

Spark™ 10M already lighting up research

Since its launch at SLAS 2015 in February, the Spark 10M has gained interest from across the life sciences community, with researchers around the world beginning to explore the advanced capabilities of this exciting new system for applications including DNA quantification, microbiology research and cell-based assays. To further extend the flexibility and appeal of this powerful system, Tecan has introduced a number of new features, including a cuvette port for absorbance measurements and an enhanced detection module offering straightforward performance of immunoassays using Alpha Technology.

The enhanced detection module makes it easier than ever before for customers to perform AlphaScreen®, AlphaLISA® and AlphaPlex™ protocols. This option combines a high power laser light source with both low-pass and high-pass filters, using pre-optimized filter settings to ensure exceptional assay performance in 96- and 384-well microplate formats. The introduction of a cuvette port further

increases format flexibility, allowing ultra-fast absorbance measurements using Tecan's patent-pending High-Speed Monochromators.

The instrument's SparkControl™ software has also been enhanced, with a number of new and improved features to streamline routine activities and maximize productivity. An extended dynamic range option enables both low and high gain measurements within a single microplate, allowing complete data sets to be obtained without compromising on sensitivity for low signal strength measurements. This is complemented by an automated gain regulation function for fluorescence-based measurements. Ideally suited to kinetic assays and long-term cell-based studies,

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this feature helps to avoid loss of data by automatically adjusting the gain settings if signal saturation is reached. The software then automatically correlates the data across different gain settings, allowing users to view the entire dataset in a single graph. In addition, the introduction of unique, one-click applications – including absorbance reading, cell counting, cell viability, nucleic acid quantification and nucleic acid labeling efficiency – makes it easy to perform optimized measurements, offering rapid, consistent results at the touch of a button.

Dr Tobias Kiesslich from the Institute of Physiology at the Paracelsus Medical University in Salzburg, Austria, is a long-term Tecan collaborator, and has already gained practical experience with this groundbreaking multimode microplate reader within his laboratory's daily research: "The Spark 10M is straightforward to use and program, offering a great range of applications and measurement modes. The innovative cell counting module is particularly useful, allowing the instrument to make the step up from a microplate reader towards full automated imaging. The SparkControl software provides a full range of functions which are easy to use, with a clear modular programming concept to make designing and running experiments very simple. Together with features such as gas and temperature control, automated lid handling, dual injectors and evaporation protection, the Spark 10M offers flexible and versatile experimental design, even for cell-based applications."

To find out more about the Tecan's Spark 10M multimode reader, visit www.tecan.com/ignite

