



BioLogic LP System

Low-Pressure Liquid Chromatography

BIO-RAD

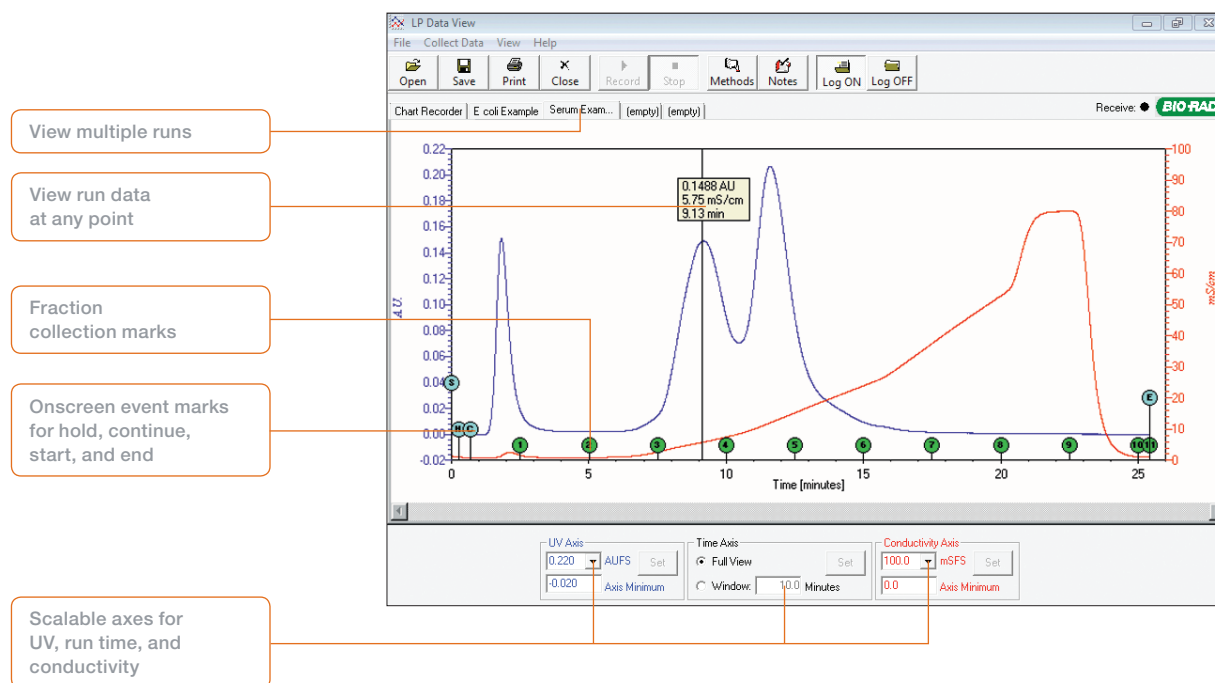
BioLogic LP Data View Software

Simple, easy-to-use software to record chromatograms



Advantages of the BioLogic LP Data View Software

- Automatically collects UV and conductivity data from the BioLogic LP System using any PC running Windows 10
- All three axes — UV, conductivity, and run time — can be rescaled independently both during and after data collection
- Automatically records method information for each run and allows notes to be recorded with the data
- Automatically records run events such as start, end, fraction advance, pause, hold, continue, and user event mark
- Includes a data logging feature, which can be used to record all data, rather than only chromatogram run data, and prevents loss of information in the event of a power failure
- Can save selected parts of either run data or logged data in independent data files
- Prints customized reports
- Exports data to other applications, such as Microsoft Excel



BioLogic LP System

Low-Pressure Liquid Chromatography

The BioLogic LP System is a valuable asset for biomolecule purification. Protein separations are achieved with the easy-to-use, flexible, space-saving, and modular features of the BioLogic LP Low-Pressure Chromatography System. This workstation offers numerous user-friendly features, making it a truly valuable tool for either the lab or the coldroom.

Common Applications

- Affinity purification
- Tagged protein purification
- Monoclonal antibody purification

The BioLogic LP System meets the needs of both novice and expert users with:

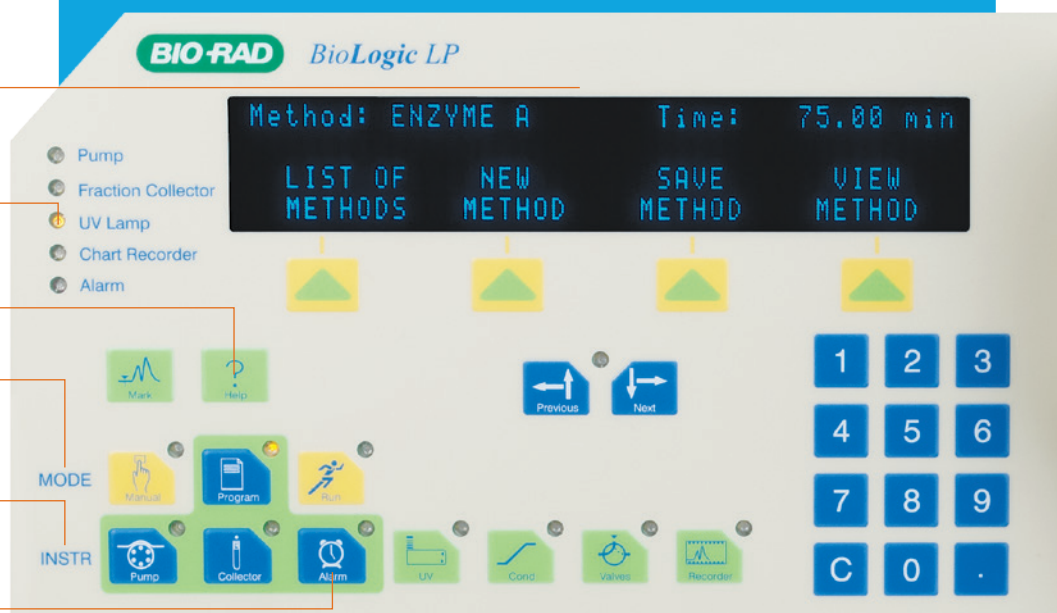
- User-friendly programming and control interface, making overall operation exceptionally easy
- An all-in-one compact design to conserve valuable laboratory bench space
- A system that achieves reproducible separations with confidence
- Flexible compatibility with all low-pressure columns

Easy to Use

Intuitive control panel guides you through the process

- Store up to 50 methods
- Program or edit methods during a run
- Program up to 50 fraction collection windows
- Delay volume is completely programmable for easy identification of which tubes contain the peak of interest
- Customize fraction collections (program up to 50 collection windows) — UV threshold value and/or fraction collection windows

- Single keypad control of all instruments
- LED status light lets you know which component is operating
- Online context-sensitive Help offers immediate answers to questions
- Selectable modes of operation
- Instrument keys and icons address instrument components independently
- 3 programmable alarms and hold option to indicate when an action is needed



BioLogic LP System Tour

Flexible, space-saving, and modular system



Manual Inject Valve

flexible control of sample application, accommodating user-made loops of any volume

Gradient Mixer/Valve

allows high-accuracy gradient formation

Buffer Select Valve (Optional)

selective control of up to five buffers and automatic injection of large-volume samples

BioLogic LP Data View Software

record chromatograms, enable easy rescaling of chromatogram axes — multitask during chromatogram data capture and print to any printer

UV Monitor

single-wavelength, high-sensitivity detector (0.001 AUFS)

Gradient Monitor

conductivity monitoring

Fraction Collector Divert Valve and Column Bypass Valve (Both Optional)

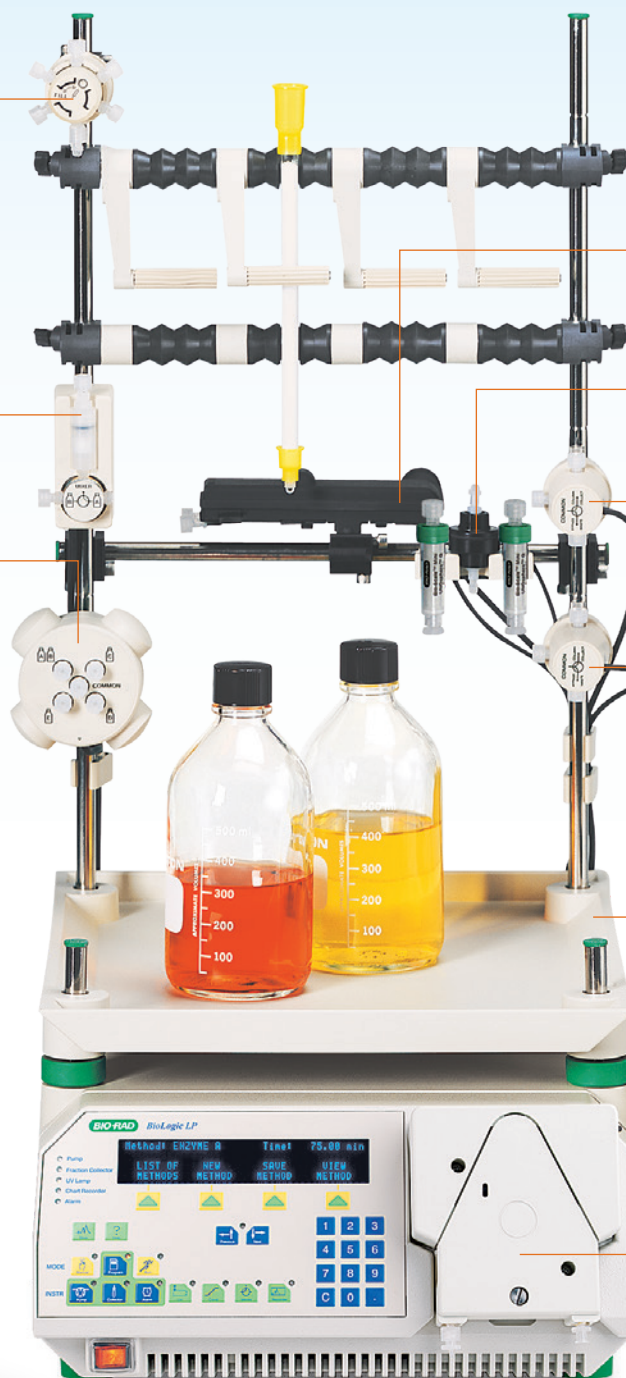
two-position solenoid valve for directing effluent flow from the column to a bypass position or from the fraction collector to a waste position

BioLogic Rack

adaptable solvent-resistant racking system; expansion options are available for custom racking applications

Peristaltic Pump

capable of generating flow rates ranging from 0.05 to 40 ml/min and a maximum backpressure of 30 psi (2 bar, 0.2 MPa)





BioFrac Fraction Collector

The BioFrac Fraction Collector offers flexibility with numerous collection rack options, including both custom and off-the-shelf collection racks. The custom racks provide a wide range of collection capability, from 1 drop (~50 µl) to 99 liters. Off-the-shelf racks extend the versatility of collection schemes and provide cost-effective storage of samples. Off-the-shelf racks are autoclavable, can be easily assembled, and lie flat, requiring little storage space.

Key features include:

- Time, drop, or volume collection
- Collection of peaks by peak detection, time windows (up to 20), or a combination of both
- Drop arm movement in an x, y motion over each collection vessel; column, row, or serpentine pattern options available for microplates or tubes
- Dispenser arm that is manually adjustable to tube heights up to 150 mm
- Numerous off-the-shelf racks to accommodate tubes (12–20 mm diameter), microtubes (0.5, 1.5, or 2.0 ml), or scintillation vials
- Optional BioFrac Ice Bath/Microplate Rack with tube grips that hold tubes firmly in any position; ice bath rack allows cooling of 13 mm tubes or microplates and tubes that adhere to SBS standards
- Optional BioFrac Prep-20 Preparative Rack with up to 20 collection ports for collection from bottles to carboys
- Optional microplate drophead kit for precise collection of small volumes into microplates
- Manual-advance tube changes
- Coldroom compatible
- Small footprint of 44.5 x 35.6 x 38.7 cm

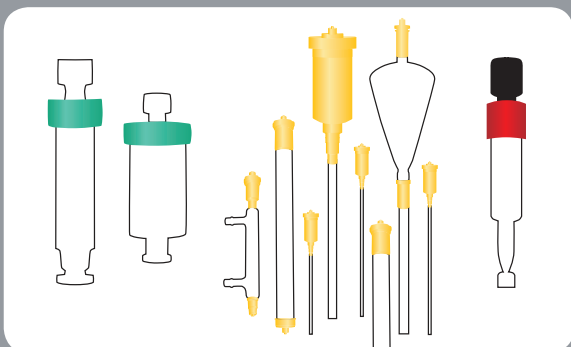


Model 2110 Fraction Collector

The easy-to-use Model 2110 Fraction Collector provides multiple collection modes for chromatographic separations.

Key features include:

- Time, drop, and volume collection
- Collection of 1 drop (~50 µl) to 9 ml fractions in 80 test tubes or microtubes (with optional adaptor)
- Manual-advance tube changes
- Coldroom compatible
- Small footprint of 24 x 33 x 25 cm



Compatible Columns

The BioLogic LP System is compatible with all low-pressure columns

- EconoFit Columns
- Econo-Column Columns
- HiTrap Columns

Low-Pressure System Fittings Kit

(catalog #7318220)

For the Chromatography Column Connection Guide, request bulletin 5326.

Specifications

BioLogic LP Specifications

Pump

Flow rate range	0.1–40 ml/min
Maximum counterpressure	30 psi (2 bar)
Gradient formation	Solenoid-activated proportioning valve
	Mixer volume ~750 µl

Detection performance

UV	Single channel, 280/254 nm with auto zero
	Detection range: 0.001–2 AUFS
Conductivity	Detection range: 0.5–500 mS/cm FS

Temperature range

4–40°C

Sample loading

Manual loop fill
Automatic loading through SV-5
Buffer Select Valve

Fraction Collector Specifications

BioFrac Fraction Collector

Collection modes

Time	0.02–99,999 min
Drop	1–99,999 drops, flow rate ≤5.0 ml/min
Volume	0.02–99,999 ml

Collection rack options

180 x 12–13 mm tubes, 120 x 15–16 mm tubes, 80 x 18–20 mm tubes, 168 x 1.5 ml microtubes, 24 x 30 mm tubes, 4 x 96, 48, 24, or 12 position microplates, and 20 x unlimited preparative volumes adaptor

Operating temperature

4–40°C

Dimensions (W x D x H)

44.5 x 35.6 x 38.7 cm

Safety

Meets IEC 61010 and CSA 22.2 certification

Model 2110 Fraction Collector

Capacity

Eighty 13 x 100 mm glass, polypropylene, or polystyrene test tubes, or 1.5 ml micro test tubes when using optional adaptor

Collection basis

1–999 drops in 1 drop increments; 0.05–9.99 minutes in 0.01 minute increments; 10.0–99.9 minutes in 0.1 minute increments

Construction

Case and carousel: polypropylene
Front panel: hard-coated polycarbonate
Drop former: silicone rubber
Waste outlet tube: polyurethane

Operating temperature

4–40°C

Dimensions (W x D x H)

24 x 33 x 25 cm

Safety

Meets IEC 1010 and CSA 22.2 certification

Related Product Literature

Description	Bulletin #
Bio-Scale Mini Cartridges	5584
Chromatography Column Connection Guide	5326
Empty Column Selection Guide	2289
Prepacked Cartridge Selection Guide	See website

Ordering Information

BioLogic LP System

Catalog#	Description
7318300	Standard BioLogic LP System , 100/120 V, includes BioLogic LP Controller, BioLogic Rack, and accessory kit containing inject valve (MV-6), proportioning valve/mixer, UV optics, conductivity cell, tubing and fittings kit, conductivity cell/column holder, user manual, and starter kit
7318301	Standard BioLogic LP System , same as 7318300 except 220/240 V

BioLogic LP System + BioFrac Fraction Collector

7318304	BioLogic LP System with BioFrac Fraction Collector , 110/120 V, includes standard BioLogic LP System, system cables 3 and 15
7318305	BioLogic LP System with BioFrac Fraction Collector , 220/240 V
7318338	BioLogic LP System with BioFrac Fraction Collector and LP Data View Software , 110/120 V, includes system cables 3 and 15
7318339	BioLogic LP System with BioFrac Fraction Collector and LP Data View Software , 220/240 V

BioLogic LP System + Model 2110 Fraction Collector

7318302	BioLogic LP System with Model 2110 Fraction Collector , 110/120 V, includes BioLogic LP System, SV-3 diverter/bypass valve, system cable 1, plus Model 2110 Fraction Collector
7318303	BioLogic LP System with Model 2110 Fraction Collector , 220/240 V
7318336	BioLogic LP System with Model 2110 Fraction Collector and LP Data View Software , 110/120 V, includes SV-3 diverter/bypass valve, system cable 1
7318337	BioLogic LP System with Model 2110 Fraction Collector and LP Data View Software , 220/240 V

Fraction Collectors

7318122	Model 2110 Fraction Collector , 100/120 V, carousel-type fraction collector, 80 tube capacity, for use in chromatographic separations
7318120	Model 2110 Fraction Collector , 220/240 V, carousel-type fraction collector, 80 tube capacity, for use in chromatographic separations
7410002	BioFrac Fraction Collector , 100/240 V, fraction collector, includes power cord, rack set F1 (2 x flatpack, 13 mm), BioFrac Diverter Valve, fittings kit

Valves

7318321	SV-5 Buffer Select Valve , 5-port, 4-position solenoid random-access valve, 30 psi (2 bar) limit
7318320	MV-6 Manual Inject Valve , 6 ports
7318322	SV-3 Diverter/Bypass Valve , 3-way valve

Software

7318365	LP Data View Software for BioLogic LP System , includes 25' serial cable, port adaptor, and installation/operation guide
---------	---

BIO-RAD and ECONO-COLUMN are trademarks of Bio-Rad Laboratories, Inc.
All trademarks used herein are the property of their respective owner.



**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site bio-rad.com **USA** 1 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 43 01 877 89019 **Belgium** 32 03 710 53 00 **Brazil** 55 11 3065 7550
Canada 1 905 364 3435 **China** 86 21 6169 8500 **Czech Republic** 36 01 459 6192 **Denmark** 45 04 452 10 00 **Finland** 35 08 980 422 00
France 33 01 479 593 00 **Germany** 49 089 3188 4393 **Hong Kong** 852 2789 3300 **Hungary** 36 01 459 6190 **India** 91 124 4029300
Israel 972 03 963 6050 **Italy** 39 02 49486600 **Japan** 81 3 6361 7000 **Korea** 82 2 3473 4460 **Mexico** 52 555 488 7670 **The Netherlands** 31 0 318 540 666
New Zealand 64 9 415 2280 **Norway** 47 0 233 841 30 **Poland** 36 01 459 6191 **Portugal** 351 21 4727717 **Russia** 7 495 721 14 04
Singapore 65 6415 3188 **South Africa** 36 01 459 6193 **Spain** 34 091 49 06 580 **Sweden** 46 08 555 127 00 **Switzerland** 41 0617 17 9555
Taiwan 886 2 2578 7189 **Thailand** 66 2 651 8311 **United Arab Emirates** 971 4 8187300 **United Kingdom** 44 01923 47 1301

