

## Beckman Coulter's Vi-CELL BLU /Flownamics' Seg-Flow S3 Integration Technical Bulletin

### Auto Sampling Integration System Hardware

**Name: Flownamics Seg-Flow  
Model: S3**

**Analyzer Integration:  
Beckman Coulter  
Model: Vi-CELL BLU**

### Technical Update

#### 1. Distances between a bioreactor and the Seg-Flow S3 and between the Seg-Flow S3 and the Vi-CELL BLU cell viability analyzer

The maximum distance between a bioreactor and the Seg-Flow S3 is 25 feet (7.62 m). The maximum distance between the Seg-Flow S3 and the Vi-CELL BLU cell viability analyzer is 10 feet (3.05 m). These distances were determined by Flownamics' internal testing and end users' results.

#### 2. Minimum sample volume

The minimum sample volume removed from the reactor is 2 mL (1 mL sample/1 mL purge) for a 10 feet tubing configuration and 2.5 mL (1 mL sample/1.5 mL purge) mL for a 25 feet tubing configuration. This is to mitigate damage caused by pressure transients in the sample line at the ASR.

#### 3. Sample cycle time for the Vi-CELL BLU cell viability analyzer and Seg-Flow S3

The full cycle time is 15-20 minutes. This is dependent upon the required dilution steps, cleaning of the devices, and distance between the components and reactors. These distances were determined by Flownamics' internal testing and end users' results.

I (We) certify that the information given in this technical bulletin is correct and complete. All equipment information provided above is verified through Flownamics' lab testing.

Name: Bryan Kison (Applications Engineer)

Company Name: Flownamics Analytical Instruments, Inc.

Signature: 

Date: 7/12/2023