

Clarity Control – LC UNI profile for a variety of SSI Pumps



Clarity Chromatography Software allows for the direct control of the SSI Pumps Series I, II, III, and Pumps 1500, 150, HF 300, Q-Grad, UHP, and VersaGrad UHP. Clarity enables direct gradient control. The high-pressure gradient is created from up to four individual gradient components, where each component is delivered by an individual pump. The control of LC enables Clarity to provide integrated instrument control and to ensure complete automation for laboratories.

The LC control is compatible with the Gilson Pumps 302 through 307.

The LC Control is an optional software module for the Clarity Chromatography Station. Clarity is designed to acquire and evaluate data from up to four chromatographs at a time (multi-detector measurement).

Detailed description can be found at: <https://www.dataapex.com/product/controls-lc-ssi-pumps>

The user can easily create a gradient method from the LC control window. It is possible to set the percentage of each gradient component and the overall flow rate in the gradient table. All parameters, including idle pump behavior controls, are a part of the method. Therefore, it is possible to create various gradient profiles and choose the corresponding method each time via loading.

The actual flow rates of each gradient component and their overall sum and pressure can be monitored in the independent LC Monitor section of the Device Monitor.

The screenshot displays two windows from the Clarity software. The 'Method Setup Default1 (MODIFIED)' window shows a 'Gradient Table' with the following data:

	Time [min]	MeOH [%]	H2O [%]	Flow [mL/min]
1	Initial	10.0	90.0	10.000
2	10.00	30.0	70.0	10.000
3	15.00	40.0	60.0	15.000
4	30.00	50.0	50.0	15.000
5				

Below the table is a graph showing 'Flow [mL/min]' and 'Composition [%]' over 'Time [min]'. The 'Standby Flow' is set to 1 mL/min. The 'LC Monitor' window shows real-time data for MeOH (0.200 mL/min) and H2O (0.800 mL/min), with a total flow of 1.000 mL/min and a pressure of 0.00 MPa. The status is 'Ready'.

The setting of the instrument method as well as online monitoring, is seamlessly integrated within Clarity

The control is realized via a standard RS232 serial port (one per each pump, Q-Grad requires 4 COM ports) using a serial DB9F-RJ11 cable (to be ordered with the Clarity Chromatography Software).

For more information contact sales@dataapex.com

Specification and requirements

Controlled devices:	Series I, Series II, Series III, 150, 1500, HF 300, Prep 100, Prep 300, Q-Grad, UHP, VersaGrad UHP
Communication interface:	RS232 via UNI Ruby
Purchasing:	LC Control (p/n A24)
Related products:	Clarity (p/n C50) MultiCOM adapter (p/n MC01)
Cable:	Serial DB9F-RJ11 cable (p/n SK05) For the Q-Grad pump, 4 of these cables are necessary