815 Robotic USB Sample Processor XL



- Precise and reproducible results
- Automation for larger sample series
- Sample preparation and liquid handling
- Parallel sample preparation and analysis
- Robust, safe, reliable
- Highest flexibility



815 Robotic USB Sample Processor XL – one device for everything

Preparing and subsequently analyzing large sample series manually is tedious and expensive. Good enough reasons to delegate routine work like this to the 815 Robotic USB Sample Processor XL, Metrohm's system for the automated preparation and processing of large number of samples. You save precious time while you and your staff can focus on other, more demanding tasks at hand.

The more diverse your samples are, the more varied are

Your 815 Robotic USB Sample Processor XL meets these demands perfectly providing consistent, reproducible and, above all, absolutely precise results.





Highlights

- Automatic sample preparation
- High reproducibility and accuracy
- Compact design with flexible components
- Performs a variety of sample preparation steps incl. pipetting
- Parallel working
- Automatic rinsing
- Sample rack can be selected at will
- Stand-alone operation using touch panel
- Control by *tiamo* or MagIC Net Software
- Possibility for connecting 3 additional dosing burets
- Robust and safe

Robotic Sample Processor XL all – requirements met

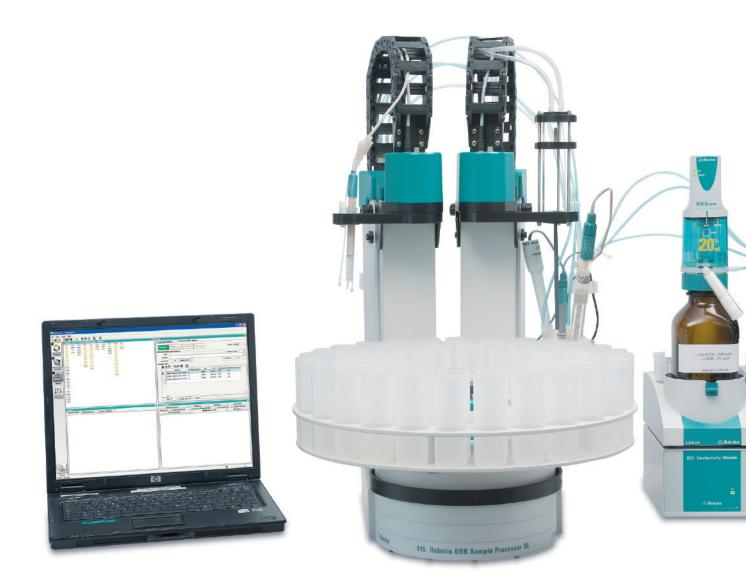
Free choice

The 815 Robotic USB Sample Processor XL is available in different versions. Depending on the nature of your sample, cleaning of the titration equipment and aspiration of the processed sample solution can be carried out with built-in membrane pumps or with external peristaltic pumps. The latter are particularly robust and reliably transfer organic solvents or precipitates from precipitation titrations.

Enormous range of movement

Combination with the 786 Swing Head and the Robotic Swing Arm enables the 815 Robotic USB Sample Processor to reach all positions on the sample rack. Therefore the maximum number of samples is always available for uninterrupted processing and analysis. Due to the variable swing range samples can be arranged on the rack and processed with unlimited flexibility.

There are different versions of the Robotic Swing Arm available, which are equipped according to the rack and use.



Work more comfortably ...

Your 815 Robotic USB Sample Processor is controlled with the greatest precision. Once the methods have been saved in the control software, the samples just need to be placed on the rack and the sample data entered in the sample data table, e.g. by way of an optional barcode reader. If you wish, the initial weight can also be transferred directly from the balance. The sample series is then started.

You can operate your 815 Robotic USB Sample Processor by PC (using our *tiamo* or MagIC Net software) or by the easy-to-use Touch Control operating unit. Either way, your samples are prepared and analyzed fully automatically. No further intervention is required.

... and save time

The diagram below shows how an automated system facilitates your work while providing optimum results. While the sample changer handles the series of samples, you are already preparing the next samples or discussing the results.



With the flexible control system the various processing steps can be interlaced and run in parallel. Thus, all the measurement results are available in a very short time and the next sample series can already be placed on the rack. A valuable gain in precious time!



Place the amples on the rack	•	
	Measure directly in the sample, e.g. pH or conductivity	
	Transfer an aliquot of sample into the external titration cell	
	Add solvent / auxiliary reagent	Measure directly in the following sample, e.g. pH or conductivity
	Titrate / measure	Prepare the next sample transfer
	Dispose of the solutions	
	Clean / conditioning of the electrode	
Evaluate results		

Schematic of a simple laboratory analysis – automated with the 815 USB Sample Processor – with optimized analysis time

Sample racks and beakers

Extremely flexible

The 815 USB Sample Processor can be operated with a number of different sample racks. Even with the standard racks it is possible to use ordinary glass, plastic or dispos-

able vessels. If your beaker dimensions are not listed, we would be happy to devise a customized solution for you.

Order number	Description of the sample rack	6.1432.210	75 mL/ glass	6.1432.320 250 ml / glass	6.1453.220	200 mL/ PP	6.1453.250 250 mL/ PP	6.1459.300	120 mL/ PP	6.1459.310	200 mL/ PP	6.1459.400	75 mL/ PP	6.2743.050	1.1 ML/ YP	6.2747.000	6.2/4/.010 50 mL/ PP	6.1608.080	300 mL/ PP	Max. Ø in mm
6.2041.800	100 x 75 mL																			
6.2041.810	34 x 150 mL																			55
6.2041.820	28 x 250 mL																			
6.2041.830	28 x 200 mL																			
6.2041.840	59 x 120 mL																			
6.2041.850	59 x 120 mL (PP)																			
6.2041.860	228 x 11 mL + 2 x 300 mL																			
6.2840.000	The water bath (can only be fitted in combination with collection trough 6.2711.070)																			
6.2041.900*	54 x 75 mL																			
6.9920.114*	46 x 75 mL + 2 x 250 mL																			
6.9920.115*	* 95 x 11 mL																			
6.9920.116*	* 30 x 120 mL																			
6.9920.117*	* 18 x 150 mL																			55
6.9920.118*	f 15 x 250 mL																			

*The marked sample racks can only be used in combination with water bath 6.2840.000.



Ordering information

- 2.815.0010 815 Robotic USB Sample Processor XL (1T/1P) With 1 work station and 1 pump
- 2.815.0020 815 Robotic USB Sample Processor XL (1T/2P) With 1 work station and 2 pumps
- 2.815.0030 815 Robotic USB Sample Processor XL (1T/0P) With 1 work station without pump
- 2.815.0110 815 Robotic USB Sample Processor XL (2T/2P) With 2 work stations and 2 pumps
- 2.815.0120 815 Robotic USB Sample Processor XL (2T/4P) With 2 work stations and 4 pumps
- 2.815.0130 815 Robotic USB Sample Processor XL (2T/0P) With 2 work stations without pumps

Swing Heads

- 2.786.0010 786 Swing Head with robotic transfer arm (left)
- 2.786.0020 786 Swing Head with robotic transfer arm (right)
- 2.786.0030 786 Swing Head with robotic titration arm (left/right)
- 2.786.0040 786 Swing Head

External peristaltic pumps

- 2.772.0120 772 Pump Unit «aspirate»
- 2.772.0130 772 Pump Unit «rinse»
- 2.843.0150 843 Pump Station (peristaltic) «rinse/aspirate» With 2 pump heads

External membrane pumps

- 2.823.0020 823 Membrane Pump «aspirate»
- 2.823.0030 823 Membrane Pump «rinse»
- 2.843.0050 843 Pump Station (membrane) «rinse/aspirate» With 2 pump heads

Robotic swing arms

- 6.1462.030 Robotic transfer arm (left)
- 6.1462.040 Robotic transfer arm (right)
- 6.1462.050* Robotic titration arm (left/right)
- 6.1462.060* Robotic titration head holder (left)
- 6.1462.070* Robotic titration head holder (right)
- 6.1462.080 Dis-Cover (left)

*The marked swing arms are also available with beaker sensor

Titration heads

6.1458.010	Titration head with 6 x NS14 and 3 x NS 9 $$
6.1458.020	Titration head with 2 x M10
6.1458.030	Titration head with 4 x M10 for KF applications
6.1458.040	Titration head with 3 x NS14
6.1458.070	Titration head with 2 x NS14 and 1 x M10





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Subject to change Layout by Ecknauer+Schoch ASW, printed in Switzerland by Metrohm AG, CH-9100 Herisau 8.815.5001EN – 2016-09 www.metrohm.com

