ODiSI 7100 Series

What's New

Contact Luna Innovations customer support at
https://support.lunainc.com/

Find the latest version of ODISI 7100 software at https://lunainc.com/product/odisi-7100-series

v3.1.1 May 2026

New features and improvements

- Improved the identification when using patch cords.
- Added ability to specify an IP Address when remotely connecting to an ODiSI Server.
- Fixed issue where the user interface would occasionally lock up with a busy cursor.
- Fixed multiple issues related to Rekeying and Custom Keying.

v3.1.0 November 2025

New features and improvements

- Full remote user interface with the ability to identify and connect to any instrument discovered on a local network.
- Support for rackmount and NUC Controllers.
- Separation of Server Software on the controller and User Interface. Server software now starts up automatically when the controller is powered on. This allows for full remote user connections.
- Further improvements to the USB Connectivity between the Instrument and the controller.
- Fixed issues related to writing test data to an external drive.
- Fixed issues related to the user interface hanging when canceling or exiting custom sensor keying.
- Fixed issue related to displaying the wrong sensor type when arming a test after editing the sensor type of a custom sensor key.
- Fixed issues related to dialog box being improperly displayed in MS Windows.

v3.0.6 September 2025

New features and improvements

- Enabled the output BNC trigger signal to indicate when the ODiSI is acquiring data

v3.0.5 May 2025

New features and improvements

- Improved processing for termination detection
- Improved custom key creation, reliability especially for sensor length of 100m.
- New remote User Interface for both Linux and Windows.

v3.0.4 November 2024

New features and improvements

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- 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.

v3.0.3 October 2024

New features and improvements

- Improved reliability of the USB interface between the controller and the instrument
- Improved data quality.
- Fixed the discrepancy between the defined gage location and the location written to the test data file.
- Fixed issue where the Y-Axis is mislabeled or the label is not readable when selected.
- Fixed issue caused by canceling out of custom sensor keying and the temporary sensor does not get cleared from the system.
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Known issues

- CFG Sensors are currently not supported.

v3.0.2 June 2024

New features and improvements

- Improved the handling of the status LED on the front of the ODiSI instrument.
- Fixed a case where the instrument could get stuck when trying to acquire data.
- Improved both remote module detection and patch cord detection.
- Support of sensors greater than 50m.
- Fixed issues with device losing connection with controller.
    - ODiSI 7100 must be connected to controller using a USB-C to USB-C 3.1 rated cable.

- Default Standoff Cable Length has been changed from 50m to 10m.

Known issues

- CFG Sensors are currently not supported.

v3.0.1 March 2024

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Updates to the About screen to show assembly information.
- Updated method to updated and change feature keys.
- Updated shutdown to ensure the instrument is stopped and disarmed.
- Miscellaneous changes for quality improvements.

Known Issues

- Rekeying and Custom Keying currently does not support 50 meter or longer sensors.

v3.0.0 December 2023

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Software release to support the ODiSI 7100 Series.

Known issues

- Currently only .65mm and 1.04cm gage pitches are available. 5.2mm, 2.6mm and 1.3mm are temporarily disabled.

ODiSI 6000 Series

What's New

v2.4.2 November 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Fixed a bug that determines the measurement rate for the new Dell 5570 Computers.
- Fixed a bug related to calculating the Temporal Moving Average Size.
- Fixed a bug related to calculating the Temporal Downsampling Factor.
- Updated Chinese Translations.

v2.4.1.1 September 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Fixed a bug that causing the sensor termination to not be properly detected when creating a new sensor key.

v2.4.1 August 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Release of the new Data Viewer for both Ubuntu and MS Windows to replace the existing player remote.
- Performance improvements during plotting data.
- Improved quality, decreased measurement noise, and decreased dropouts for longer length sensors.
- Change OMSP connection and remote control connection to always be enabled.

- Fixed issue where Temperature plots display as Strain.
- Fixed issue where Temperature values are plotted relative to the Strain Y-Axis when the plot contains both Strain and Temperature.
- Fixed issue where Spectral Shift was not plotting properly when the configuration contained both Strain and Temperature sensors.
- Fixed issue where gage points are not displayed during playback.
- Fixed issue in Custom Keying where the Index of Refraction was not able to be adjusted after clicking the Index of Refraction spin box.
- Fixed UI size issues caused by applying non-English translations.
- Fixed issue in generated TSV file where the Performance Mode field was not properly formatted.
- Fixed issue where selecting specific channels for generating TSV files still wrote out all channels.
- Fixed issue where Spatial down-sampling was not properly applied.
- Fixed issue when rekeying a sensor whose physical length is significantly less than the original length.
- Fixed issue in the DAC Settings where the voltage and current settings were not applied.
- Various usability improvements.

v2.4.0.3 April 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Fixed a bug that could sometimes cause the live data plots to not be displayed correctly in the Ui when Arming and Starting a test.
- Fixed a bug that caused the gage plot in the test data playback to not show the proper timestamp.
- Fixed a bug that could cause the y-axis on the gage plot to show temperature units when using only strain sensors.
- Fixed a bug that could cause difficulty selecting files in some file selection dialogs.
- Fixed a bug that sometimes caused the wrong standoff cable length to be indicated in the header information of a generated TSV file.

v2.4.0.2 March 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Added a diagnostic OFDR plot to assist in troubleshooting optical issues. The diagnostic OFDR plot is found in the advanced section of the Sensor Details dialog which is opened with the blue info ⓘ button.
- The sensor strain/temperature vs length plots now have an option for displaying cursors associated with the defined gages.
- The load configuration and default configuration dialog boxes now show which configuration is currently selected as the default.
- Fixed a bug that caused the default end gage to sometimes have a location value approximately four times the actual length of the fiber sensor.
- Fixed a bug that could cause the gage pitch and patch cord settings to be reset when changing the Measurement Mode setting.
- Fixed a bug that could cause the custom sensor keying process to get stuck acquiring new data from the instrument.
- Fixed a bug that caused the file name of a TSV file generated from a test data playback clip to be incorrect.
- Fixed a bug that caused the space reserved for the gage plot to shrink each time a test was Armed and then Disarmed.
- Fixed a bug that could cause the test data file to have saved data from before the Start button was pressed.

Known issues

- Sometimes when Arming and Starting a test the user interface does not properly show the plots. In this case the ODiSI software must be closed and restarted.

v2.4.0.1 February 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Fixed a bug in v2.4.0 that could cause the ODiSI software to malfunction if there is no network connection.

v2.4.0 January 2022

NOTE: The ODiSI controller is required to be running at least Ubuntu 18.04 for v2.4.0 and beyond. Please contact Luna's customer support if your controller is running Ubuntu 16.04.

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Significant user interface improvements to create a cleaner and simpler ODiSI controller interface.
- Support for the following language translations of the UI:
    - Russian
    - Chinese
    - Japanese
    - French
    - Italian
    - Turkish

  The user can change the language by going to the main menu of the ODiSI software and selecting "Help…" -> "Language…". Furthermore, the user can also install updated translation resource files form this Help submenu. Updated translation resource files can be downloaded from the Luna website.
- Decreased the time it takes for a sensor to be identified by the software.
- ODiSI control software now utilizes information from the installed fiber sensor key files to provide more accurate gage, segment, and x-axis locations on a per channel basis.
- 100 meter sensing is now fully supported (was previously beta).
- Luna CFG sensing is now fully supported (was previously beta).

v2.3.4 August 2021

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Maintenance release for minor bugfixes.

v2.3.3 June 2021

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

New features and improvements

- Fixed a bug in v2.3.x that prevented the ODiSI from reading SC Temperature sensors.
- Fixed a bug in v2.3.x that could cause the ODiSI software to crash just after completing startup initialization when using some default configurations.

v2.3.2 May 2021

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Fixed a bug in v2.3.0/v2.3.1 that could cause the ODiSI software to not properly detect the Extended Length Remote Module sensor connector position.
- Fixed a limitation in the software that could prevent the laser from reaching stability when using sensor lengths greater than 50 meters.

v2.3.1 April 2021

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Fixed a bug in v2.3.0 that could cause an application crash in some instances when using a 50 meter sensor with the 1.3 mm gage pitch.

v2.3.0 March 2021

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Introducing support for Luna's USB-3106 analog output device (sold separately). Simply connect the USB analog output device to the ODiSI 6000 controller, and then use the ODiSI 6000 control software to configure which user-defined gages are assigned to particular analog out channels of the USB analog output device (this is done in the settings dialog box accessed via the gear icon button on the main View All screen). The strain/temperature values of the assigned gages will be scaled to the appropriate voltage or amperage values.
- Can now utilize Continuous Fiber Grating (CFG) sensors sold by Luna. Please contact your sales representative for more information. Please note that this is currently beta functionality.
- Increased the maximum allowed Extended Length sensor to 100 meters. This requires the ODiSI instrument to be remotely recalibrated by Luna customer support. Please note that this is currently beta functionality.
- Increased the maximum allowed Standard Length sensor to 20 meters.
- Improved the reliability of remote module detection.

v2.2.0 December 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Introducing support for Luna's new Strain-compensated Temperature (SC Temperature) fiber sensors. Please speak to your Luna sales representative to learn more about these new sensors.
- The user can now specify both spatial and temporal down-sampling factors. The down-sampling applies to the results shown on the plots, streamed over OMSP, and saved to the test data file. These settings are controlled in the "Filter and Downsample" tab of the settings dialog (accessed by the gear icon button on the View All screen).
- The loaded test configuration name is now displayed on the main View All screen. This text label is located below the file saving properties section, and the label is colored black by default. After loading a configuration, the test configuration name label will be colored orange if the user changes any test configuration settings. If the user returns the changed settings to the previous values, the text label will reset to being colored in black.
- Strain values are now reported with 0.1 microstrain resolution.
- Measurement timestamps are now reported with microsecond resolution.

v2.1.1 September 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- The user can now select the standoff cable length on a per channel basis. This is done in the "Channel Settings" tab of the settings dialog (accessed by the gear icon button on the View All screen).
- The user can now specify both spatial and temporal moving average filter lengths. The moving average filtering applies to the results shown on the plots, streamed over OMSP, and saved to the test data file. These settings are controlled in the "Moving Average Filter" tab of the settings dialog (accessed by the gear icon button on the View All screen).
    - Generated TSV data files will include the spatial and temporal moving average filter lengths in the header. Please note this means that the number of header rows in the generated TSV files has increased.
- The user can now move test data files into a different directory using the ODiSI control software. Multiple files can be moved at once if desired. This functionality can be utilized by clicking the "Browse" button on the View All screen, selecting some number of test data files, and then clicking the "Move" button.
- The ODiSI control software will now remember (between executions of the application) the user's last rekey selection for all sensors. When the ODiSI control software starts up, the most recently used rekey for each sensor will be selected. This startup behavior is overridden by loading (either manually or via having a default set) a saved configuration.
- OMSP client applications are now guaranteed to first get a fully up-to-date metadata message (followed by all fully up-to-date measurement messages) when connecting to an ODiSI controller that already has a running test.

v2.1.0 August 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Strain range extended from ±12,000 με to ±15,000 με.
- Extended Length remote modules now support patch cords up to 19 meters in length. Standard Length remote modules continue to support patch cords up to 9 meters in length.
- Application startup time has been significantly reduced.
- Added additional information to the generated TSV test data files. Note that this includes a new column of information about the measurement type (e.g. strain, temperature) which comes after the timestamp column and the column that contains the "measurement" label. A typical beginning for a row of strain data results in a generated TSV file would be as follows:

  2020-07-23 15:45:50.699 measurement strain

  Please note, this means that when parsing TSV files generated from test data files collected in v2.1.0 and beyond, you must take this new column into account to get the correct starting point for the numeric results.
- Fixed a bug where feature keys could disappear from the ODiSI 6000 instrument, especially when using custom sensor keying.

v2.0.4 June 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Introduced the new "Performance Mode" control. The user can select:
  - "Full Optimization" to utilize some additional quality optimizations at half the measurement rate, or
  - "Maximum Rate" which provides the maximum measurement rate possible for the given test configuration.

  It is recommended to start out using "Full Optimization" and then move to the "Maximum Rate" mode if necessary. Note, for those utilizing "Transverse Strain Compensation" in previous versions of the software, please use the "Full Optimization" mode.
- The settings dialog accessed with the gear button has been restructured:
  - Some settings that were previously available on the "View Sensor" screen have been moved to the settings dialog (axes units selection, temperature offset).
  - The "Streaming Properties" tab has been moved into the settings dialog.
  - The "Trigger Properties" tab has been renamed to "Rate and Triggers" and moved into the settings dialog.

- Generated TSV data files now include the user-controled temperature offset value and the "Performance Mode" selection in the header. Please note this means that the number of header rows in the generated TSV files has increased.
- The measurement rate can now be reduced by an integer multiple. This setting is distinct from what the user configures for the trigger properties; trigger properties should be set in light of the value used for the measurement rate divider. The measurement rate divider setting is found on the "Rate and Triggers" tab in the settings dialog.
- Significant performance improvement when reading test data files into the ODiSI Player.
- User can now do batch generation of TSV files from multiple test data files.
- When generating a TSV file for a single test data file, the user can now specify start and end measurement indices to reduce the amount of data in the generated TSV.
- In test data playback, the user can define a playback clip by specifying start and end measurement indices. This facilitates more convenient playback of a subsection of the data. The defined clip can also be used to generate a TSV file that only contains the data from that clip subsection. The user can save the clip file and load it at a later time for playback or for generating a TSV file.
- Software will now remember gage plot color selections and gage plot checkbox selections for user-defined gages.
- The Extended Length feature can now support up to 8 Extended Length sensors in a single test for ODiSI 6108 owners. This requires the purchase of an instrument controller upgrade and additional Extended Length remote modules. Please contact Luna Sales for more information

v2.0.3.1 February 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Fixed a bug introduced in v2.0.3 that could cause laser stability issues.

v2.0.3 January 2020

New features and improvements

NOTE: Luna's customer support must be contacted prior to upgrading to v2.0.3 (and beyond) if the customer is currently using a version prior to v2.0.3.

- Added a Transverse Strain Compensation mode, which improves measurement reliability and reduces dropouts especially when a sensor is subject to transverse strain (e.g. embedded in a composite material). Turning on this compensation will reduce the measurement rate by a factor of two. This compensation is enabled via the settings configuration dialog (i.e gear icon dialog).
- Reduced number of dropouts at higher strains especially when using the 0.65 mm gage pitch setting.
- Added support for using Standard Length sensors connected to Extended Length remote modules when using the HD Extended Length measurement mode. This allows for more flexibility in choosing sensor lengths when using the HD Extended Length measurement mode.

As before, all remote modules used in a test must be of the same type (either Standard Length or Extended Length). The measurement rate is always determined by the longest sensor in the test configuration.

- Updated Help menu to display Documentation, Update, and About. This includes other user interface improvements related to the menus.
- Gage plot colors are now selectable by clicking the color swatch in the gage plot tab.
- Settings configuration button is now available on both the View All and View Channel screens.
- Can now use the ODiSI 6000 control software to select and open a new ISO installer for performing a software update.
- User can now generate an issue report which can then be sent to Luna customer support. This issue reporting dialog is accessed through the Help menu.
- Fixed a bug that could cause only the View All button to be shown when viewing a channel.
- Fixed issue where the gage pitch is not reset back to the user-selected value after creating a custom sensor key.

v2.0.2.1 October 2019

New features and improvements

- Fixed a firmware bug to reduce sensitivity to the orientation of the standoff cable and remote module.

v2.0.2 September 2019

New features and improvements

- Fixed issue with the Network Time Protocol (NTP) configuration file where the NTP timing protocol was not updating the time on the client computer.

v2.0.1 August 2019

New features and improvements

- Fixed an issue where the installer picks the wrong version of the Firmware Installer if multiple Firmware Installers exist.

v2.0.0, August 2019

New features and improvements

- Improved the performance of Extended Length sensors.
    - In order to realize the full improvement, rekey Extended Length sensors with this software.
- Added feature to transfer files between the ODiSI 6000 controller and external removable media (USB flash drive or CD/DVD). User can transfer:
    - TSV test data files,
    - Playback test data files, and

    - Sensor installations (including tares, gage and segment definitions, and user-created keys).
- Added an advanced view to the sensor identification details dialog box which shows return loss and insertion loss info for the chosen channel.
- The About screen now shows software version info, hardware revision info, and enabled options.
- Supports the latest ODiSI 6000 controller.

v1.6.4, June 2019

New features and improvements

- Fixed a bug introduced in v1.6.3 that caused a newly created/selected tare to no longer be in use after navigating away from the View screen for that channel/sensor.

Known issues

- There are many dropouts of the strain/temperature results beyond 30m.

v1.6.3, June 2019

New features and improvements

- The standoff cable length being used is now user selectable.
    - The available options are 10 meters, 50 meters, and 100 meters.
    - This control is found in the configuration settings dialog which can be accessed by pressing the gear icon button that sits next to the Measurement Mode drop-down combo box on the Sensor Properties tab.
    - The selected standoff cable length is reported in the exported TSV data files. This information is on a new row in the header portion of the exported TSV files.
    - Note that you must use the same length standoff cable on every channel of the ODiSI 6000.
- Made improvements to reduce the number of dropouts/NaNs in the reported strain/temperature results.
- Fixed a bug that could cause sensor keying to save suboptimal sensor key data. This bug could affect both sensor rekeying and custom sensor keying.

Known issues

- There are many dropouts of the strain/temperature results beyond 30m.

v1.6.2, May 2019

New features and improvements

- There is now a configuration settings dialog for adjusting various options. This dialog can be accessed by pressing the gear icon button that sits next to the Measurement Mode drop-down combo box on the Sensor Properties tab.

- When exporting test data, you can now select a subset of channels to export.
- The configuration settings dialog includes an option for enabling or disabling the patch cord search that occurs during sensor identification and during custom sensor keying. Note that if you disable this search, sensors connected with patch cords will not be identified.
- The Sensor Properties tab now includes an input field for a temperature offset. This temperature offset is added to the temperature values reported for each temperature sensor. This input field is only visible if a temperature sensor is connected and identified.
- Fixed a bug causing spectral shift results to wrap in the test data file and the exported data file.
- Fixed a bug which prevented custom sensor key coefficients from being editable after rekeying the custom sensor.
- Fixed a bug which could cause some instruments to fail to produce result sets when only using sensors shorter than 2.5 meters, especially when using the 0.65 mm gage pitch setting.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.

v1.6.1, May 2019

New features and improvements

- Simplified the Sensor Properties tab user interface.
- Changed the View/View All buttons to be a combo box selector to allow moving directly from viewing one channel to another.
- Improved the speed of the View, View All, Arm, and Disarm actions.
- Added the option to choose to export either the gages and segments export data file, the full export data file, or both.
- Added support for Precision Time Protocol (PTP) and Network Time Protocol (NTP) on the ODiSI 6000 controller.
- User software now runs a check at startup to ensure the connected ODiSI 6000 instrument has the expected firmware.
- Improved the performance of the 0.65 mm Gage Pitch setting at higher strains.
- Custom sensor keys can now be used immediately after creation without exiting the application software
- Fixed a rare bug that could cause a test to save a 0 byte file instead of correctly saving the test data.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.

v1.6.0, March 2019

New features and improvements

- Introduced custom sensor keying feature. This feature requires an additional purchase to be enabled. Please contact Luna Sales for more information.
    - **Please note**: There is a known issue which requires that the user exit the software after creating a custom sensor key before using the sensor in a test.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.

v1.5.1, March 2019

New features and improvements

- Fixed a bug introduced in v1.5.0 that caused the default end gage to be defined incorrectly when a sensor was installed with the Gage Pitch setting not on 2.6 mm.
- Improved the reliability of the instrument disconnected pop-up notification.
- Updated the user's guide for the ODiSI 6000 controller application.
- Fixed a bug in the remote control operation of the ODiSI Remote software.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.

v1.5.0, February 2019

New features and improvements

- The user can now create new sensor keys when Viewing a single Luna sensor. The user can select which key to use for a given sensor when Viewing that sensor as well as via the Manage Sensors dialog.
- Improved test data file export to show the progress of the file export as well as allow the user to pause or cancel the export process. The user can now perform other tasks in the application while the file export process is ongoing.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.

v1.4.6, February 2019

New features and improvements

- Optical patch cord cables (between the remote module lead and the sensor) are now supported (must be SMF-28 fiber). Supports patch cords up to 9 meters in length with Standard Length Remote Modules, and patch cords up to 6 meters in length with Extended Length Remote Modules.
- Now supports limited remote control using the separate ODiSI Remote application.

- The user can now uninstall sensors via the Manage Sensors dialog which can be accessed by the associated button on the Sensor Properties tab.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.
- When clicking the “Export Test Data” file menu option and choosing a large test data file to export, the application window may temporarily gray out and become unresponsive before completing the action and returning to normal operation.

v1.4.5, January 2019

New features and improvements

- Made some processing improvements to improve the noise performance with the 2.6mm gage pitch setting.

Known issues

- There are a large number of dropouts of the strain/temperature results beyond 30m.
- When clicking the “Export Test Data” file menu option and choosing a large test data file to export, the application window may temporarily gray out and become unresponsive before completing the action and returning to normal operation.

v1.4.4, January 2019

New features and improvements

- Improved the responsiveness of the UI when viewing a sensor or running a test.
- Improved the quality of the strain/temperature results for extended length sensors.

Known issues

- When clicking the “View”, “View All, “Arm”, or “Disarm” buttons, the application window may temporarily gray out and become unresponsive before completing the action and returning to normal operation.
- There are a large number of dropouts of the strain/temperature results beyond 30m.
- When clicking the “Export Test Data” file menu option and choosing a large test data file to export, the application window may temporarily gray out and become unresponsive before completing the action and returning to normal operation.

v1.4.3, December 2018

New features and improvements

- Clarified and cleaned-up the test data file saving configuration section of the main tab.

- The “Measurement Count” setting for triggering is now specified to be in terms of the number of measurements per channel.
- Fixed a bug that prevented the user documentation from opening via the “Help” menu in some circumstances.
- Fixed a bug that caused the results plots (sensor plot and gage plot) to update too slowly when certain triggering settings were used.
- Added temperature y-axis and dual strain/temperature y-axis support to the gage plot.

Known issues

- When clicking the “View”, “View All, “Arm”, or “Disarm” buttons, the application window may temporarily gray out and become unresponsive before completing the action and returning to normal operation.

v1.4.2, November 2018

New features and improvements

- Decreased the amount of time taken for the “View”, “View All”, “Arm”, and “Disarm” operations.
- Resolved a software bug causing the application to crash after running a test for several hours.
- Added the ability to create a user-defined default test configuration.

Known issues

- The application window may gray out when clicking the “View”, “View All, “Arm”, or “Disarm” buttons.

v1.4.1, November 2018

New features and improvements

- Resolved software bug that was causing the achieved measurement rate of the system to decrease over time.

Known issues

- Longer length/higher resolution modes can take as long as 1 minute to start.

v1.4.0, October 2018

New features and improvements

- Improved instrument laser control
- Faster 2.5 m sensor modes now supported
- Resolved memory leak issue that was causing application to crash after a few hours

Known issues

- Longer length/higher resolution modes can take as long as 1 minute to start.

v1.3.5, October 2018

New features and improvements

- Fixed bug viewing sensors after using triggering

Known issues

- 2.5 m sensors are not yet supported.

v1.3.4, October 2018

New features and improvements

- Time interval start triggering
- Measurement count stop triggering

Known issues

- 2.5 m sensors are not yet supported.

v1.3.3, October 2018

New features and improvements

- Fixed a problem saving tares for some sensors produced in September 2018
- File browser open the USB drive location when installing a sensor

Known issues

- 2.5 m sensors are not yet supported.

v1.3.2, September 2018

New features and improvements

- Improved playback controls
    - Timestamp and measurement number are shown during file playback
    - A scrollbar indicates the position in the file and can be repositioned to move through the file
    - A different playback file can be selected without first exiting playback mode
- Improved Sensor Plot controls
    - Strain and temperature measurements can be shown together in the Sensor Plot Single Plot view, with strain and temperature on separate axes
    - Graphs can be hidden or shown by clicking on the channel and sensor name in the Single Plot legend
- Armed state and triggering

    - Tests are armed using the Arm button. After this the test is started and stopped using the Start and Stop buttons or start and stop hardware triggers.
    - Test initialization is performed when arming the test, so that data collection begins immediately when pressing Start.

Known issues

- 2.5 m sensors are not yet supported.

v1.3.1, September 2018

New features and improvements

- Simplified user interface
    - Add/Remove buttons replace Accept button and Measure checkboxes in Sensor Properties tab
    - Gage and segments are specified using the View Gages button when viewing a sensor in the Sensor Properties tab
    - File properties are always visible at the top of the program window
- User can save test files into subfolders
- Temperature can be measured in C, F, or K
- Sensor Application Guide is available from the program menu
- Automatic Touch to Locate feature is available when defining gage locations

Known issues

- 2.5 m sensors are not yet supported.

v1.3.0, August 2018

New features and improvements

- User defined gages and segments.
    - User can specify key measurement locations, referred to as gages, and define measurement segments (the set of measurement value between two defined gages).
    - User can view individual gages in the Gage Plot tab during a test.
    - OMSP will stream only defined gages and segments.
    - Exported TSV files contain only defined gages and segments. (Additional TSV file shows full measurement data.)
    - Playback uses the gages and segments that were defined when the test was run.
- Users can rename sensors.
- Improved file browser allows users to select test files for export or replay by sorting by test name, notes, and date.
- Button to open exported data folder after exporting TSV files.

- Data in TSV files and OMSP streaming are no longer padded with NaNs at the end of each measurement. Each channel has a different number of measurement points determined by the actual sensor length and gage pitch.

Known issues

- 2.5 m sensors are not yet supported.

v1.2.3, July 2018

New features and improvements

- Improved speed when viewing a sensor or starting a test.
- If no instrument is connected, the software will continue to run but will only allow file playback and export.

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.

v1.2.1, July 2018

New features and improvements

- Increased measurement rates
- Improved user interface
    - Single Sensor label instead of selectable Sensor Name and Sensor Serial Number controls
    - Display connected remote module type
    - Sensor status message when no sensor is connected, no remote module is connected, or when sensor length does not match remote module type
- Multiple named, saved tares
- Measurement data playback
- Sensor Plot can display multiple channels on a single plot, or multiple plots with a single channel each
- Support for extended length remote modules and sensors
- Support for 100 m standoff cables
- Error message if software fails to connect to instrument
- Detection if USB 2.0 cable is connected instead of USB 3.0
- File saving is enabled by default

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.

v1.2.0, May 2018

New features and improvements

- Increased measurement rates to the full specified rates.
- Timestamps are created at the time of acquisition, rather than the time that strain/temperature processing has finished.

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.8, May 2018

New features and improvements

- Report more accurate measurement rates. Show the measurement rate per channel.
- Ensure that the maximum number of gages per channel is set correctly for all sensor lengths.

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.7, May 2018

New features and improvements

- Tests can contain multiple channels

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.6, May 2018

New features and improvements

- Software starts in full screen
- Improved noise performance in higher resolution measurements

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.
- Single channel tests with manual switching between tests. Automatic multi-channel scanning in a test will be available later this month.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.5, April 2018

New features and improvements

- Help menu showing Users Guide, What's New, Setup Guide, and About
- Reduced delay when starting and stopping a test, and when changing between View All and View Sensor

Known issues

- If the system fails to identify any sensors after several minutes, please close the software, power cycle the ODiSI, and restart the software after one minute.
- Single channel tests with manual switching between tests.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.4, March 2018

New features and improvements

- Test data file can be exported to Tab Separated Value (TSV) files.
- Improved plot fitting. "Fit Plot" scales to reasonable bounds instead of rescaling tightly around the current measurement.
- Sensor Plot tab shows the correct number of plots to match the system type.

Known issues

- Single channel tests with manual switching between tests.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.

v1.1.1, March 2018

New features and improvements

- Sensors are automatically identified. Any ODiSI 6100 sensor can be attached to any channel.
- When starting a test, the correct measurement rate and gage pitch are used. The measurement rate is determined from the selected gage pitch and the length of the selected sensor. This software release does not yet achieve the specified measurement rate. That is a feature of a future software release.
- Temperature sensors are now supported.
- Sensors can be installed through the File menu. (File, Install Sensor)
- Sensor installation uses the ODiSI 6100 sensor file format. v1.0.0 used the ODiSI-B sensor file format. Luna can convert existing ODiSI-B sensor files to the new format. New ODiSI 6100 sensors are available.

Known issues

- Single channel tests with manual switching between tests.
- Data is not measured at the full specified measurement rate.
- Extended length remote modules and extended length sensors are not yet supported.
- There is a delay when changing from viewing all sensors to viewing a single sensor in the Sensor Properties tab, and when starting or stopping a test. The User Interface is unresponsive during this delay.
- File saving and file export are not yet supported.

v1.0.3, February 2018

New features and improvements

- Allows switching between multiple sensors, processing one sensor per test.
- Sensors are predetermined and must match the configured setup.
- Increased font and button size in user interface.
- Uses temporary tares. Tares can be taken, but are not written to a file and cannot be reloaded when restarting the software.

v1.0.0, November 2017

Initial release.

- Processes strain measurements for a single channel, using a predetermined sensor.