

Advantages of SCIEX OS software over Analyst software

Related workspace	Feature	Benefit	SCIEX OS software [for acquisition on X500*, SCIEX 7500, ZenoTOF 7600, triple quadrupole and future systems, and soon QTRAP systems]	Analyst software	SCIEX OS-Q software	SCIEX OS-MQ software
Acquisition	QTRAP acquisition with DFT	With the introduction of the linear ion trap, SCIEX mass spectrometers are able to provide capabilities that hybridize the accuracy and selectivity of a high resolution solution with the sensitivity of a triple quadrupole instrument. This technology is now compatible with systems from the 4500 all the way to the 7500 QTRAP with the additional benefit of dynamic fill time.	•			
Acquisition	MPX capability (North America only)	With the need for high-throughput solutions with our best in class mass spectrometry, we are providing tools to allow you to utilize multiplexing through SCIEX OS software connectivity.	•			
Acquisition	Support for M5 MicroLC system	Support for the M5 MicroLC system within SCIEX OS software	•			
Acquisition	Support for nominal and accurate mass systems	A single software solution for all MS systems	•			
Acquisition	Dynamic ion transmission coefficient (ITC) for MS/MS	Improved linear dynamic range (LDR) for MS/MS data acquired using SWATH DIA (data independent acquisition) and multiple reaction monitoring (MRM) or Scheduled MRM (sMRM) on X500 QTOF systems	•			
Acquisition	Decision rules	Decision rules can be used in the Batch workspace to define corrective actions for specified analysis results and to make decisions for sample submissions in real time while a batch of samples is being acquired	•			
Acquisition	SWATH DDA (data dependent acquisition)	Best of both worlds for full coverage acquisition independent of analyte concentration	•			
Acquisition	LC pressure trace saved with data file	Troubleshooting feature	•			
Acquisition	Echo® MS system support	Support for the Echo® MS system within SCIEX OS software	•		•	•
Acquisition	Import of variable SWATH DIA windows	Users can now import variable SWATH DIA windows from a text file	•			
Acquisition	Scheduled MRM (sMRM)	Significantly more MRM transitions can be monitored in a single acquisition while maintaining the quantitative reproducibility that is essential for targeted quantification assays	•	•		
Acquisition	Scout triggered MRM (stMRM) algorithm	stMRM is a refinement of the sMRM algorithm that uses marker transitions to acquire data for dependent transitions based on user-defined trigger thresholds	•			
Acquisition	Zeno SWATH DIA on the ZenoTOF 7600 system	The Zeno trap is now supported for SWATH DIA methods on the ZenoTOF 7600 system	•			
Acquisition	Support for non-overlapping scheduled experiments	SCIEX OS software can create a .wiff file for processing in Analyst software to enable non-overlapping scheduled experiments for SCIEX Triple Quad systems	•			
Analytics	Built in queries	Historically users have utilized Excel queries for data review and interpretation. In an effort to stream line and make the data lifecycle more 21 CFR Part 11 compliant, we have integrated many of the tools which users require into SCIEX OS Analytics. This is particularly beneficial for quantitative studies.	•			
Analytics	Processing API	Given the varying needs to access and process data, we are providing an API to allow you to tie into the processing power of SCIEX OS software to leverage your own tools to provide a customized approach to data review and processing.	•			

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Audit Trail	Audit Trail enhancement	With the additional emphasis on data integrity and 21 CFR Part 11 compliance, we have added additional traceability tools for changes in acquisition methods, acquisition batches, processing methods, results tables, and Central Administrator roles.	•			
Configuration	Export and import of user management settings	The SCIEX OS software user database can be exported on one SCIEX computer and then imported on a different computer, which allows configuration changes to be made on one computer and populated to the other computers in the laboratory (for regulated customers, if user management settings are imported after software validation, we recommend documenting the configuration changes and following the internal change control process)	•		•	•
Configuration	Administrator console	User, projects, workgroups and workstations can be managed centrally with an administrator console (new permissions have been added to the user management database to support this feature)	•	•	•	•
Configuration	Internationalization	Users can now configure the user interface for SCIEX OS software to display in French, German, Italian, Japanese, Korean, Portuguese, Spanish and Simplified Chinese in addition to English	•		•	•
Processing	Regression through intercept for quadratic fit	The quadratic through zero ($y = ax^2 + bx$) regression type can now be used for analysis.	•		•	•
Processing	AutoPeak and MQ4 integration algorithms	AutoPeak is a second-generation peak modeling algorithm that improves data quality and consistency, while the MQ4 algorithm is used to support existing processing methods that are being transferred from MultiQuant to SCIEX OS software	•	Older algorithms: - IQA II - MQ III	•	•
Processing	Retention time (RT) mode	RT mode provides support for suspect screening workflows and enables users to identify additional components with unknown RT that were not originally targeted in the sample	•		•	•
Processing	Area ratio threshold	Area ratio threshold helps improve non-targeted processing and compound identification for comparison of peaks found in control and unknown samples	•		•	•
Processing	Signal-to-noise threshold	All non-targeted peaks below the specified signal-to-noise threshold in all selected samples are eliminated from the final peak list in the results table	•		•	•
Processing	New adducts added to the Adduct/Charge column	Account for expected and unexpected adducts	•		•	•
Processing	Support for processing data from both Analyst and Analyst TF software	Single software solution/experience for all data processing needs	•		•	•
Processing	Support for MS/MS library searching on QTRAP and QTOF systems	Replacement for targeted and non-targeted screening workflows with MasterView software	•		•	
Processing	Outlier flagging	Outlier identification tools for streamlining data review in high-throughput environments	•		•	•
Processing	Automatic outlier removal	Reduce time spent creating acceptable calibration curves	•		•	•

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Processing	Standard addition	Time-saving feature that simplifies standard addition workflows by natively performing inside software	•		•	•
Processing	Peak grouping by adduct and charge	Reduce number of unknowns needing investigation	•		•	
Processing	Custom calculation columns	Enables users to create custom calculations in processing methods, and be used for flagging	•		•	•
Processing	Custom flagging rules	Customizable flagging rules for a "review by exception" workflow	•		•	•
Processing	Filter on all columns	Quickly and easily drill down to the data that meets your criteria	•		•	•
Processing	Auto-triggered data processing	Workflow enhancement	•	*Script		
Processing	ChemSpider database API update	Allows SCIEX OS software to continue using the ChemSpider database with the updated APIs	•		•	
Processing	Intact quant	Intact quant for protein analysis	•		•	•
Processing	New GETSTAT function for use in calculated columns	This function can be used to show selected statistics columns (mean, standard deviation and percent CV) in the results table	•		•	•
Processing	Combined flagging rules	Users can create a combined flagging rule, which evaluates results based on multiple predefined or custom flagging rules and is added to the results table as a column that contains results values as specified in the rule	•		•	•
Processing	New options for signal to noise	<ul style="list-style-type: none"> • Peak-to-peak: with this option, the noise is calculated by subtracting the highest and lowest noise values in the specified background region, and then the ratio of the detected peak height is divided by this noise value to calculate the signal to noise • Standard deviation: with this option, the noise is calculated as the standard deviation of the data points in the specified background region, and then the ratio of the detected peak height is divided by this noise value to calculate the signal to noise 	•		•	•
Processing	Save workspace layout	This feature allows users to save customized workspace layouts in the Analytics workspace to save time getting to their preferred data visualization	•	Limited	•	•
Processing	Calculated columns with IF statements	Enhancements to the calculated columns feature include a redesign of the Formula page to support the creation of complex formulas and support for both numeric and text values in IF statement logic	•		•	•
Processing	Calculated column enhancements	In calculated columns, IF conditions can now test confidence traffic lights for the following columns: mass confidence, fragment mass confidence, RT confidence, isotope confidence, library confidence, formula confidence and combined rules	•		•	•