

### Summary

Luna continues to develop and evolve the ODiSI system for high-definition distributed fiber optic sensing to address more applications and deliver maximum value in your most challenging measurement and control projects. Following is a summary of some of the more significant and *recent* improvements.



### Sensors – More Types and Flexibility

- Support for Luna strain-compensated temperature sensors (v2.2.0)
- Support for up to eight channels of 50 m (or 100 m) sensors on a single system, increasing the sensor capacity of an 8-channel system from 200 m total to 800 m total (v2.0.4/2.4)
- Support for 100 m sensors (coming in v2.4, to be released Q2 2021)
- Standard remote modules can now be used with 20 m sensors, up from 10 m (v2.3.0)
- Both standard and extended length sensors can be used with Extended Range Remote Modules (v2.0.3)
- Standoff cable options increased to include 10 m, 50 m, 100 m, 150 m and 200 m (v2.1.1)
- Standoff cable length can vary from channel to channel (v2.1.1)

### System Functionality

- Option for generating analog output signals (voltage or current) using USB analog output device (v2.3.0)
- Option to average or down-sample measurement data in real-time (v2.1.1/2.2.0)
- Increased acquired data resolution, to 0.1  $\mu\epsilon$  and 1  $\mu\epsilon$  (v2.1.1)
- Added 5.2 mm as an option for gage pitch (v2.2.0)
- Revamped and improved data file management and usability (v2.0.4 and others)
- Improved remote client for Windows and Linux to provide basic control of ODiSI tests, visualize measurement data in real-time and playback data files

### Measurement Performance

- Added Full Optimization measurement mode, which provides general data quality improvement and compensation for transverse strain, which is especially useful for embedded sensors (v2.0.4)
- Increased maximum strain measurement range from  $\pm 12,000 \mu\epsilon$  to  $\pm 15,000 \mu\epsilon$  (v2.1)
- Ongoing significant improvements in measurement performance and robustness, including tolerance of dynamic environments

## Upgrading Your ODiSI System

These improvements are generally available for all existing ODiSI 6000 and ODiSI 6100 models. Depending on the current software installed on the system, updating the ODiSI system may be as simple as downloading and installing the software on the ODiSI system or may involve recalibration of the internal laser system, which can be done remotely by Luna support staff.

### Check Your Version of ODiSI Software

Within the ODiSI software, select *Help* from the menu and select *About* to display the currently installed software version.

### ODiSI Systems with Software Version 2.0 or Earlier

ODiSI 6000 Series systems that have software version v2.0 or any prior version will need to be recalibrated to support the software upgrade. This can be performed by Luna via a remote login.

Contact Luna support staff at [support@lunainc.com](mailto:support@lunainc.com) to schedule a session where Luna can access the system and fully update the software and firmware to the latest version.

### ODiSI Systems with Software Version 2.0.3 or Later

Systems with software version 2.0.3 or later can be easily updated by downloading the latest software and installing the software directly on the ODiSI instrument controller

Owners of ODiSI 6000 systems can access and download the latest version of the ODiSI software here: <https://lunainc.com/odisi-software-download>

For more information or if you have any questions, please contact us at [support@lunainc.com](mailto:support@lunainc.com).