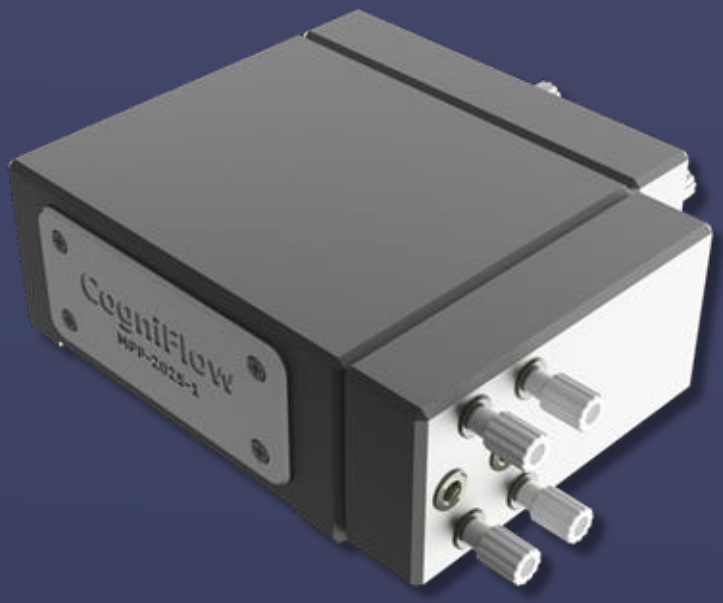
TwinFlow

Hassle-free dual-channel precision pump for droplets and micropumping



Precision pumping & droplet generation have been a balancing act…

Volume-limited
Syringe pumps are volume-limited and take minutes to set up...

Expensive
Pressure pumps are smooth and precise but bulky and costly…

Inaccurate
Peristaltic pumps are cheap but imprecise and pulsate a lot…

TwinFlow

No volume limit
Our twin pressure-regulated pumps can move an ***unlimited volume*** of liquid

Compact, 2-in-1
Two independently controlled pumps that fit in your backpack; ***<15 x 15 cm***

Responsive control
Closed-loop pressure control with ***10x faster response*** than syringe pumps

Field-ready & modular
Self-contained design with modules that hot-swap, powered by ***one USB-C cable***

Droplets, out of the box
Highly monodisperse droplets on demand, with parameters tunable on the fly

Turn the page for the secret sauce…

COGNIFLOW®

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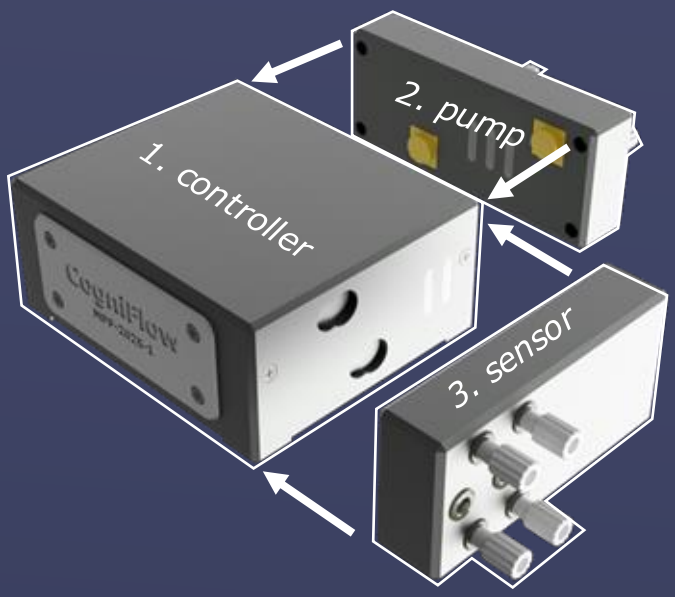
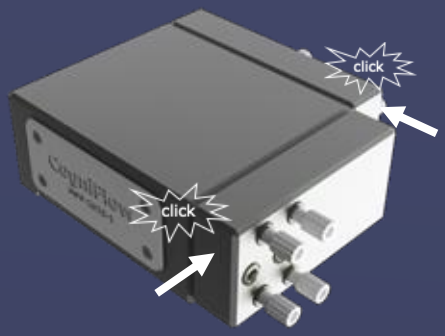
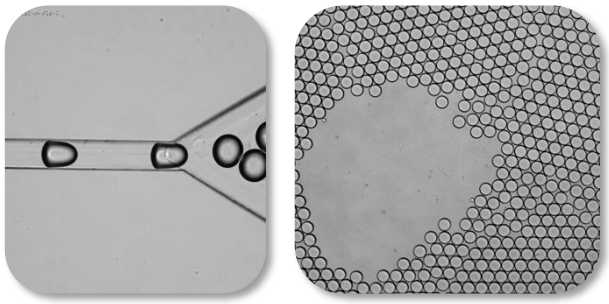




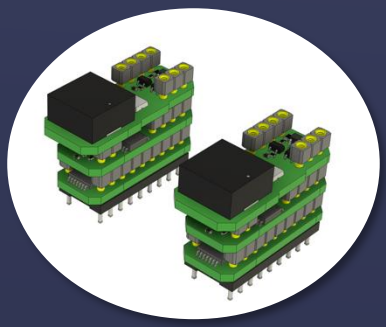
1. Modular system

Pump and sensor modules are hot-swappable to replace or upgrade modules



2. Droplet generation

Our pump is the easiest way to generate ***50-200 µm*** monodisperse droplets in microflows with as low as ***1.8%*** variability of diameter, proven across several peer-reviewed experiment series



3. Patented technology

Our patented pump driver methodology and circuit ensure smooth pumping and increased control precision with the simplest, smallest piezoelectric micropumps

With TwinFlow you can…

- ☐ …continuously generate monodisperse droplets for hours with ***<5% CV***
- ☐ …automatic, precise pressure control inside your chip in up to ***200 mbar*** *(±1.5%)*
- ☐ …two liquids pumped independently by one of the smallest pumps out there

CogniFlow® - Droplet biotechnology ***for every lab****!*

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