

LineUp™ Push-Pull

Pressure & Vacuum control

P/N: ELUPPU1000



The **LineUp™ Push-Pull** is a microfluidic pressure controller capable of delivering **positive pressure** or **vacuum** through a single outlet. The device requires pressure supply and a vacuum source for aspiration operations. **PC use is optional** as **local control** makes it ideal for **benchtop use**.

BENEFITS



Compact device

Dedicated for benchtop use



Automation capabilities

Design automated protocols



Ease of use

Operate within a minute



Use with or without a PC

Software and/or local control



Pressure and vacuum

A single outlet for both use



Modular & Adaptable

Expand the system as needed

SPECIFICATIONS

Performance	
Maximum pressure	Up to 1000 mbar (14.50 psi)
Minimum vacuum*	Down to -800 mbar (-13.05 psi)
Pressure supply	1100 mbar (15.95 psi)
Vacuum supply	-800 mbar (-13.05 psi)
Maximum pressure supply	1400 mbar (20.3 psi)
Resolution	600 μ bar
Stability	0.1% on measured value (effective beyond 10% of the maximum pressure)
Repeatability	180 μ bar
Response time	Down to 30 ms
Accuracy	4,5 mbar
Hardware specifications	
Dimensions	91,9 x 71,8 x 131 mm
Weight	636 g
Standard operating conditions	
Operating temperature	20°C
Operating humidity	40%HR
Electrical specifications	
Power consumption	6 W
Chemical compatibility	
Gas compatibility	Dry, oil-free gas, air, N ₂ , CO ₂ , Ar, any non corrosive or non explosive gas
Liquid compatibility	Aqueous solvent, oil, organic solvent, biological sample
Software compatibility	
OxyGEN	ver. 2.2.0.0
Software Development Kit	ver 22.2.0.0

*Maximum range depends on the vacuum pump performance

**Response time includes settling time and pressurization time

APPLICATIONS

● Microfluidics

For experiments where combined or alternating positive and negative control is needed

● Flow recirculation

One can use the vacuum and positive pressure to redirect the flow bidirectionally

● Micro-sampling

For sampling, the tubing can be used as a reservoir

● Micropipetting

Precisely control aspiration and dispensing to perform micropipetting applications