# Sievers\* Autosampler, DataPro2\*, and DataGuard\* software

For use with Sievers M9 and M5310 C TOC Analyzers



## **Autosampler**

The Sievers Autosampler is a highly automated, compact accessory for optimizing laboratory Total Organic Carbon (TOC) measurement. It was designed for minimal maintenance, maximum productivity, and enhanced ease of use. DataPro2 runs on a computer with the Windows® operating system and controls both the analyzer and the Autosampler.

When coupled with the Sievers M9 or M5310 C (Laboratory or Portable models only), the random access Autosampler offers both high sample capacity and fast analysis time for enhanced automation. Additionally, optional DataGuard software for the M9 Laboratory and Portable Analyzers provides full compliance support for 21 CFR Part 11 requirements for electronic records in pharmaceutical applications.

## Expanded sampling capacity and efficiency

The high-capacity Autosampler enables 24+ hours of unattended sample analysis. Load up to sixty-three 40-mL or 60-mL vials, one hundred and twenty 17-mL vials, or 35-mL test tubes. For maximum flexibility, a dedicated emergency rack provides space for five 40-mL vials that can be accessed during protocol to measure high-purity samples.

#### Random access enhances flexibility

The Autosampler moves along three axes, making it possible to analyze samples in any sequence, regardless of vial position in the rack. This user-defined sampling provides maximum flexibility in defining and modifying sampling routines.

#### Compact, space-saving size

The Autosampler's slim 28.2 cm (11.1 in) profile requires minimal bench space. Even when paired with the analyzer (only 19.2 cm/7.6 in wide), the two units occupy just 0.24 m/2.6 ft.

#### DataPro2

DataPro2 M9 software features a host of time-saving features to maximize productivity and ensure easy TOC data management.

#### Ease of use

DataPro2 menus, editing options, and its user interface are designed for ease of use and increased productivity.

#### Visually enhanced

The vial configuration window maps the vial placement in the Autosampler for ease in implementing sample protocols. DataPro2 allows users to customize and configure screens and printouts.

# Windows compatible

DataPro2 is Windows compatible and data are securely stored in an SQL database structure. Other applications can be run during DataPro2 operation. DataPro2 is fully network compatible and supports remote file access via the secure SQL database structure.

## Automated system protocols

Analyzer calibration is fully automated through DataPro2 software. Select the desired calibration and the software initiates calibration standards analysis, manages data collection, and performs all necessary calculations. Calibration and other system protocols results are displayed in a summary screen for review. The user may choose to apply the new calibration and its constants will automatically upload to the analyzer.

DataPro2 M9 system protocols for Performance Qualification (PQ) activities, including individual protocols for accuracy, precision, linearity, specificity, robustness, and LOD/LOQ, are included with the



optional Validation Support Package. The DataPro2 M9 system includes a single validation protocol that combines all system protocols into one, streamlining the validation process and eliminating the need for any user intervention.

#### TOC removal

When used with the M5310C, DataPro2 enables identification of influent and effluent sample groups, which provides for automatic calculation of percent TOC removal between specific influent-effluent sample pairs. This feature directly facilitates compliance with US EPA 415.3 and Standard Methods 5310 C for TOC reporting.

## Autoreagent adjustment feature

When the Autoreagent feature is used, DataPro2 works with the Analyzer and Autosampler to add the precise volume of reagent required for accurate sample analysis. Use of the Autoreagent feature eliminates the potentially lengthy optimization and data interpretation process.

#### **DataGuard**

DataGuard is an optional upgrade within the DataPro2 M9 software that supports compliance with 21 CFR Part 11. For those pharmaceutical customers requiring true 21 CFR Part 11 functionality, DataGuard offers an administratively controlled, user-access security system, as well as electronic signature capability and a complete audit trail system for all instrument activities.

#### System security

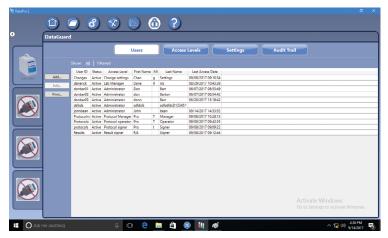
To ensure data integrity is safeguarded, DataGuard restricts access to the system through administratively controlled user accounts, and automatically performs authority checks to verify that an individual can perform specific functions. DataGuard ensures that each system user has a unique user ID/password combination. It also offers the system administrator the ability to configure and enforce length and aging, login time-out, and different levels of access for User ID categories.

## **Electronic signatures**

DataGuard offers electronic signature capability designed specifically to provide equivalence a handwritten signature on a record or file. Directly linked to the applicable record, the signature clearly identifies the signer, including the user's name, reason for the signing, and the time/date of signature.

#### **Audit trail**

DataGuard automatically generates an audit trail containing a date/time stamp for all actions performed and identifies the User ID associated with each action. The audit trail is a separate, secure electronic record, safe from modification (intentional or unintentional).



DataGuard Screen with Users Tab



Create New User Dialog Box



Rinse Station



Vials



Standards



Stirring Station

## options & accessories

#### **Dedicated rinse station**

The optional rinse station and wash pump provide a flush of the sample inlet system with a flowing water source, maximizing analytical performance of sample sets with widely varying concentrations.

#### TOC vials and standards

Sievers Certified Reference Materials are available in 40-mL vials for the Sievers TOC Analyzer calibration and verification needs. To provide maximum flexibility in sample collection and analysis, sample vials and test tubes ranging from 17-mL to 60-mL are also available.

## Stirring station

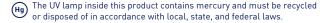
The patent-pending Stirring Station option uses a magnetic system to stir and mix the sample during the sampling process to create a homogeneous mixture for analysis. This innovative Stirring Station has no moving parts. The magnetic stir bars keep particles that would otherwise settle in the bottom of the vial suspended during the sampling process. The Stirring Station has a capacity of sixty-three 40-mL vials.

specification	ins			
Capacity	Configuration options include a			
	six-position 40-mL standards rack and:			
	Sixty three (63) 40-mL or 60-mL vials,			
	Sixty three (63) 40-mL vials with 3			
	Stirring Stations, or			
	One hundred and twenty (120) 35-mL			
	tubes or 17-mL vials			
Power	60W(base model), 100-240VAC, 50-60Hz.			
	No manual voltage adjustments are			
	required. The power supply unit has the			
	following approvals: CE and recognized			
	cRU component for Canada and US.			
Dimensions	H: 52.2 cm (20.5 in); W: 28.2 cm (11.1 in);			
	D: 53.3 cm (21.0 in)			
Weight	14.1 kg (31.1 lbs)			
Safety	CE, ETL			

Certifications

# recommended system requirements

System Component	Operating System	RAM	CPU	Available Hard Disk Space	Screen Resolution	Printer	USB to Serial Adapter	Printer (used with computer)	CD-ROM Drive
Recommended Requirements	Windows XP	1 GB	1 GHz	2 GB	1024 x 768	Optional	Optional to run program; required to connect to the Analyzer	Optional to run program; required to print protocols and results	Required for program installation
	Windows 7	2 GB	1 GHz	5 GB	1024 X 768	Optional			
	Windows 10	4 GB	1.4 GHz	10 GB	1024 X 768	Optional			



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