# Empower your research with the Spark® 20M multimode reader

**The new Spark 20M multimode microplate reader* offers tailor-made solutions to suit virtually any drug discovery or advanced life science research application. This freely configurable system gives researchers access to new techniques and features intended to enhance and streamline biochemical and cell-based workflows.**

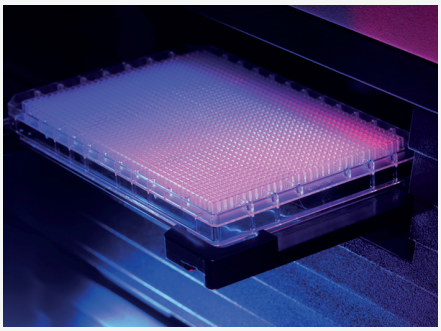

At the heart of the instrument are Spark's unique Fusion Optics and a powerful, ultra-high frequency xenon flash lamp. This advanced optical system can be combined with your choice of high performance detection modules – from basic fluorescence and DNA quantification to multi-color luminescence and TR-FRET – ensuring a perfect match for your workflow, with the option to upgrade as your needs change.

Understanding that throughput is essential to drug discovery workflows, Tecan has introduced an enhanced fluorescence module designed to improve sensitivity and increase the speed of high throughput screening. Combining dichroic mirrors with the variable bandwidth selection and full wavelength flexibility offered by the latest generation QuadX Monochromators™, this set-up allows on-the-fly measurements, providing exceptional performance and speed – even for closely related excitation and emission spectra – without compromising on data quality.

The Spark 20M's cell handling capabilities have also been enhanced to provide greater workflow automation for cell-based assays. To complement the existing cell counting and viability check functions, a new automated cell imaging and confluence measurement feature allows incubation and monitoring of cell culture microplates within the instrument's environmentally-controlled chamber. This allows the user to define the confluence at which the assay starts/ends or the substrate is injected, offering optimal assay results and greater walkaway operation.

To ensure complete confidence in your data, the Spark 20M offers complete control of the measurement environment, including the $CO_2$ and $O_2$ partial pressures, humidity and temperature. A newly developed Te-Cool™ cooling module now provides complete environmental independence, uniquely allowing the measurement chamber temperature to be set below the ambient room temperature, offering more precise control for more accurate and reliable results. These new options – combined with the ability to read 6- to 1,536-well microplates – ensure there is a Spark 20M configuration to increase the productivity of your lab, both today and in the future.

Spark 20M offers fully automated cell counting, viability checks and confluence measurements



Up to 1,536-well plate formats can be accommodated

**To find out more about Tecan's Spark 20M, visit www.tecan.com/spark20m**

* Spark multimode reader is for research use only.