



## Seg-Flow S3 & Vi-CELL BLU Sampling Integration System

**Flownamics Seg-Flow S3** is an automated sampling system for withdrawing samples from up to 8 reactors/process streams. It can be controlled locally or remotely. When paired with a Sample-Mod S3, the Seg-Flow S3 can perform in-line dilutions (up to 1:20 ratio) and deliver samples to up to 4 analyzers.

The **Beckman Coulter Vi-CELL BLU cell viability analyzer** automates the widely accepted trypan blue dye exclusion method for cell viability that has historically been performed with a light microscope, pipette, and a hemacytometer.

Combining the Seg-Flow S3 with the Vi-CELL BLU creates a **fully automated on-line system** that provides cell viability/counting for up to 8 bioreactors. This user friendly integration requires minimal set-up due to the Seg-Flow S3 interface and the Vi-CELL BLU being designed for automation and having a complete library of functions readily available for implementation. The Seg-Flow S3 pulls continu-

ous and/or scheduled samples from a bioreactor, performs in-line dilution, if needed, and delivers the samples to the Vi-CELL BLU. The Vi-CELL BLU provides the analyzed data to the Seg-Flow S3 via the API, which is then sent to the SCADA system. All fluid paths and sample reservoirs are fully cleaned to ensure consistent and accurate measurements for the next sample.

This integration is fully compatible with both automated samples and manual walkup samples. When the Vi-Cell BLU is actively measuring the online sample for the Seg-Flow S3, the Vi-Cell BLU system displays an 'Automation Lock' message that prevents the walkup user from loading a manual sample. As soon as the online sample completes, the lock is released and the system can be used for walkup samples until the next online sample arrives from the Seg-Flow S3.

