

The ECP201LG Gradient Preparative Pump is an innovative, powerful and cost-effective unit for preparative liquid chromatography where high pressure is needed.

The pump with 4 low-pressure gradient valves delivers a flow rate up to 1000 ml/min at a very high output pressure up to 15 MPa (2176 psi).

Main features and benefits

- **Wide application possibilities** – The unit is used for pharmaceutical separations and plant extract purification, such as cannabinoids, peptides, and oligonucleotides. Also, it has much wider use in other chemical production, such as dosing into chemical reactors, and in various laboratory uses. Another advantage is the usability of the same device for separation method development.
- **Durability** – The pump is constructed for high pressure and flow rates. This makes it suitable for day-to-day long-term use in production.
- **Gradient features** – This new, sophisticated unit allows achieving a precise low-pressure gradient, i.e. gradual changes of solvent composition, by mixing up to 4 liquids at the pump's input.



- **Other useful features** – A new learning algorithm for pulsation suppression, a leakage sensor, and a seal wash kit for longer piston seal life.
- **Smart controls and diagnostics** – It is easy to operate, especially with ECOMAC and Clarity software. This makes unit management powerful and convenient. The gradient profile can be defined from the computer or manually using the display and the keyboard. It is also possible to control it by digital and analog inputs and outputs, e.g. in PLC systems. The basic version of the ECOMAC software is available free of charge. It is also used for service and diagnostics.

TECHNICAL DATA

Part number	ACMG000X
Flow rate	2–1000 ml/min
Maximum output operating pressure	15 MPa (150 bar, 2176 psi) up to 1000 ml/min
Maximum input operating pressure	0.2 MPa (2 bar, 29 psi)
Flow rate setting	1 ml/min steps
Repeatability of flow rate adjustment	±1 %
Accuracy of flow rate setting	±2 %
Wetted materials	Stainless steel, PEEK, Tefzel™, Kalrez®, ceramic, ruby, FFKM, seals*
Seals	*GFP (PTFE) by default, UHMW-PE on request
Input tubing outer diameter	1/4 "
Input tubing connecting thread	1/2 "– 20 UNF flat bottom
Output capillary outer diameter	1/8 "
Output capillary connecting thread	5/16 "– 24 UNF conical bottom
Number of gradient valves	4 (A, B, C, D)
Gradient valve orifice	5.0 mm
Fluid temperature	5–90 °C
Interfaces	RS232, LAN, USB, I/O interface, display, keyboard
Power supply/power input	100–240 V AC / 500 VA
Dimensions (w × h × d)	340 × 170 × 640 mm (13.4 × 6.7 × 25.2 in)
Weight	30 kg (66.14 lb)