



## **SEG-FLOW**<sup>®</sup> **S<sub>3</sub>**

The Next Generation in Automated Sampling

- Smart Flow Control
- Improved Ease of Use
- Optimized Operator Interface
- Increased Reliability



## Seg-Flow S3 Automated On-Line Sampling

Introducing the next generation of the industry leading Flownamics Seg-Flow Automated Sampling System, the **Seg-Flow S3**. A solution designed and built with the most critical sampling applications in mind, *yours*. The Seg-Flow S3 product line is characterized by more robust hardware manufactured using sturdy, heavy-gauge steel finished with durable powder coating. Intuitive tubing routing and management features smart pinch valves and ultrasonic sensors to ensure pinpoint accuracy and reliability. Enhanced GUI features intuitive menus and bright color palette with thumbnail navigation, as well as more scheduling options and reagent status. A row of LED status lights illuminate under the enclosure to indicate the stage of sampling being executed and status, such as Cleaning, Purge, Sampling, Air, Idling, Stop, Critical Error.

### Sampling Solutions

- Delivers accurate, reliable high-speed segmented sampling
- Seamless sample delivery to 4 analyzers/fraction collectors
- Enables online monitoring of nutrients, metabolites, cell growth
- Communication interface and FlowWeb™ control software
- Sample from 1-8 vessels/process streams
- Extract cell-free or cell-containing samples
- Sample line cleaned and/or sterilized after every sample
- Export data to any OPC-enabled DCS, PLC or PC

## ACCESSORIES FEATURE BUILT-IN TUBING MANAGEMENT

### Seg-Mod S3

- Designed for minimal sample withdrawal
- Compatible w/any vessel size or design
- Mounts easily on FISP or other in-situ sampling probe
- Suitable for R&D, PD, Pilot and Manufacturing Scale Applications
- Single-use fluid path

### Reagent-Mod S3

- Ancillary sample management that enables efficient addition of reagents and cleaning:
  - Detergent
  - De-ionized water
  - Ethanol
  - Air

### Sample-Mod S3

- Delivers samples to four devices
- Enables sample dilution, including serial dilution
- Allows reagent addition for sample preparation
- Zero dead volume syringe

### SCADA Integrations via OPC

- Sartorius BioPAT® MFCS
- DASGIP DASware
- Eppendorf BioCommand®
- Broadley-James BioNet®
- Emerson DeltaV
- Other DCS, PLC, and SCADA platforms available on request

### Feed Control Options

- Control 2 feed pumps per vessel
- Setpoint control, gravimetric feed control
- Other feed strategies can be programmed
- Pump interfaces include: Watson-Marlow, Cole-Parmer®, MasterFlex®, SciLog® ACCU Digital, and Ivek

### Communication Interfaces

- TCP/IP
- Serial – RS-232
- Analog I/O
- OPC

### Instrument Integrations

- Agilent 1200/1260/1290 Infinity II HPLC
- Beckman-Coulter Vi-CELL® XR Cell Analyzer
- Kaiser RamanRxn2™ Multi-Channel Analyzer
- Mettler-Toledo Balances
- Nova® Biomedical BioProfile® FLEX 2 Analyzer
- Roche Cedex HiRes Cell Analyzer
- Roche Cedex Bio HT
- Waters PATROL UPLC
- YSI® 2900/2950 Biochemistry Analyzers