

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

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

SPECIFICATIONS

| Performance | |
|-------------------------------|---|
| Maximum pressure | Up to 1000 mbar (14.50 psi) |
| Minimum vacuum* | Down to -900 mbar (-13.05 psi) |
| Pressure supply | 1100 mbar (15.95 psi) |
| Vacuum supply | -900 mbar (-13.05 psi) |
| Resolution | 600 µbar |
| Stability | 0.1% (in the 10% to 90% range) |
| Response time** | Down to 30 ms |
| Hardware specifications | |
| Dimensions | 91,9 x 71,8 x 131 mm |
| Weight | 636 g |
| 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 | |
| Microfluidics Automation Tool | ver. 19.0.1.3 |
| All-in-One | ver. 19.0.0.2 |
| Software Development Kit | ver 20.0.0.0 |

*Maximum range depends on the vacuum pump performance

**Response time includes settling time and pressurization time