

LC₂ System

Low Cost Binary Gradient System



Complete High-Pressure Binary Gradient System with Performance Beyond its Price.

Complete System Makes Setup Easy

The LC₂ Binary Gradient System features a binary pump, UV detector, and Clarity software. For reproducible mixing, a static mixer forms part of the high-pressure binary gradient mixing kit. An injection valve with a 20 µL loop, injector bracket, column holder, nuts, ferrules, and tubing complete the system.

Functionality and Flexibility

From teaching to daily analytical chromatography, the LC₂ is a rugged, repeatable and reliable system.

Two head sizes are available for flow rates to 10 mL/min to extend your separation flexibility. Variable volume autosamplers, additional detectors, Fract 1 & 2 fraction collectors are available as options to automate your system.

Data and Automation

The LC₂ System is controlled by Clarity software.

This highly popular software adds clarity to your separation and is extremely simple to use. The software also controls the pumps to create high-precision gradients. The supplied computer takes up no additional bench space making this the most compact system on the market.

Choice of Material

The LC₂ Binary Gradient systems are available with Type 316 stainless steel or metal-free, biocompatible PEEK fluid path at no extra charge.

Meets Your Performance Requirements

The LC₂ Pump features an advanced design, rapid-refill cam and a combination prime-purge valve/low volume diaphragm-type pulse damper for minimal baseline noise and low pulsation. Its flow rate of .001-5 mL/min (6000 psi) is suitable for most analytical applications. A 10 mL/min model is available for analytical and small-scale prep.

The Fixed Wavelength 254 nm is a high-performance detector that minimizes noise. The 254 nm wavelength has long been the most popular for general purpose chromatography. The simplicity of the detector guarantees long lamp life and ease of use.

PSS1022-A-092011

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Software Operation

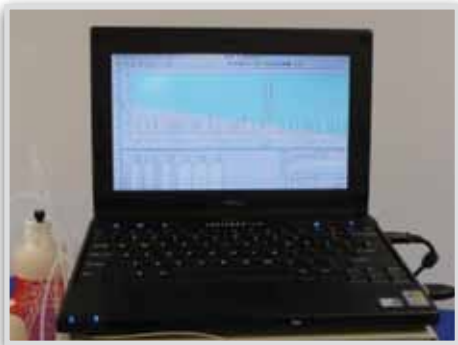
The LC₂ is controlled by Clarity software. This software, combined with a small pc, allows for a fully-featured data and control package without the use of additional bench space

The chromatography station package includes:

- Clarity Software with complete set of printed manuals
- A/D converter for analog data acquisition
- Control module for control

Clarity has additional modules available for virtually any application and method you may wish to perform. It can be upgraded to multiple systems and will interface into a LIMS if required.

Clarity supports and meets CFR 21 11 requirements for applications requiring traceability.



New Easy Prime Heads

The LC₂ Pump's head design, with the integrated prime/purge valve in each fluid path, ensures the solvent is drawn from the reservoir even if the other pump is running.



Reproducibility You Can Count On

The LC₂ Pump yields reproducible gradients and accurate chromatography due to its pulse-free, low-volume fluid path. The result of this simplicity and low dead volume is reproducibility that is seen in the chromatographic performance.

Peak 1	Peak 2	Peak 3	Peak 4	Peak 5
0.248	0.422	0.700	1.079	1.638
0.247	0.419	0.698	1.078	1.638
0.247	0.418	0.696	1.075	1.636
0.247	0.419	0.698	1.077	1.635
0.246	0.418	0.696	1.076	1.635

	Peak 1	Peak 2	Peak 3	Peak 4	Peak 5
Mean	0.2470	0.4192	0.6976	1.0770	1.6364
Standard Error	0.032%	0.073%	0.075%	0.071%	0.068%
Standard Deviation	0.071%	0.164%	0.167%	0.158%	0.152%

Functionality and Flexibility

The LC₂ can be set up by the user in most cases. However, if you require assistance, our experienced technicians are available for on-site installation (additional charge).

Ordering Information

DESCRIPTION	PART No.
LC ₂ SYSTEM Stainless Steel, 5 mL/min	B2305CLS
LC ₂ SYSTEM PEEK, 5 mL/min	B2305CLP
LC ₂ SYSTEM Stainless Steel, 10 mL/min	B2310CLS
LC ₂ SYSTEM PEEK, 10 mL/min	B2310CLP

Options

DESCRIPTION	PART No.
FRACT R1 FRACTION COLLECTOR w/ rack for 13mm diameter tubes	IS683870070

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