## Symbion RTM

## ... High Speed Process Analytical Deployment Software



# Monitoring and control of an individual instruments or a complete unit operation

Symbion RTM is a rapid deployment software package for the continuous control, data analysis, and monitoring of analytical systems whether in the laboratory or on the process line. It combines a flat, user friendly interface with rapid execution of multiple functions, allowing complex chemical processes to be monitored in near real-time.

Symbion RTM can be used with a wide variety of analytical instruments, controlling the simultaneous operation of one or more instruments as well as auxiliary sampling equipment, while synchronizing chemometric operations, data display, and storage.

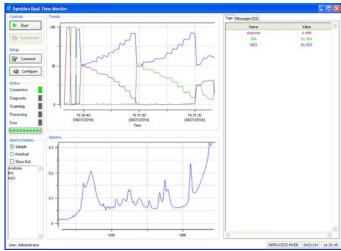
## Workflow-oriented method development

Symbion RTM includes a set of step-by-step tools that enable an administrator to configure diverse analytical methods. Typical functions include setting of instrument parameters, sequencing the operation of instruments and sampling system controls, scheduling chemometric data analysis, plotting, and reporting results in various formats. Once a method is fully tested and released, it is available for locked-down deployment within RTM's operational environment.

For situations requiring greater flexibility than is available within the structured RTM environment, the Administrator has the option of using the comprehensive mathematical capabilities of Symbion DX or RX. Methods developed using either of these programs can be locked down and transferred to RTM for deployment.

#### User-friendly operation at any level.

An RTM method typically includes the specification of a user interface (UI) for either laboratory or on-line deployment. This can be as simple as a "start/stop" button, or it can include a progress bar, a statistical report, a set of concentration plots. The definition of the UI is under the administrator's control.



Symbion RTM's standard operating screen showing both a trend plotting area and spectral display.

#### **Symbion RTM Features**

- A standardized platform for rapid, continuous online process analysis and control
- Simplified (flat) user interface
- Simultaneously controls multiple instruments, multivariate software, and I/O devices
- Outputs raw and processed data in common file formats
- Executes methods developed internally or by using Symbion DX or RX
- Interfaces to and synchronizes diverse data analysis software products
- Employs multithreading to allow simultaneous execution of disparate functions

### Simultaneous multiple task execution

Symbion RTM employs multi-threaded data processing, enabling it to run multiple processes simultaneously. This greatly increases the overall speed by allowing operations such as instrument control and data analysis to run in parallel. In practice, the operating speed attained when using Symbion RTM is only limited by the capabilities of the instruments and multivariate analysis software being used.

#### **Seamless Chemometrics integration**

RTM methods can incorporate chemometric models developed by using any of the common third party chemometric packages. An alternative to these is Symbion Confluence QT a comprehensive chemometrics program developed using the same workflow oriented approach as Symbion RTM. Models developed with Symbion Confluence QT are fully compatible with the RTM multi-threaded processing environment, enabling simultaneous execution of any number of models.

#### **Application development and support services**

Symbion RTM has been configured to make application development and deployment as easy and seamless as possible. However, for those customers with limited resources, the development staff at Symbion is available to provide assistance or to undertake custom method development tasks.