







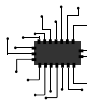


UniGo Microfluidic Pump

Technical note

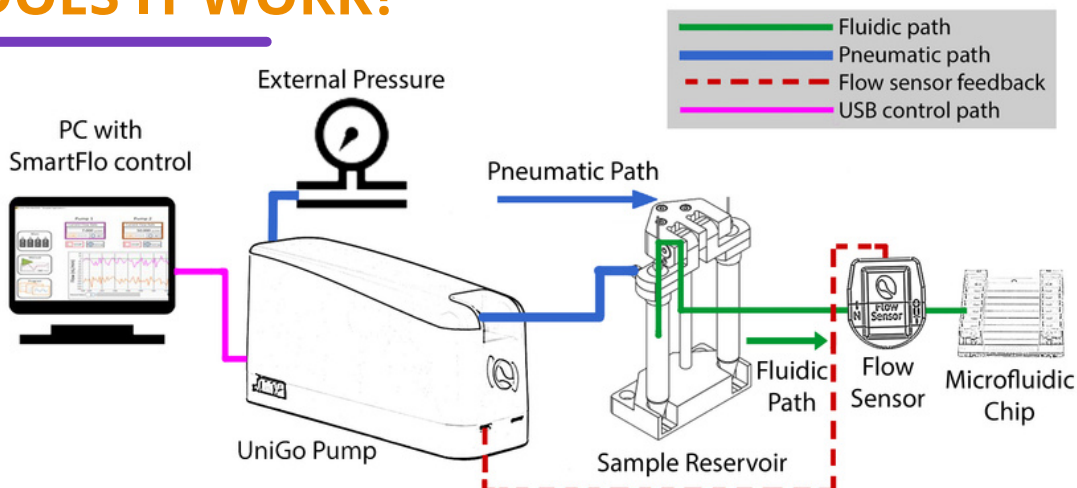
UNIGO MICROFLUIDIC PUMP

UniGo microfluidic pump is a precision pressure pump for a variety of microfluidic applications, where accurate and stable flow rate delivery is required. You can control all the features of the pump with the SmartFlo software program running on your PC.

MAIN BENEFITS

-  **FAST:** Fast response time and settling time.
-  **PULSE FREE:** Achieve precise and pulse-less flow.
-  **MODULAR:** Up to 4 UniGo microfluidic pumps can be racked together allowing simultaneous control and independent programming of each pump's flow profile.
-  **VERSATILE:** Combine UniGo pumps with ExiGo pumps to get the best features of both pressure and syringe pumps in one microfluidic set-up.
-  **PROGRAMMABLE:** Program your own flow profile with any combination of constant, ramp, sine and step.
-  **EASY INTEGRATION:** Integrate the pump control with your own software using LabVIEW, C++, Python, etc.
-  **CLOSED-LOOP FEEDBACK:** Integrates a plug-and-play flow sensor for active feedback and precise flow control.

HOW DOES IT WORK?



TECHNICAL SPECIFICATIONS

Input Pressure	Up to 10 bar or 145PSI or vacuum -0.9bar ¹
Volumetric Flow Rates	1µL/min to 1mL/min
Flow Direction	Unidirectional (Push or Pull)
Flow feedback options	Pressure-flow combined or Pressure only
Fast response	<50ms
Software Control	SmartFlo running on a PC
Dimensions	225mm (L) x 69mm (W) x 122mm (H)
Weight	1.3 kgs
Power Requirements	110/220V - 50/60Hz 60W
Pulse-free flow rate for microfluidic applications	1µL/min - 80µL/min ($\pm 120\text{nL/min}$) ² 10µL/min - 1mL/min ($\pm 2\mu\text{L/min}$) ³

(1) External compressor or vacuum required.

(2) Using a 80µL/min sensor (FS80.0)

(3) Using a 1mL/min sensor (FS-1000).

APPLICATIONS

- ✓ Droplet Generation
- ✓ Organ-on-chip studies
- ✓ VOC experimental set-ups
- ✓ Shear based cell rolling, adhesion and transmigration assays on ligand-coated surfaces or endothelial cells
- ✓ Cell and particle manipulation
- ✓ Precise multichannel mixing
- ✓ Bacterial biofilm formation on solid surfaces

WHAT'S INCLUDED

	INCLUDED	OPTIONAL
UniGo Pump	✓	
Flow Sensor ⁴		✓
Sample Reservoir		✓
Fluidic Manifold		✓

(4) More information available on www.wearecellix.com/flowsensors.



Place your order by emailing sales@cellixltd.com



WE ARE CELLIX!



Unit 1, Longmile Business Park,
Longmile Road, Dublin 12
D12 EK79, Ireland



info@wearecellix.com



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