new Focus and Focus? SCPI commands to set/get the Measurement Focus.
- SCPI Commands "ABORt" and "MMEMory:STORe[:CUSTom]" are no longer supported.
- When not connected to an instrument, the user is now forced to load Trace A prior to loading other Traces.
- Fixed issues related to unit conversion to ensure data integrity.
- Fixed software crashes caused by updating Measurement Option or Trace Settings while the system is busy.
- Fixed issue where the x-axis values stored in the TSV file for units other than meters were incorrect.
- Fixed TSV output for transmission to display Insertion Loss and not Return Loss for the y-axis in the Delay Plot and Event Tables.
- Fixed issue where the front panel location is not set to 0 when switching measurement length modes.
- Fixed issue where the front panel location was lost when switching between Transmission and Reflection.
- Fixed issue where the front panel location was lost when switching between 20m and 50m modes.
- Fixed issue where loading a config from startup is different than loading a config while running the software.
- Fixed issue when loading the same trace, the Return Loss and Insertion Loss values are different.
- Fixed issue where the Vertical Cursor on the Delay plot is unable to be moved when loading a file while not connected to an instrument.

- Fixed issue where the Horizontal Cursor on the Delay plot and all cursors on the Spectral Plot do not display when not connected to an instrument.
- Fixed issue where the values for the min and max locations in the Trace Dialog will display in meters when in another unit of measure.
- Fixed issue when switching between Transmission and Reflection and back to Transmission does not properly change the Measurement Type.
- (File Viewer) Removed instrument settings from top of screen since the information is not relevant in the File Viewer.

V2.7.4 January 2023

New features and improvements

- Updated the focus length to match the selected Units. The focus length displays the single pass length.
- Fixed issue where events displayed from Traces loaded from a file were not correct.
- Fixed issue where changing the length units to "mm" and changing the filter length caused a crash.
- Fixed issue where the length units are not always properly applied.
- Fixed issue where the Return Loss for loaded traces are incorrect in some cases.
- Fixed issue where the Group Index was not being properly applied to traces.
- Fixed issue where values from a loaded configuration were being ignored.
- Fixed issue where the user is not able to load a trace once a trace has data.
- Fixed issue where changing the measurement length or units would reset the Group Index to the default value.
- Fixed issue where loading a longer length measurement into a trace (i.e. 200m) and performing a continuous measurement using a shorter length mode (i.e. 20m) would crash the application.
- File Viewer Changes:
    - Fixed issue where older OFDR files are corrupted after reading into the File Viewer.
    - Fixed issue where 62xx Series OFDR Files are not supported by the File Viewer.
    - Fixed issue where the File Viewer did not properly handle the display of Spectral Plots.

Known Issues

When switching between Reflection to Transmission back to Reflection mode, the software will not be able to detect the front panel location. You will need to restart the software to resolve this issue.

V2.7.3 November 2022

New features and improvements

- Enhancements related to SCPI commands
- Fixed issue related to irregular measurements when in continuous mode.

V2.7.2 October 2022

New features and improvements

- Bug fixes related to SCPI commands
- Fixed issue related to front panel detection.
- Removed creation of "not used" folder when running the Windows File Viewer.

v2.7.1 October 2022

New features and improvements

- LWA File Viewer now supports multi-trace.
- Fixed issue where snapping a single or vertical cursor to a peak was displaying incorrect results and not the values related to the peak.

v2.7.0 September 2022

New features and improvements

- Multi-trace capabilities.
    - Up to four traces shown at one time
    - Trace A is the main trace from each measurement taken by the unit.
    - Traces B – D can load saved traces or copy one of the other three traces
    - All traces can be displayed or non-displayed
    - Trace Legend allows turning on / off displaying the trace, change color of trace and load & save data files, copy another trace and change trace settings.
- New LWA File Viewer for MS Windows
- Various bug fixes

v2.6.0 March 2022

New features and improvements

- Standalone Windows File Viewer to view saved measurement files on a Windows PC
- Example Python code for using SCPI commands
- Improved measurement speed
- Reduced time to switch modes
- Language can be selected. Current options are: English and Turkish
- Feet added to units options
- Measurement file format changed to save a single file instead of paired .ofdr/.bin files
- Two-channel handheld 62xx measures both channels whenever Measure is pressed

- Startup message prompts user to remove connected devices during initialization to prevent reflections from test devices from affecting initial calibration
- Various bug fixes and optimizations

Known Issues

Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.5.2 December 2021

New features and improvements

- Improved measurement quality
- Improved and faster alignment and gain adjustment
- Fixed bugs loading measurements when no instrument is connected

Known Issues

Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.5.1 October 2021

New features and improvements

- User can save a subsection of the OFDR data in TSV or retrieve a subsection of data from SCPI commands
- Fixed issue in which continuous measurements slowed down when zooming the plot with single or vertical cursors selected
- Support for 200 m and 500 m measurements
- Users can improve the quality of 200 meter and longer measurements by specifying a focus length for the measurement

Known Issues

- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.4.0 June 2021

New features and improvements

- Maintenance release with several minor bug fixes

Known Issues

- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.

Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.2.1 May 2021

New features and improvements

- Fixed bug that could cause the optical alignment to be incomplete in some systems
- Added ns as units suffix for SCPI commands
- Fixed SCPI command to change measurement length

Known Issues

- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.
- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.2.0 March 2021

New features and improvements

- Added support for SCPI command set allowing for remote control of the 6415 system.
- Added option to display data for the x-axis in nanoseconds as well as the current length units, e.g. millimeters, meters and inches.
- Added Show Event Distances check box to the Event Table. If checked, the Event Table will show the distances between events instead of the event locations.

Known Issues

- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.
- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.1.2 December 2020

New features and improvements

- Fix minor issue with Transmission measurements.

Known Issues

- A software crash can occur after changing the measurement length repeatedly a large number of times.
- User Guide shows the old user interface
- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.
- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.1.1 November 2020

New features and improvements

- Added 100 meter length measurements for 6415
- User choice of units (m, mm, inches) for 6415
- Minor bug fixes

Known Issues

- A software crash can occur after changing the measurement length repeatedly a large number of times.
- User Guide shows the old user interface
- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.
- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.1.0 September 2020

New features and improvements

- Added 100 meter length measurements for 6225
- User choice of units (m, mm, inches) for 6225
- Minor bug fixes

Known Issues

- User Guide shows the old user interface
- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.

- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v2.0.0 July 2020

New features and improvements

- New user interface
- Minor bug fixes

Known Issues

- User Guide shows the old user interface
- Continuous measurements may slow down when zooming the plot while the single or vertical cursors are selected. If this happens, set the Cursor Type to "None" while zooming, and reselect the "Single" or "Vertical" after zooming to the desired level.
- Measurement length and measurement type (reflection or transmission) are not stored in the configuration. The user must select the desired measurement length and type after loading the configuration.

v1.0.6 May 2020

New features and improvements

- Minor bug fixes
- User defined group index

v1.0.5 May 2020

New features and improvements

- User defined group index
  - Change in group index affects subsequent measurements
  - Cannot change the group index of a previously-acquired measurement
- Can set a default configuration to automatically load group measurement, RL and IL widths, and other settings when the software is started.
- Can select 20m length (default) or 50m length.
- Can choose to apply a Gaussian Filter with variable width.
- *NOTE:* There has been an update to the firmware which will require a recalibration of the unit when installed.

v1.0.4 December 2019

New features and improvements

- Faster measurement speed

v1.0.3 October 2019

New features and improvements

- Rolloff correction
- Default min/max event locations changed to show front panel as an event

v1.0.2 September 2019

New features and improvements

- Increased measurement rate and quality

v1.0.1 August 2019

New features and improvements

- Improved front panel detection
- Distinguish between RL and IL events with Event Type column and event marker colors
- Detect RL events by detecting when RL that rises above the preceding area by a certain amount, rather than looking for RL to be above a fixed threshold
- Dragging plot cursor overrides x- or y-axis selection. (Previously, cursor could not be dragged without clicking off of axis selection first.)
- Allow user to select what information (OFDR plot, spectral plot, events) in exported to TSV file
- Fixed task bar icon to show Luna spark instead of grey question mark
- Other minor bug fixes and improvements

v1.0.0 June 2019

New features and improvements

- Initial release