



**FLOWNAMICS**<sup>®</sup>  
*Your Bioprocess Sampling Solution*

Autosampling Solution for Nova Biomedical  
BioProfile<sup>®</sup> FLEX2 Automated Cell Culture Analyzer



## Automated On-Line Analysis

The Flownamics Seg-Flow® 4800 Automated On-Line Sampling System coupled with a Nova Biomedical BioProfile® Automated Cell Culture Analyzer provides automated, on-line analytical solutions for advanced bioprocess culture monitoring. The Seg-Flow 4800 draws samples from 1 to 8 vessels and delivers each vessel sample to the FLEX2, or up to 4 analyzers total. The Seg-Flow 4800 system acquires and processes the FLEX2 data to provide real-time cell, nutrient and metabolite analysis, as well as feed control options for bioprocess cultures. The Seg-Flow's FlowWeb™ OPC technology provides seamless integration of the FLEX2 data into any OPC-enabled SCADA or bioprocess management system for enhanced bioprocess monitoring and control.

## Seg-Flow 4800 System Features

### Versatility

- User-defined sample size (200 µL to 50 ml), rapid and accurate sampling
- Sample from 1 to 8 vessels (streams) at a time
- Withdraw cell-free and/or cell-containing samples
- 8 analog inputs, 21 analog outputs, 3 RS-232 ports, TCP/IP

### Internal Web Server

- FlowWeb™ controls system internally
- Log data and information for each vessel or stream
- View and control from any PC or smart phone

### Low Maintenance and Operating Cost

- Single-use fluid path from vessel to analyzer

## Seg-Flow/Nova BioProfile FLEX2 Interface

### Nova BioProfile FLEX2 Analytes

Glucose	pO <sub>2</sub>
Lactate	pH
Glutamine	pCO <sub>2</sub>
Glutamate	Total Cell Density
Ammonium	Viability
Sodium	Viable Cell Density
Potassium	Cell Diameter
Calcium	Osmolality

### Small Footprint

- 11"W x 10 ¼"H x 14"D  
(27.9 cm x 26.0 cm x 35.6 cm)

### Simple Setup, Interface, and Startup

### Patented Segmented On-Line Sampling Technology

- Provides rapid and accurate sampling

### Data Management

- Seamless data integration to various bioprocess management systems via OPC

### Scale-Independent Technology

- Lab, pilot, and commercial processes



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